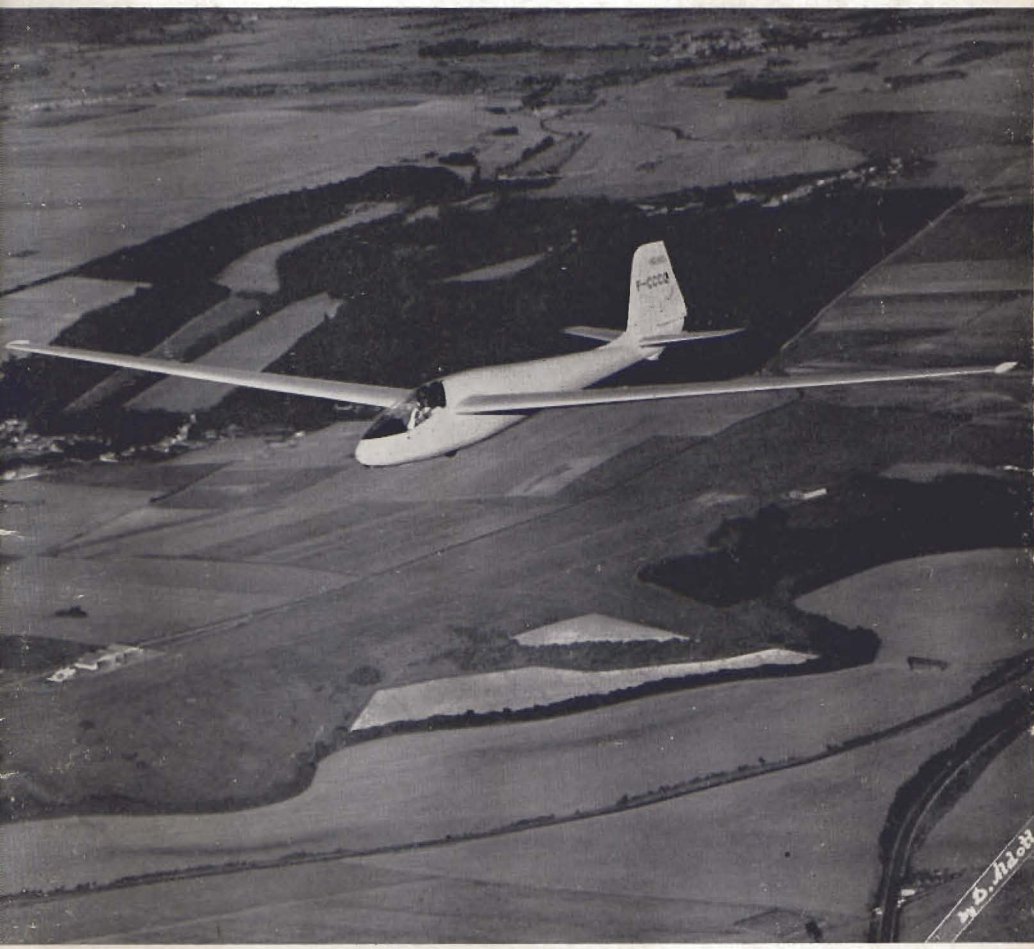
Sailplane and Gliding

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April 1960



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SAILPLANE AND GLIDING

OFFICIAL ORGAN OF THE BRITISH GLIDING ASSOCIATION

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

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

Magazine Committee: Yvonne Bonham, Godfrey Harwood, Rika Harwood, Walter Kahn
Peggy Mieville, Ann Welch, Philip Wills.

Vol. XI, No. 2. Bi-monthly

April 1960.

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COVER PHOTOGRAPH.—Alex Aldott flying a Bréguet 901 *at Beyne. Photo by Mrs. D. Aldott.*

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British Gliding Association Chairman's Report on 1959

NINETEEN-FIFTY-NINE gave us the finest gliding weather I can recall since the birth of the British Gliding Movement.

The results included Commander Nicholas Goodhart's startling flight on 10th May, the first day of the National Championships, from Lasham to Portmoak, a goal flight of 359 miles, beating five records; his brother Tony's flight to France on the 12th June of 384 miles, which shuffled the distance record again within the family; and a number of new feminine records established by Mrs. Anne Burns. Over the rest of the season a record number of Gold and Diamond badges were won all over the country.

When I come to the major issues and difficulties facing us, I have to report that never in the 28 years in which I have been in the gliding movement have I experienced such a general feeling of indignant frustration. Our difficulties are exactly what they were a year—and ten years—ago, and our new Government has, at the time of writing, shown neither understanding of them nor any desire to help solve them.

In general terms, the Government have declared increased support for Youth and Sport, and here is the finest possible sport for the best of our youth. Yet the Standing Joint Committee on Private Flying and Gliding set up over a year ago sent in its first report early last year—it has disappeared into the classic silence of the pigeon-hole. There has still been no statement of policy on light aviation and gliding. Little has been done to solve the basic problem of sites. Airfields are being closed and sold up. Sporting flying cannot expand without ground facilities, and in our overcrowded country these can only be provided on the necessary scale by a positive policy of government support. Airfields are in the same category as ports and roads; the Government should first provide them, and then the traffic builds up which pays for them, whether directly or indirectly. As the years go by and other nations, many of them far smaller and less wealthy than ours, forge ahead in this field, the gap between what is done in this country and elsewhere becomes still more incomprehensible.

The statistics are simply pathetic: Germany has re-established over 500 civil gliding clubs since the war, as against our 41. France has supported sporting flying to the tune since the war of several million pounds as against our virtual nil, and has built up a network of small grass airfields throughout the country. Yet in Gliding we still lead both in quality. It is felt necessary to be proud of our Service and Civil Aviation, but apparently no disgrace to have one of the smallest light aviation movements amongst nations of our size and importance.

The result of these years of equivocation and neglect is that we are now faced with a crisis. All our chances of expansion on the scale necessary to meet the demand—for thousands of people still want to join our sport, but available clubs are too full or too far away—hinge on the availability of sites.

As government airfields go out of use, we have to find more and more money if we want to purchase or even lease. Up to now, with the aid of the Kemsley Flying Trust, and some generous enthusiasts, we have maintained our movement to its present standard. With the retirement of Lord Kemsley, the K.F.T. is to be wound up. We are immensely grateful for what he has done for us over the past 12 years, but are now clearly facing a crisis, for we cannot allow the advances we have made, so largely due to the Trust's assistance, now all to be lost.

First, a recapitulation of what the Trust has done. So far as Gliding is concerned, out of the £100,000 initially put into the Trust, we have had available to us a revolving sum of the order of £50,000 which has been lent at low rates of interest to enable clubs and groups to purchase capital equipment, and repay loan and interest in due course from the accruing revenue. The effect of this has been enormous, and the results hightly gratifying, for as far as our benefactor is concerned, the original capital is virtually intact, and will be paid back into the Trust as the loans mature.

But, as they are paid back, they will now no longer be available for fresh loans, and the draining of these sums from the Gliding Movement will of course seriously weaken us.

We therefore ask that the Government now assumes as a duty what a private

individual has for so many years and with such magnificent results done from a sense of public spirit. A revolving interest-free fund, administered in the light of the experience gained from the K.F.T. and in the same way, would ensure the growth and future of Gliding and Sporting Flying at trivial cost to the nation. So far as gliding is concerned, the Shaw Slingsby Trust is a ready-made piece of machinery available to operate such a fund immediately, and a sum of £500,000 applied to Gliding would enable us to overcome our difficulties and expand enormously over the years to come.

There is no doubt at all that such an arrangement produces far better results than an outright subsidy, for the principle of "something for nothing" saps the qualities of initiative and independence on which our whole movement is founded.

The peculiar mixture of team spirit and individual initiative which is required in our sport falls exactly within the scope of the British genius, and we retain our international position as a leading—if not the first—nation in Gliding because of this, and in spite of high governmental dis-interest. The problems of Service and Commercial Aviation—of war and profits—continue to absorb the attention of our rulers to the virtual exclusion of the sporting flying, yet with comparatively trivial help we can encourage the development of many of the qualities of character on which the future of our contry depends.

Two of the underlying reasons for this disinterest are possibl:: (a) the feeling that flying is a sport for the rich, and (b) the air is too full for it to be safe to encourage large numbers of people to occupy it merely for fun.

The first is despicable: the answers, apart from the political dishonesty of equating wealth with worthlessness, is that in so far as it is true, the very reason is the lack of government support, and that, so far as gliding is concerned, any critic should leave his archair and visit a gliding club, where he will see for himself that the idea is absolute nonsense: the vast majority of members are far from wealthy but make up for this by sheer hard work and enthusiasm.

The second objection is also without foundation. Recently we have started investigations on a cheap and simple method to make gliders good reflectors of radar, to assist ground controllers. The first figure we came on startled us, for it indicates that the air outside the immediate radius of the major airports is overcrowded only in the minds of the experts. When one actually flies in it, it always seems empty enough, as indeed it is. For we were told that, within the whole vast volume of airspace over our country, a spot-check has revealed that the number of aircraft flying under control in Airways at a normal time was 28. By the fuss and propaganda that is made, most people might think this figure was nearer 2,800; it is not—it is 28. By the exercise of reasonable self-discipline, of which we have shown ourselves capable, there is plenty of room for ten or twenty times as many sporting aircraft as at present exist to fly in safety; yet in the name of these 28 aeroplanes, many influential people want to deny to the ordinary man the freedom of the air.

Shaw Slingsby Trust Ltd.

The first year's operation of the Shaw Slingsby Trust has been entirely satisfactory. It has now been finally accepted as a Charity.

It will be recalled that, as originally tailored, it was designed to start augmenting the K.F.T. within 5-6 years. With the latest development reported above, obviously we must search every possible means whereby some at least of this load can be assumed earlier. The Trustees are considering ways and means urgently.

Membership

During the year the following new Clubs were elected to Membership: Norfolk, Royal Aircraft Establishment, British European Airways Silver Wing, Shorts, Glasgow & West of Scotland, Lasham Gliding Society, Dumfries and District.

Our membership is now (1958 in brackets):

Full Member Clubs	18	(18)
U.K Associate Member Clubs..	23	(16)
Overseas Associate Member Clubs	4	(4)
Private/Group Owner Members	77	(71)
Individual Associate Members	43	(39)

The Association is currently giving help to the following clubs that are in the process of formation: Essex, Norfolk and Norwich Aero (Gliding Section), Doncaster and District, Swindon.

The Essex Gliding Club still has no site. The Kent Gliding Club, cast adrift from Detling last year, is still determinedly trying to find a new site.

Operations

All our U.K. Clubs, except the Swansea Club and the Moonrakers and Home Counties R.A.F., have completed the questionnaire. I should like to thank the hard working club secretaries for their help over this.

They report that, from club sites, they have flown a total of 27,384 hours, involving 157,540 launches. This shows an increase of 5,848 hours and 22,466 launches over 1958. Operating in the U.K. are 294 gliders (this includes 64 two-seaters and 68 privately owned aircraft). The number of pilots this year has increased by 271 to 4,286. Owing to the wonderful weather an unprecedented record number of cross-country miles were flown: 78,892 miles, of which 30,595 were flown in the National Championships.

Included in these totals are the returns from 11 R.A.F.G.S.A. Clubs and one R.N.G.S.A. Club, who report 4,447 hours, 36,344 launches with 73 aircraft and 878 pilots.

In 1959, 183 Gliding Holiday Courses were held and were attended by 1,528 pupils.

Gliding Certificate Endorsements were issued as follows (1958 figures in brackets):

A Endorsements	542	(482)
B Endorsements	533	(488)
C Endorsements	342	(263)
Silver C	94	
Gold C	12	

These were made up as follows:

Endorsements	*Service*	*Civilian*
A	163	379
B	163	370
C	76	266

The Air Training Corps report a total of 102,434 launches and 1,988 Cadets trained up to A and B standard, and 30 up to C standard.

Finance

1959 has been a reasonably successful year, and in spite of increased expenditure we have finished with the small surplus balance of £512 0s. 11d. The fine weather increased the number of certificates and the Championships helped with the sale of books and magazines, etc.

All surplus funds are deposited in the Shaw Slingsby Trust.

Work of the Council

Much work was done by the Council, and much more by the Secretariat, on the organisation of the National Championships, and the first National Glider Trade Fair, which were run with great success at Lasham, and with over 80 entries proved the largest championships ever seen in the world.

Many discussions took place on the composition and procedure of the Seeding and Selection Committees, to select our team for the 1960 World Championships. This is a most difficult subject, and any machinery is unlikely to be perfect; but at least we can feel that results over the past many years have been extremely good, as in every Championship since 1952 we have achieved a first or second place.

During eleven meetings our basic problems of sites and of airways were discussed at length. A new handicapping system was agreed to be tried out over this year's National Gliding Weeks.

Gliders seem to live for ever—we have several still in the air after 20 years. The Technical Committee recommended that a special examination should be called for after ten years' life, and this obviously sensible proposal was endorsed, but the machinery to carry it out without undue expense proved difficult to devise. It is hoped, however, that an acceptable procedure has now been reached, although we are still anxious for any constructive suggestions.

A start was made on the vital problem of making training facilities available to instructors. This is the best and quickest way to reduce the cost of accidents, and what we really need is a Central Instructors' School. This, however, can hardly be expected to pay for itself, so the first big problem to solve is that of finance. If we can establish such a school, open to the

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Empire or even to all other nations, the result would be of the first importance, and would without doubt also benefit our export trade—for nearly one-third of our production of gliders is already exported. Indeed, a Skylark 3 and an Olympia 419 this year were the first British aircraft of any kind ever sold to Soviet Russia.

Selection Committee.—The Selection Committee sat soon after and made a provisional selection of four teams. This had to be modified later, due to the reduction to a maximum entry of three aircraft per nation.

The final selection was made on 11th January 1960, and was as follows:

1. Open Class: Cdr. H. C. N. Goodhart
2. Open Class: Col. A. J. Deane-Drummond.

Standard Class: Cdr. G. A. J. Goodhart.
Reserves: D. H. G. Ince and Sgt. J. S. Williamson.

Secretariat

During the past year Mrs. Yvonne Bonham, our Secretary for the past five years, retired, taking with her the best wishes of everyone in gliding. The post was filled by Miss Anthea Russell. Our efforts to find more accommodation failed, but in the existing cramped office the Secretariat have continued their gallant battle with the ever-increasing work of the Association, and the results now before you speak for themselves.

The Future

Despite the vast indifference of the Government, nothing seems able to damp the enthusiasm of British Gliding. One of these days the powers that be may momentarily take their eyes off the problems of £100 million supersonic airliners and even more expensive space research and give a little attention and support to the gold-mine of human values awaiting development under their noses at trivial cost, with devotees ready and eager to expand a branch of aviation in which we at present rank in size as a third-class power. Without official help, we lead in quality. With it we would startle the world by the pace of our growth and the standard of our performance.

P. A. WILLS, *Chairman.*

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"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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Committees, Panels and Officials

DURING the year the following Committees and Panels were set up under the Chairmen mentioned and other Officials appointed:

Flying Committee: Sqn.-Ldr. E. J. Furlong, D.F.C., M.B.E.
Technical Committee: F. G. Irving.
Equipment Committee: P. A. Wills, C.B.E.
Instructors' Panel: Mrs. A. C. Welch, M.B.E.
Publicity Panel: Mrs. Anne Ince.
Magazine Committee: P. A. Wills, C.B.E.
Design Requirements Sub-Committee: C. O. Vernon.
Airways Committee: Cdr. H. C. N. Goodhart, R.N.
World Championships Master and Pilot Selection Committees: Sqn.-Ldr. E. J. Furlong, D.F.C., M.B.E.
Accidents Analysis Officer: Air Commodore G. J. C. Paul, C. B., D.F.C.
C.C.P.R. Representative: W. A. H. Kahn.
O.S.T.I.V. Representative: A. H. Yates.
Representatives on M.T.C.A. Standing Joint Committee: P. A. Wills, C.B.E. Mrs. A. C. Welch, M.B.E.
Representative on Royal Aero Club Aviation Committee: P. A. Wills, C.B.E.
Representative on other Ministerial Committees: Mrs. A. C. Welch, M.B.E.

Reports from Airways Committee, Accident Analysis Officer, Technical Committee and Instructors' Panel are published separately.

Equipment Committee.—This Committee works quietly and smoothly, and is responsible for a large part of the financial well-being of your Association. As a rule I do not single out individual names amongst our many helpers in this report, but John Furlong, by storing much of our bulkier equipment, by measuring out literally miles of winch-wire, and by using his commercial judgment on our behalf, unobtrusively contributes more than most to our comparative freedom from financial worry.

Flying Committee.—The Flying Committee has checked and authorised the issue during 1959 of 124 Silver C's and 16 Gold C's—far the largest number ever gained in one year.

During the year 13 records have been homologated by the Council.

A new recommendation for cloud-flying was made in January. The proposed regulation was that "No glider shall enter cloud within a radius of 5 miles of a gliding site except from at least 200 ft. below the lowest part of the cloud." This was accepted by the Council and promulgated as a new Operational Regulation.

An effort was made to regularise the documentation for Gold and Silver badges. Finally, a reminder form was adopted pending the printing of a new claim form (see SAILPLANE & GLIDING, December 1959, p. 358).

During the year there have been 15 Gold C distance legs, 9 Gold C height legs, 2 Height Diamonds, and 19 Goal Diamonds.

Magazine Committee.—SAILPLANE & GLIDING remains the best gliding magazine in the world, with a larger and wider-spread circulation than any other publication devoted solely to motorless flight.

Publicity Panel.—Apart from general publicity, the Panel handled the pre-Nationals Press campaign, when coverage was very good. For the period of the Nationals, Mr. Pirie, of the Surrey Gliding Club, was appointed Press Officer.

The intensified campaign to fill holiday courses appears to be bearing fruit.

Through the kindness of J. Arthur Rank, the B.G.A. will be able to add to its film library a copy of a full-colour 15-minute feature entitled "Sailing the Sky". Cambridge University and Midland Clubs and the Lasham Gliding Centre all helped to make this film a success.

Beryl Stephenson has most efficiently dealt with the Press-cutting book and we are greatly indebted to her for this work.

O.S.T.I.V.—No O.S.T.I.V. Congress has been held in 1959, but it is hoped that members of the B.G.A. will take an active part in the eighth Congress in Germany in 1960.

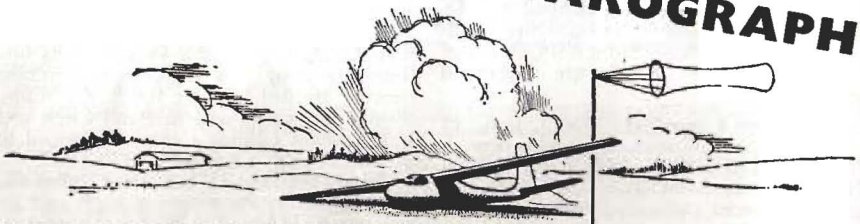
The O.S.T.I.V. Section in the *Swiss Aero Revue* is now under the editorship of Beverly Shenstone, Chief Engineer, B.E.A., and has been publishing the papers presented at Leszno in 1958. . .

O.S.T.I.V. has continued to give attention to the Standard Class. The evaluation





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method at Leszno has been examined and plans are being made for the judging in 1960.

An O.S.T.I.V. study group met in Vienna in January and in Paris in September 1959 to discuss airworthiness requirements for the Standard Class. Many nations have requested O.S.T.I.V. to try to get a minimum code of requirements as a guide to those countries having no national requirements. The British representatives have warned of the danger of having an envelope requirement imposed by the organisers of the World Championships. O.S.T.I.V. has stated that it has no intention of asking the F.A.I. to make any Standard Class requirements mandatory.

Central Council of Physical Recreation.—The close association between the Central Council of Physical Recreation and this Association was maintained during the year.

The second Gliding Conference organised by the C.C.P.R. was held in London during January and proved an unqualified success.

The Whitbread Bursaries, which are granted to us through the C.C.P.R., were put to good effect and 11 young boys and girls were given grants.

A number of Clubs up and down the country were helped by the local C.C.P.R. officers during the year.

World Championships Master Committee. The World Championships Master Commitee is responsible for supervising all arrangements for sending the British Team to the World Gliding Championships to be held near Cologne, Germany, in June this year.

Messrs. Slingsby and Elliotts have again come to our aid with generous loans of aircraft and trailers. The Standard Car Co. also have agreed to loan us the necessary cars specially built and equipped for the job. Pye Radio and other firms have also offered us sundry equipment, so that we hope to send, as usual, a first-class team with first-class equipment of which we can be justly proud.

Seeding Committee.—All full member Clubs are invited to send their Chairman or his nominee. At the actual meeting only six Clubs were represented, plus P. A. Wills, as B.G.A. Chairman and past International, and Mrs. Ann Welch as last Team Manager. Seventeen pilots were considered very carefully on all the available evidence, including their seeding of each other.

The names were arranged in order of merit, but the first six were then placed alphabetically at the discretion of Council.

The South African Nationals

by "A. Bird"

OUR bi-annual nationals were held from 28th December to 9th January at Kimberley.

Kimberley is 4,200 ft. a.s.l. and lies on the hot, dry plain of the N.W. Cape Province. From here you could range for 500 miles in all directions over well-cultivated fields and use good roads for retrieving. The "Big Hole" of the De Beers diamond mines is on the edge of the town. This hole is so wide and deep that you could gain your Silver C altitude leg inside it without coming out at the top.

Speaking of diamonds—seven diamond legs were gained in the hot turbulent air and towering clouds above the wide plain during the period of the championships.

E. (Boet) Dommisse, flying his Skylark 3b, became the new Champion, closely followed by Edwin (Edi) Leemann, who also flew a Skylark 3b. Both pilots flew for the Johannesburg Soaring Centre.

Dommisse has now won the Nationals four times. In 1950 he won at Kroonstad, flying a Minimoa. He then spent five years building a Kranich I, which he flew in the Nationals in 1955 to win again. In 1957 he won in a Moswey IV at Kimberley, and now again with his Skylark.

At this last event, he won the 300 km. triangle task with a speed of 74.24 km./hr. (46.13 m.p.h.) to set the pace for the first South African record in this class.

Edi is a much younger pilot, who first achieved fame by flying a goal Diamond on a Spalinger-15 during the Nationals held at Bloemfontein in 1952. At this Kimberley meeting, he shared his machine with Gordon Albu, so each pilot could only fly four out of the eight tasks. Edi won three times out of four against Boet, but failed to beat him on average points. On the last

day, Edi achieved his height and distance Diamonds to become our second pilot with a completed Gold badge. He set a new South African distance record of 374.5 miles with this flight.

Besides Boet and Edi, a lot of fireworks were provided by other able pilots, despite the fact that their machines were somewhat outclassed by the Skylark 3b's. A Skylark 3b was in first place on each task, as was only to be expected. Fifteen machines took part, shared among 21 pilots.

Geoff Green and Peter Leppan were doing very well on the Skylark 1. Peter achieved his Gold distance with a flight of 300 miles. Geoff was always close on the heels of the Skylark 3.

Eric Kaizer achieved his goal Diamond on the Swallow. A goal Diamond flight has now been achieved three times on a Swallow in the past two years.

TUESDAY, 29th DECEMBER.—Very hot with light winds. Dry thermals were predicted to only 4,000 ft.

Task: Out-and-return of 104 miles.

Six machines completed the task, the most noteworthy being Brian Stevens on the S-18. Thermals were very strong but not plentiful, and most of the slower machines were caught by a little gremlin which appeared at this time and remained constantly with us. His name was "Fierce down".

Boet was first with a time of 3 hrs. 1 min., closely followed by Geoff Green on the Skylark 1, who took 2 minutes longer.

WEDNESDAY, 30TH DECEMBER.—From very dry, the air had changed to very moist. How this happens with hardly any wind to move the air mass is a mystery to us glider pilots.

A 300-km. triangle task was set and it was hoped that the large predicted storms (in which we could hardly believe) would not spoil the day.

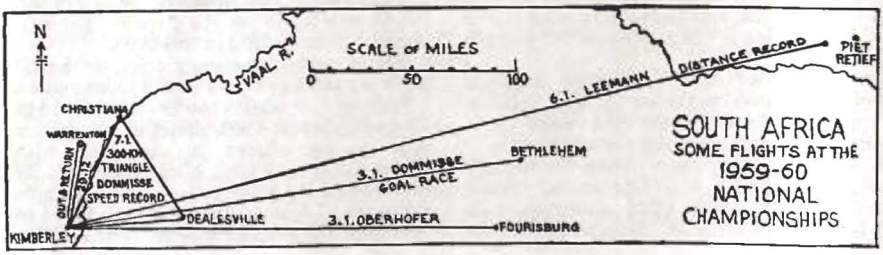
An early start was made in a clear, hot sky, and things went well until 3 p.m., by which time some magnificent clouds covered the sky, but a large storm developed along the third leg to spoil this nice picture.

Most machines went down on and around the second turning-point, where heavy rain fell. Boet attained 22,000 ft. before going in and round this point; he then worked his way back to the good clouds along the second leg, attained height again near the first turning point and glided it out into the dead air towards home, to land a few miles short after flying for about 6½ hours.

None completed the task. Boet was again first, with Peter Leppan on the Skylark 1 a close second. Edi flew on this day and lost heavily by being down at the second turning-point.

THURSDAY, 31ST DECEMBER.—Weather much as on the previous day. A large storm was already building to the N.W. of Kimberley as competitors set off on a 100-km. triangle to the S.E. As this was New Year's Eve, a short task had been set in order that everyone could be back in time for celebrations.

A brisk N.W. wind was blowing as Boet released and immediately crossed the starting line very low down. Most of the others were desperately trying to attain their starting height of 1,000m. before the storm moved in, while Boet scratched along downwind in imminent danger of falling down. Tim Biggs in the Air-100, Geoff on the Skylark 1 and Gordon Clarry on the Ka-2 all made good, but later, starts, and rapidly overtook Boet. But they were just too late. A large storm and heavy rain cut them off at the second turning point as Boet went around it and into the storm ahead. He was the only one to complete the task, albeit with many holes made by hail in his machine. The storm took him up to 26,000 ft. from which height he covered the last 17 miles with airbrakes open and



nose pointed straight down to the centre of Kimberley aerodrome.

SUNDAY, 3RD JANUARY.—Good west wind. Cloud base would be 8,000 to 10,000 ft. Large thunderstorms were predicted for the Drakensberg escarpment, Natal and Eastern Transvaal about 250 miles to the east of Kimberley. This spoilt any hopes of records for distance.

A goal race of 220 miles to Bethlehem was therefore set.

Boet was again the only one to achieve the goal. Gordon Albu on the Skylark 3 achieved his Gold distance more to the north and was second. H. Oberhofer on the S-18, more to the south, also achieved Gold distance. The other machines were all on track but 30 to 40 miles short, having been cut off by a large storm.

TUESDAY, 5TH JANUARY.—Freak snow on the Cape and Drakensberg mountains, at the height of summer, spoilt the weather. Cold, stable air had moved in from the south. The air was still cool and stable and the wind light S.E. as pilots set off for distance on a set course to the N.E. Going was slow and difficult in the slight convection set up in the lower air by a bright hot sun in a cloudless sky.

Edi Leemann won the day with a flight of 195 miles. Boet and Geoff were about 30 and 35 miles short of this. Most of the others achieved about 120 miles.

WEDNESDAY, 6TH JANUARY.—Dry thermals to 6,000 ft. Light winds.

Task: 100-km. triangle.

A record day was spoilt by convection which would be late in starting. Thermals were then very fierce and narrow with fantastic downs between.

Edi won the day in fine style in 1 hr. 57 min. Bobby Clifford took 2 hrs. 4 min. with the Air-100, while Boet had to take third place with 2 hrs. 14 min.

Brian Stevens again showed his mettle by completing the course. Seven in all got around, while the rest complained bitterly about the unbelievable gremlins between thermals. Many pilots tried to go around a second time. Thermals now went to 8,000 ft. and the downs disappeared, but the day petered out very early, spoiling their hopes.

THURSDAY, 7TH JANUARY.—Light winds: 1/8 to 3/8 cu with base at 10,000 ft.

The task of accomplishing the first South African 300-km. triangle was again set. Tim Mowat-Biggs was first around in the Air-100, followed two minutes later by Boet, who had started 40 minutes later. Geoff Green in the Skylark 1 was next, followed by Heini Heiriss with the Ka-6 and Hans Jordan in the Moswey IV. Gordon Albu landed short, as also John Hugo in a Swallow. Most of the others completed two-thirds of the task. Heini and Hans obtained their goal Diamonds with this flight. The others already held this honour.

FRIDAY, 8TH JANUARY.—Conditions were promising for free distance, with a good S.W. wind and little chance of large storms. Cloud base would rise to 12,000 ft. above ground.

Edi nominated Piet Retief and achieved 374.5 miles, landing 19 miles short of his goal. He climbed to 24,000 ft. in a cumulus cloud quite early on this flight, thus also gaining his height Diamond.

Boet nominated Bremersdorp, 440 miles, but landed after 282 miles.

Peter Leppan flew 300 miles, Heini Heiriss went 250 miles, while Bobby Clifford and Brian Stevens both achieved their goal Diamonds with 220-mile goal flights. Eric took the Swallow to his goal of 197 miles for his Diamond.

This brought the end of a most successful event. Final placings were as follows:

Open and National Championships

Place	*Pilot*	*Sailplane*	*Points*
1	E. Dommisse	Skylark 3b	939
2	E. Leemann	Skylark 3b	930
11	G. Albu	,,	390
3	P. Leppan	Skylark 1	807
4	G. Green	,,	776
5	R. Clifford	Air 100	730
6	T. Mowat-Biggs	,,	694
7	H. Heiriss	Ka-6b	627
8	E. Kaiser	Swallow	553
13	J. Hugo	,,	302
9	C. Hyde	Ka-2	520
10	G. Clarry	,,	499
12	H. Jordan	Moswey IV	365
	K. Losch	,,	Ret.
14	J. Andrews	Swallow	243

Junior Championships

Place	*Pilot*	*Sailplane*	*Points*
1	H. Oberhofer	S-18	963
3	H. Morsbach	S-18	381
—	R. van Gelder	S-18	Ret.
2	B. Stevens	S-18	883

AIRWAYS COMMITTEE REPORT

MEMBERS of the Committee are: Cdr. H. C. N. Goodhart, R.N. (Chairman), C. A. P. Ellis, D. H. G. Ince, O. W. Neumark, B. A. G. Meads.

General

The Airways Committee has continued its efforts to ensure that the Ministry of Aviation is fully aware of the reasonable needs of the gliding fraternity, and that, before any change in legislation is made, there shall be an adequate opportunity for stating our views. As always, we have received the utmost co-operation from the Ministry, who invariably do their best to meet our reasonable requirements.

The policy we are following is therefore based on the following points:

1.—Better utilisation of controlled airspace. This can be achieved by more accurate ground control and by better navaids in airliners. Thus we favour Decca Flight Log for airliners and full radar coverage of all controlled airspace. Given these facilities, there is ample capacity within existing controlled airspace for all traffic increase in the foreseeable future.

2.—"See-and-be-seen" in V.M.C. There is strong pressure by the Airways fliers to avoid the necessity of looking where they are going, even in V.M.C. To support this they use the almost unbelievable argument that their windscreens are so small they cannot see, or (even worse) that they are too busy to look out. If these arguments or any others should prevail, all controlled airspace will become for all practical purposes permanently prohibited to gliders, and this must be strenuously combatted.

3.—Raising the base of all Airways to 5,000 feet. There is no good reason for Airways to come lower than 5,000 ft., other than a collection of very outmoded aircraft which are still flying somewhat on the Bradshaw principle.

Important Items during the Year

ADR 160.—This Advisory Route continues to be a major thorn in the flesh of the Midland Gliding Club. The Ministry of Aviation has been making continuous attemps to find a solution by substituting an Airway for it on some new alignment. At present no re-alignment has been found which is fully acceptable to all the interests concerned; however, there is a good prospect of a solution before the traffic starts to increase in the spring. The Bristol Club is concerned in this, since one of the possible routes covers their site at Nympsfield. Another of the alternatives crosses Dunkeswell.

AMBER ONE DECCA.—A new experimental Airway with this title has been established west of Amber One. It is five miles wide and its base is at FL. 70 from its southern end to the Birmingham Control Zone and then FL 100 onward to its northern end. Despite this increase in controlled airspace we have raised no objection, since its aim is to encourage the use of Decca. This Airway is at present not operative at week-ends.

I.C.A.O. STANDARD ALTIMETER SETTING PROCEDURE.—This is a procedure which is now in force whereby all aircraft on flight plans fly at cruising heights determined from an altimeter set to 1013.2 millibars. From the gliding point of view this does not affect us except that the top of the controlled airspace is now defined by this method. Heights obtained by this means are called "flight levels"; thus, for example, the top of the Birmingham Control Zone is at flight level 110, which could be at anything from about 9,500 to 12,000 feet above sea level, depending on the state of the barometer. The more important aspect from the gliding point of view is the bottom of controlled airspace, which continues to be defined by a height above sea level; Amber One Decca, mentioned above, being the one exception.

NEW AIR NAVIGATION ORDER.—A new Air Navigation Order to replace the current 1954 version is being produced by the Ministry of Aviation. A draft copy has been

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reviewed by the Airways and other B.G.A. Committees, and our views have been forwarded.

WEST MALLING "SPECIAL RULES" ZONE.—A large area under the London Terminal Control Area has been designated as controlled airspace (IMC and VMC) to provide some protection for the operation of fighter aircraft from West Malling. The institution of this Zone did not seriously affect gliding since the base of the London TCA in this area was already 2,500 ft. This "Special Rules" Zone is not in operation at weekends.

SCOTTISH CONTROL AREA.—A new Scottish Terminal Control Area has come into existence which considerably increases the amount of controlled airspace. Efforts were made to cut this down and some concessions were gained. The resulting area is, however, a considerable impediment to Scottish gliding.

H. C. N. GOODHART,
Chairman, Airways Committee

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INSTRUCTORS' PANEL REPORT

MEMBERS of the Panel are: Mrs. Ann Welch (Chairman), J. S. Williamson, D. Darbishire, B. Thomas, K. E. Machin, J. C. Neilan, G. Collings, T. Davidson, A. D. Piggott, B. M. Masters.

During the year 28 category tests were carried out, of which 21 were successful, 2 were failed and 5 are pending the candidate's qualifications or experience being brought up to standard.

In spite of the number of tests done, it would appear that there is no increase in the total numbers of Instructors over last year, and when the final renewal figures are known, it may show a slight decrease. This is because there is a steady loss of instructors in the Clubs due to their either becoming private owners in order to concentrate on soaring, or because they drop out of gliding for various reasons.

This is unsatisfactory. There are numbers of new Clubs starting who need instructors, and there are not enough good trained instructors available generally, quite apart from the geographical problems of their distribution.

The shortage can be largely overcome in two ways: (1) through a National Instructor training programme, which includes the running of concentrated central courses—this would need to be subsidised owing to the high staff/pupil ratio and the equipment needed to run such courses to the best advantage; (2) by enabling clubs' instructors to obtain soaring and other flying of a more advanced nature—for instance, by giving them some priority on the use of gliders on good days.

The increase in the number of cross-country gliders, and their use by pilots of less experience than hitherto, has resulted in more accidents in the early soaring stages, a problem which can best be overcome by giving the pilot further training after he is solo. In most clubs this is difficult owing to lack of facilities, such as advanced two-seaters and aero-towing, and because there are not enough instructors.

During the last year the Instructors' Panel has gone some way towards overcoming these problems by running a very successful advanced instructors' course at Nympsfield in September, and by touring clubs with the Travelling Circus throughout the winter. These visits involve a group of two or three experienced instructors taking an Eagle to a Club which has no equivalent facilities, and giving instructional flights from aero-tows to any members that the C.F.I. puts forward, with lectures and slides on the Saturday evening. The Panel has been fortunate in being able to borrow or hire nominally Eagles for these purposes, and would like to take this opportunity of thanking those owners who have generously made their aircraft available. There is, however, a limit to the amount of this sort of borrowing which can be done, and if these visits are to continue, they will need financial support.

The Council of the B.G.A. is doing what it can in this respect by allocating £200 for the continuance of these and similar facilities for 1960, and the Panel is very grateful. The Air League of the British Empire has also very generously allocated £50. There are, however, 41 clubs in this country, and it is necessary to provide adequate national provision for the training of instructors. It is very difficult for the Clubs to do this work themselves owing to lack of time and launches, and in any case, to train an instructor who can teach adequately through to the soaring stage is

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something which takes not only time but is expensive to do properly.

Discussions are taking place on the feasibility of running a small establishment somewhere in the centre of England, which would teach instructors and advanced flying in the summer, and go on tour to the small clubs in the winter. It is hoped that it will be possible to raise money to do this job which is essential to the health and strength of gliding.

ANN WELCH,
Chairman, Instructor's Panel.

UP and DOWN

Insurance of Glider Pilots

In a letter to *The Times*, Mr. R. B. Boss, Secretary of the Life Officers' Association, writes: "The proposal forms of most offices ask for information regarding expected flying other than as a passenger on a recognised air service and such passenger flying, which has its parallel in road travel, is almost invariably covered without extra charge. Other types of flying extend over a wide range, e.g., from club gliding, which is usually free of additional premium, to test flying of experimental supersonic aircraft . . ."

Collision in India

A Dakota freighter was approaching to land at Sonegaon Airport, Nagpur, at 2.30 p.m. on 29th January, when, between 50 and 100 ft., its port wing hit a two-seater glider, which was wrecked, killing the pupil and injuring the instructor. The Dakota, when 20 miles away, had received permission to land, and a "red flag signal" was hoisted. The glider was apparently coming down to land because of the red signal.—*Madras Mail.*

Made in Germany

Since gliding re-started in Germany in late 1951, the two firms of Scheibe at Dachau and Schleicher at Poppenhausen have been responsible for nearly 1,900 new sailplanes, complete or in kits. The Scheibe factory has produced about 500 complete, 300 in kit form, and 300 have been built under licence elsewhere; 20% were for export. Schleicher has produced 630, of which 200 were exported; the most popular types are Rhönlerche (181), Ka-6 (132) and K-7 (105). A further 158 Schleicher types were built by groups, making 758 in all.—*Flugwelt.*

German Accident Rates

From January to October, 1959, in Germany, Helmut Kaulich calculates, every 13th aeroplane (i.e. one in every 13) was involved in a serious accident, every 25th totally destroyed, and every 29th severely damaged. The figures for gliders were somewhat better: every 15th involved in a serious accident, every 29th destroyed, and every 18th severely damaged.—*Flugwelt.*

Australian Soaring Certificates

As at October, 1959, Australia had 620 C pilots, 107 Silver C and 15 Gold C. Among the latest Silver C's are John Rowe, aged 15, and Ronald Brock, aged 14. But there are still no women on the Silver C list.—*Australian Gliding.*

Swiss Champion

In Switzerland, where no centralised competition is held, Hans Nietlispach has amassed 63,412 points during the 1959 contest period and becomes Champion. The runner-up, Bernhard Müller, had 46,395 points, and Manfred Pelzer 45,998. Best performances of the year were 17,454 ft. by Pelzer on 10th July, 304 miles goal flight by Nietlispach on 10th June, 303.2 miles distance by Niklaus Dubs on 21st April, 211 miles goal-and-return by Müller on 5th August, and 100-mile (161-km.) triangle on 10th May (speed not stated).—*Swiss Aero Revue.*

American Contest

The 1960 United States Championships will be held at Odessa, Texas, probably in the first fortnight of August.

Warren Storey

Sailplane and Glider Servicing

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THRUXTON AERODROME, ANDOVER

TECHNICAL COMMITTEE REPORT

MEMBERS of the Committee are: F. G. Irving (Chairman), D. H. G. Ince, J. Leach, R. C. Stafford-Allen, L. Welch, K. R. Obee, B. E. Warner, C. O. Vernon, H. U. Midwood.

Advisors to the Committee are: M. J. Neale (Motor Transport), J. S. Williamson Radio), K. G. Wilkinson.

Work of the Committee.—During 1959, six meetings of the Committee were held; 219 Certificates of Airworthiness have been issued (201 in 1958), of which 32 were initial applications (45 in 1958); 15 new Inspectors were approved, and 59 Inspectors and 5 firms renewed their approval. The Committee is grateful to Messrs. Stafford-Allen and Warner for their assistance in approving Inspectors and to Slingsby Sailplanes for their kindness in providing instruction for would-be inspectors.

The machinery for the Ten Plus Examination now exists and is available for those who wish to take advantage of it. The decision as to whether or not the scheme will be made compulsory will be taken after the discussion following the Annual General Meeting. In order to facilitate this scheme, seven Senior Inspectors have been appointed and the examiners (R. C. Stafford-Allen, assisted by B. E. Warner) will be visiting five more applicants. Every effort has been made to operate this scheme in accordance with the wishes of the owners of gliders, and it is hoped that it will cause the minimum of inconvenience whilst ensuring that the condition of old gliders is kept at a high level.

A Certificate of Airworthiness has been granted to the Polish Bocian. In this case, the owners obtained very comprehensive documentation from the Polish authorities and rendered the tasks of the Test Group and the Technical Committee relatively simple. It is hoped to publish recommendations for the guidance of intending importers of foreign machines in the near future.

The proposed revision of British Civil Airworthiness Requirements, Section E, has been submitted to the Air Registration Board and the Board has circulated them in draft form. Every effort is being made, in conjunction with the Board, to facilitate their early publication in final form.

A large proportion of the work of the Committee consists of considering modifications or in making recommendations to the manufacturers. We are most grateful to those instructors, inspectors and members of Clubs who bring such matters to our attention and to the manufacturers for their generous co-operation.

Again, we wish to thank the B.G.A. staff for the immense amount of work they carry out on technical matters. It is difficult to think of original observations to make on this aspect of the office work: it goes on incessantly and, as always, is greatly assisted by those who fill in forms properly. Every effort is made to keep the forms as convenient as possible, but the co-operation of Inspectors and Owners is important.

F. G. IRVING,
Chairman, Technical Committee

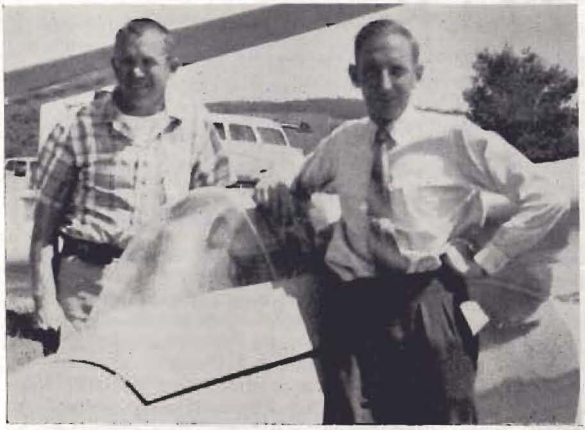
A Visit to Elmira

by Martin Mulhall

MY first impression of Elmira was not too favourable. I arrived by bus from New York (265 miles) at 2.30 a.m. during a deluge of rain. A dismal bus stop with a waterlogged street under reconstruction did not improve matters. After a little effort I got accommodation at a near-by hotel. Next morning—what a change! Blue skies with some nice cumulus beginning to form.

The Schweizer Factory and Gliding School are situated at the edge of Chemung County Airport. I was introduced to Gliding Director, Gene Bardwell, who soon made me feel completely at home. The friendliness and co-operation of everybody at the Schweizer School and Factory has to be experienced to be believed. Instructor Brad Straus checked me out in a Schweizer 2-22, a very robust trainer.

After getting the O.K. from C.F.I. Bernie Carris, I soloed in a 1-26. The tug in use was a Piper Super Cub and was most efficient at the job in the expert hands of Tony Doherty. The 1-26 is a dream to fly,



Martin Mulhall (right) looks happy after a flight at Elmira.

very compact and responsive. I really felt on top of the world flying my own machine with the landscape of a wonderful strange country unfolding beneath me.

I was very impressed at the speed of training at the school. The apparent casualness of the dispatch of students on first solo flights was a bit disquieting after my experience of more conservative methods back in Dublin. However, the extremely low accident rate indicated that the instructors were "on the ball".

Nevertheless, I was just a little apprehensive when I was installed in a 1-23G and released at 3,000 feet. Here was I a mere Irish C with the responsibility of a 5,000-dollar sailplane on my hands. But boy!—did she fly? A cruising speed of 88 m.p.h. and a minimum sink of 1.9 ft. per second, plus the added security of an all-metal construction all added to the pleasure. I would like to heartily congratulate the Schweizer Bros. on their production of such a wonderful sailplane.

It was very interesting to see the different States represented as the contestants began to arrive in preparation for the big event. One contestant, Dick Schreder, Toledo, was particularly unlucky as he was involved in a collision with his car and trailer a few miles from the site. The glider, his own remarkable HP-8, suffered considerable damage to its leading edge. However, the Schweizer factory was placed at Dick's disposal, and with the aid of exploding rivets, microballons and plenty of elbow grease the machine was repaired in time for the competition. This mishap was not the end of Dick's ill luck. But with grim determination he overcame all adversity and won second place in the competition. I believe we will see Dick in Europe in 1960.

One person who was warmly welcomed back to the sport was Peter Riedel, who travelled to the States in 1939 and attained fame when he then soared over the Manhattan Skyscrapers. He hit the headlines again during the Nationals. On an open distance day he took the route via Coney Island, N.Y., to get to Belmont Race Track, where he landed just in time to see the last horse reach the finish line. I quote from the New York Herald Tribune:

"Unlike the fabled Martians who demand 'take me to your leader', the pilot insisted on staying with the glider until it had been dismantled and tucked away. Pinkertons fetched him his supper."

The Contest was run with remarkable smoothness. One outstanding character was the Barney Wiggin U.S. Weather Bureau who was "on loan" for the Nationals. Everybody looked forward to his daily weather reports, which were interlaced with his unique sense of humour.

The launching was carried out with the aid of three tugs, and a launch every three minutes was the general run. Dick Johnson made some remarkable flights, including one open distance of just 300 miles. He was justifiably the winner of the National, earning 4,243 points with his Weigh. Dick Schreder came second in his HP-8, 3,696 points; and A. J. Smith third in his Lo-150, 3,627 points.

F.A.I. News

At the meeting of the Commission for Motorless Flight of the *Fédération Aéronautique Internationale*, held at Paris on 23rd and 24th January, news of the forthcoming World Championships was announced and certain revisions of the Sporting Code for gliders were recommended.

World Championships, 1960

To be held in Germany. Entries from 26 nations with 73 aircraft are anticipated. The nations are:

1. Australia
2. Belgium
3. Brazil
4. Canada
5. Denmark
6. Germany
7. Finland
8. France
9. Gt. Britain
10. Holland
11. Italy
12. Iceland
13. Israel
14. Yugoslavia
15. Norway
16. Austria
17. Poland
18. Rhodesia
19. Rumania
20. Spain
21. Sweden
22. Switzerland
23. Czechoslovakia
24. U.S.S.R.
25. Hungary
26. U.S.A.

It is hoped that permission will be granted to cross all adjacent West European frontiers.

It will be permissible to change any pilot, crew-member or aircraft up till the last practice day.

It is likely that barographs will be mandatory, and used to check that cloud-flying is not indulged in on days when the task set involves flying through airways.

Butzweilen is a single 1,900-m. runway (2,100 yards) running N.E.-S.W.; launch-point will be from the centre, so take-off point will not change throughout the contests.

Future Championships

The period has reverted from every 3 years to every 2 years.

Sporting Code (Section 3)

Distance marking for goal flights.—The existing formula involving an 8-km. wide strip will be superseded after this one by a simple formula as follows:

The course represented by line AB. Pilot lands at C. Distance marks scored on the distance AB—BC.

Method of speed and distance marking of goal races to be altered to conform with the system to be used this year in the World Championships.

All National Aero Clubs are asked to agree that the Silver C 50-km. triangle be deleted, as it is considered too easy, and avoids an away landing.

It is also recommended that dog-legs are deleted for 300-km. and 500-km. flights. These points will be decided at the next meeting in Germany.

Two meetings ahead, the question of whether or no permanently to forbid radio in Standard Class gliders will again be discussed.

O.S.T.I.V. News

The Board of the International Scientific and Technical Organisation for Soaring Flight (Ostiv) met in Zurich on 2nd-4th February, and the following information on matters discussed has been furnished by Mr. B. S. Shenstone, who is a member of the Board.

Eighth Congress

This will be held during the World Championships at Butzweiler Airfield, where it is expected that those attending will be able to live.

Opening: Tuesday, 7th June, at 11.00 hrs.
Technical Sessions: 9th-11th June.
Free Day: Sunday, 12th June.
Boat Trip on the Rhine: 13th June.
General Conference: 14th June.
Meteorological Sessions: 15th-17th June.
Concluding Dinner and Dance: 17th June, evening.

Technical papers proposed for delivery at the Congress are to be sent to Ostiv Secretariat, Kanaalweg 3, The Hague, Holland.

Slides used by lecturers should be 2 × 2 in. for convenience; the Secretariat should be notified if other sizes will be used.

Standard Class

A Working Group on Airworthiness Requirements will convene on 4th and 5th June to discuss developments, and on 7th June at 15.00 hrs. it is planned to discuss this subject with Aero Club delegates on the basis of comments already received in writing.

OSTIV Prize

As in Leszno (Poland) in 1958, the best Standard Class sailplane will again be chosen in 1960 by an international jury. Preparations for the evaluations are being based on the experience of and in co-operation with the original members of the jury, who were: P. A. Schweizer, U.S.A. (Chairman); G. Abrial, France; J. Bojanowski, Poland; B. Cijan, Jugoslavia; L. Welch, Gt. Britain; and H. Zacher, Germany.

To enable the evaluations to be made during the World Championships in Cologne, one example of each type in its normal condition must be made available and flown by members of the jury.

The following data in English, French or German should be sent as soon as possible, and in any case not later than 15th May 1960, to the OSTIV Secretariat, Kanaalweg 3, The Hague, Holland:

(a) Written application for the particular sailplane with the statement that it is the same as the certified type and fulfills the requirements of the "Draft Specification for F.A.I. Standard Class Gliders" (available from OSTIV Secretariat).
(b) Data sheet on the lines of "The World's Sailplanes". (Sheets available from OSTIV Secretariat and to be seen in Swiss *Aero Revue*, December 1959.)
(c) Performance data with indications as to whether they are estimated, calculated or measured, and also information on position error.
(d) Flying qualities report, if possible with reference to "Airworthiness Requirements for Standard Class Sailplanes, Draft 3", obtainable from the OSTIV Secretariat.

The sailplanes must be made available for at least two days for examination by the jury. For ground transport and assembly, crews must be available. Each member of the jury is to have at least one flight up to 1,500 metres altitude. These flights will take place during the championships early in the mornings before competition flights begin.

The evaluation on the ground will include:

Design	Maintenance
Useful Load	Ground Handling
Appearance	Assembly
Price	Cockpit arrangement

Possibility for Home Manufacture

and give consideration to the data supplied by the contender.

During the flight testing, the handling qualities, low-speed flight, high-speed flight, rate of change of turn, sideslip and landing qualities will all be considered on the basis of subjective impressions.

Sailplanes which are withdrawn by the contenders before the end of the flight tests by the jury, or are not available for other reasons, will be considered as withdrawn from the competition for this Prize.

World Championships Programme

Practice Period: 29th May—3rd June.
Opening Ceremony: 4th June.
Competition Days: 4th—17th June.
Prizegiving and Closing Ceremony: 18th and 19th June.
Departure: 20th June.

Accidents Analysis for 1959

THIS analysis has been in progress for ten years. During that time 671 reports have been received, and these have now been sorted into thirty-two significant categories. Some of these, like Number 2, "inability to deal with cable breaks or winch failures," are significant because of their numbers. Others, marked with asterisks, because they have resulted in fatalities. The results of this analysis are in TABLE 1.

The categories of accidents established in this ten-year analysis have been used to provide a detailed comparison of the years 1955 to 1959. This is set out in TABLE 2, which should be used in particular to observe how 1959 compares with previous years.

Finally, TABLE 3 is a catalogue of accidents and incidents reported during 1959. The figures in these tables are sufficient for further analysis by anybody interested; comment is therefore restricted to one point only.

TABLE 3 shows that the costliest damage

is done by pilots with over five hours solo, but who have not attained their Silver C. This has been a feature of the two previous years, i.e. 1958 and 1957. The cause could be one of two things, or more likely, a combination of both. These are (a) post-solo supervision and advanced instruction is inadequate, and (b) inexperienced pilots are getting onto expensive aircraft too soon (in this connection No. 90 should be noted). These conclusions are similar to those drawn in 1958 and 1957, and emphasise the urgency of making further improvements in Instructor training, particularly in post-solo instructional techniques.

It is gratifying to note that the cost per launch is less for 1959 than it was for 1958. There is, however, still plenty of room for improvement.

AIR CDRE. G. J. C. PAUL,
Accident Analysis Officer.

TABLE 1.—TEN-YEAR ANALYSIS OF ACCIDENT REPORTS

TAKE-OFF		
(1)	Dived in during, or immediately on, release from launch	2*
(2)	Inability to deal with cable break or winch failure	46
(3)	Hit obstruction during launching	6*
(4)	Airbrakes out, or opened during launch	10
(5)	Loss of control during aero-tow launch	2*
(6)	Other miscellaneous launching accidents	34
IN FREE FLIGHT		
(7)	Collisions	13***
(8)	Canopies coming off	10
(9)	Loss of control, including failure to recover from spins	12*
(10)	Flew into obstruction during deliberate low-level pass	2
(11)	Other miscellaneous accidents in free flight	13
APPROACH TO LAND		
(12)	Hitting obstructions during the approach	30*
(13)	Wing-tip hit ground due to final turn too low	17
(14)	Loss of control due to slow approach, including stretching the glide	45*
(15)	Accidents similar to 12, 13 and 14, but clearly due to leaving decision to land till too late	10
(16)	Undershooting landing area	44
(17)	Other miscellaneous accidents on the approach	16
LANDING		
(18)	Instructor failed to take over in time	24
(19)	Landing on rough ground	24
(20)	Hitting obstructions in landing area	27
(21)	Overshooting landing area	17
(22)	Heavy landings	53
(23)	Touch down too fast	11
(24)	Touch down out of wind, or with drift	31
(25)	Landing accidents attributable to bad weather (e.g. snowstorm)	4
(26)	Landing on slope and running backwards downhill	8
(27)	Other miscellaneous landing accidents	49
PILOT NOT IN CHARGE		
(28)	Wind blowing away unattended gliders	22
(29)	Damaged by careless ground handling	21
(30)	Found on Daily Inspection	12
(31)	Other miscellaneous accidents when aircraft was not in charge of a pilot	21
HOPS AND SLIDES		
(32)	Hops and Slides	35
	TOTAL REPORTS RECEIVED OVER 10 YEARS	671

* Fatalities (one for each asterisk).

TABLE 2.—FIVE-YEAR COMPARISON OF REPORTED ACCIDENTS

	1955	1956	1957	1958	1959
Total hours flown	13,381	13,596	17,996	17,798	22,937
Cross-country miles	26,936	16,045	52,878	22,117	71,306
Total launches	84,642	76,937	97,979	99,746	121,196
Total number of gliders	173	194	211	190	221
Number of B.G.A. Categorised instructors	91	104	97	96	(85)
Flying membership of clubs	—	—	—	3,147	3,408
(1) Dived in during, or immediately on release from launch	—	—	—	—	1 (£250)
(2) Inability to deal with cable-break or winch failure	2 (£225)	8 (£453)	8 (£283)	4 (£249)	3 (£389)
(3) Hit an obstruction during launching	3 (£307)	—	1 (£8)	1 (Nil)	—
(4) Airbrakes out, or opened during launch	1 (£750)	—	1 (£100)	1 (£150)	2 (£20)
(5) Loss of control during aero-tow launch	—	—	—	2 (£950)	—
(6) Other miscellaneous launching accidents	—	3 (£165)	8 (£83)	3 (£3)	3 (£17)
(7) Collisions in flight	2 (£105)	1 (£150)	—	1 (£1,400)	1 (£750)
(8) Canopies coming off in flight	—	3 (£60)	2 (£52)	2 (£270)	3 (£50)
(9) Spun in, or similar loss of control due to pilot failure in the air	—	—	—	1 (£300)	4 (£1,700)
(10) Flew into obstruction during deliberate low-level pass	—	—	1 (£550)	—	1 (£30)
(11) Other miscellaneous accidents in flight	1 (£1)	—	1 (Nil)	4 (£22)	1 (£7)
(12) Hitting obstructions during the approach to land	4 (£783)	2 (£40)	3 (£124)	5 (£727)	3 (£1,225)
(13) Wing tip hitting ground due to final turn too low	2 (£100)	1 (£100)	4 (£1,080)	3 (£422)	3 (£705)
(14) Stretch, stall and spin accidents on the approach	4 (£675)	6 (£496)	4 (£4,775)	10 (£2,906)	6 (£690)
(15) Accidents similar to 12, 13 or 14, clearly attributable to leaving decision to land too late	—	1 (£170)	6 (£1,030)	1 (£55)	—
(16) Undershoots	3 (£44)	3 (£560)	5 (£461)	8 (£566)	8 (£830)
(17) Other miscellaneous accidents on the approach	2 (£32)	1 (£7)	—	—	1 (£1)
(18) Landing—instructor failed to grab it in time	2 (£61)	3 (£23)	5 (£106)	3 (£315)	5 (£434)
(19) Landing on rough ground	4 (£268)	1 (£10)	3 (£600)	2 (£36)	5 (£167)
(20) Hitting obstructions in landing area (1955 including cows)	3 (£659)	1 (£80)	4 (£180)	3 (£170)	6 (£46)
(21) Overshot landing area	3 (£8)	4 (£487)	1 (£5)	1 (£5)	1 (£120)
(22) Heavy landings	3 (£72)	1 (£50)	13 (£286)	4 (£46)	11 (£203)
(23) Touch down too fast	—	—	5 (£52)	1 (£5)	—
(24) Touch down out of wind or with drift	2 (£58)	—	7 (£621)	7 (£238)	5 (£45)
(25) Landing accidents attributable to bad weather (1958, landing in snowstorm)	1 (£50)	1 (£3)	—	1 (£450)	—
(26) Landing on slope and running backwards downhill	1 (£18)	—	1 (£2)	—	5 (£236)
(27) Other miscellaneous landing accidents	5 (£158)	2 (£15)	6 (£285)	3 (£268)	—
(28) Wind blowing away unattended gliders	2 (£270)	3 (£231)	4 (£230)	1 (£25)	3 (£181)
(29) Damage done by careless ground handling	1 (£50)	3 (£10)	2 (£7)	5 (£38)	2 (£85)
(30) Found on Daily Inspection	—	—	4 (£44)	1 (£10)	4 (£46)
(31) Miscellaneous accidents to aircraft not in charge of a pilot	7 (£75)	—	2 (£23)	2 (£8)	2 (£55)
(32) Hops and slides	1 (£5)	—	—	—	1 (£150)
TOTALS	59 (£4,774)	48 (£3,110)	101(£6,987)	80 (£9,634)	90 (£8,332)
COST PER LAUNCH	19½ pence	10 pence	17½ pence	21 pence	16½ pence

TABLE 3.—ACCIDENT ANALYSIS REPORT FOR 1959

B.G.A. No., 1959	Type of Accident or Incident	Ref. to Table 2	Class of Pilot and Cost of Damage				Type of Glider
			Under 5 hrs. solo	Over 5 hrs. solo	Silver C or better	Instructor instructing	
57	Cable broke at 100 ft.; pilot pushed stick hard forward and dived in	1	£250	—	—	—	Olympia
67	Winch cut at 10 ft. Pilot stuffed nose down and hit ground hard	2	—	£50	—	—	Olympia
54	Winch cut at 20 ft. Pilot landed heavily and damaged spine	2	—	Nil	—	—	Tutor
50	Winch cut, and instructor allowed aircraft to stall: it dived in	2	—	—	—	£339	T-21
79	Pilot took off on aero-tow with airbrakes extended. Waved off by tug and force-landed	4	—	Nil	—	—	Skylark 2
49	Ditto: except that pilot failed to accept wave-off from tug and was jettisoned. Gross negligence by pilot who claimed 10,000 hrs. experience	4	—	£20	—	—	Skylark 2
85	Pilot held stick firmly forward on launch and failed to launch: damaged skid and fuselage	6	—	£10	—	—	Tutor
39	Take-off abandoned when canopy opened during beginning of launch	6	—	—	Nil	—	Skylark 2
4	Weak link, fitted between winch part of cable and parachute, broke. Parachute remained attached to aircraft, streamed back and fouled tailplane	6	£7	—	—	—	Tutor
26	Collision between two aircraft soaring on ridge just below cloud base which was 350-450 ft. above ground level. One killed	7	—	£750	—	—	Harbinger and Prefec
62	Canopy came off whilst soaring	8	—	£20	—	—	Skylark 2
34	Ditto	8	—	—	£5	—	Skylark 2
40	Ditto	8	—	£25	—	—	Skylark 2
90	Having released the cable and begun a turn, pilot spun, and failed to recover before hitting ground	9	£1,000	—	—	—	Skylark 2
47	After beating up landing point down wind, pilot pulled up into climbing turn and spun in	9	—	£450	—	—	Kite 2b
44	Pilot attempting to soar, contrary to instructions, stalled and spun in	9	£150	—	—	—	Tutor
18	Pilot started a turn at 600 ft., stalled and spun in	9	£100	—	—	—	Cadet
72	Pilot doing high-speed fly-past hit loud-speaker with wing-tip	10	—	—	£30	—	Olympia
88	Pilot approaching small field failed to see small tree, and flew into it. (Claims over 1,000 hrs. power-flying, but this was only his third field landing)	12	—	£400	—	—	Olympia
25	Encountered severe sink on approach in turbulent conditions and lacked height to avoid obstruction	12	—	£275	—	—	Skylark 2
6	Hit power cables on approach to land in field on cross-country	12	—	—	£550	—	Skylark 2
87	Began loop at 100 kts., and claims to have pulled 5G. Ply skin on underside of wing cracked	11	—	—	—	£7	Eagle
83	Wing tip hit ground during final turn in to land	13	—	—	—	£300	T-31
52	Ditto (first solo)	13	£5	—	—	—	Tutor
24	Ditto	13	—	£400	—	—	Olympia
71	Stalled on the approach	14	£20	—	—	—	Tutor
66	Ditto, attempting to stretch glide to reach field	14	—	£10	—	—	Skylark 2
37	Ditto, in wind of 20 kts., gusting to 30 kts.	14	—	—	£100	—	Olympia
23	Ditto, attempting circuit without enough height	14	—	£150	—	—	Skylark 2
14	Ditto ditto	14	—	—	—	£10	Eagle
13	Ditto, merely flying too slowly	14	—	£400	—	—	Skylark 2
82	Undershoot	16	£12	—	—	—	Tutor
81	Ditto	16	—	—	—	£8	T-21
58	Ditto	16	£12	—	—	—	Tutor
46	Ditto	16	—	—	£245	—	Skylark 3
21	Ditto	16	—	—	—	£300	T-21
12	Ditto	16	—	£9	—	—	Skylark 2
7	Ditto	16	—	£10	—	—	Tutor
46	Ditto, due to doing circuit with airbrakes extended	16	£234	—	—	—	Prefect

76	Airbrake lever came away in pilot's hand on the approach (landing successful)	17	—	£1	—	—	Olympia
89	During landing, instructor failed to take over in time	18	—	—	—	£170	T-21
48	Ditto	18	—	—	—	£15	T-21
10	Ditto	18	—	—	—	£200	T-21
5	Ditto	18	—	—	—	£20	T-21
2	Ditto	18	—	—	—	£29	T-21
70	Damage attributed to landing on rough ground having failed to get back to airfield	19	—	£20	—	—	Tutor
		19	—	£20	—	—	Eon Baby
64	Ditto	19	£117	—	—	—	Tutor
16	Ditto	19	—	£5	—	—	Olympia
69	Damage attributed to rough ground in selected field on cross-country landing	19	—	—	£5	—	Skylark 2
41	Ditto	20	£20	—	—	—	T-21
68	Failed to avoid post sticking up on landing area on home airfield	20	—	£5	—	—	Tutor
33	Ditto	20	—	—	—	£2	T-21
30	Failed to avoid tea urn on own airfield	20	—	£2	—	—	Olympia
56	Cross-country away landing, ran into electric fence	20	—	—	£15	—	Skylark 2
31	Ditto, ran into old bomb crater	20	—	—	£2	—	Skylark 2
15	Ditto, ran into barbed wire fence	21	—	£120	—	—	Prefect
65	Overshot landing area and ran into standing crop	22	—	£5	—	—	Olympia
84	Heavy landing, due to injudicious use of airbrakes	22	—	£5	—	—	Skylark 2
80	Ditto, due to misjudged height	22	£25	—	—	—	Prefect
73	Ditto, failure to hold off	22	—	£30	—	—	Olympia
59	Ditto, due to slow approach	22	—	£20	—	—	Weihe
42	Ditto, hit bump and bounced	22	—	£10	—	—	Kite 2
38	Ditto, due to slow airspeed on approach and up-hill landing	22	—	£55	—	—	T-21
27	Ditto, due to misjudging height	22	—	£25	—	—	Weihe
20	Ditto	22	£10	—	—	—	Prefect
17	Ditto, failure to allow for wind gradient	22	£15	—	—	—	Tutor
9	Ditto, due to slow approach in gusty conditions	22	£3	—	—	—	Grunau
3	Ditto, misjudged height	24	—	£15	—	—	Prefect
61	Landing with drift	24	—	£10	—	—	T-31
53	Ditto	24	—	—	£15	—	Swallow
43	Ditto	24	—	£3	—	—	Olympia
29	Ditto	24	—	£2	—	—	Grunau
11	Ditto	26	—	£200	—	—	Olympia
86	Landed on slope and ran backward downhill	26	—	—	—	£20	T-21
60	Ditto	26	—	—	—	£5	T-21
55	Ditto	26	—	—	£1	—	Skylark 2
32	Ditto	26	—	£10	—	—	T-21
19	Ditto						
			Damage				
28	Visiting glider pilot drove vehicle over wing-tip of parked aircraft	29	—	—	—	—	Olympia
8	Aircraft launched whilst its cable was under the tail of another	29	—	—	—	—	T-31
51	Unattended aircraft blown over by wind	28	—	—	—	—	T-21
35	Pilot opened canopy, which was forced open further and damaged by wind	28	—	—	—	—	Skylark 2
22	Aircraft unsecured and with insufficient crew blown over	28	—	—	—	—	T-21
77	Found on Daily Inspection, cracked skid	30	—	—	—	—	T-21
75	Ditto, bulkhead and skid damaged	30	—	—	—	—	Skylark 2
74	Ditto, loose wing attachment fittings, due to wood shrinkage	30	—	—	—	—	Skylark 2
63	Ditto, tail trim lever connected up in wrong sense	30	—	—	—	—	Eagle
36	Powered aircraft taking off, hit parked glider	31	—	—	—	—	Prefect
1	On being opened, canopy slid off hinges, fell to ground and broke	31	—	—	—	—	Skylark 2
78	Low-hop pilot doing low hop stalled at 15 feet; attributes accident to not having flown for *seven* months	32	—	£150	—	—	Kite 2a
90 Reports	TOTALS, number and cost		16 (£1,980)	38 (£3,692)	11 (£968)	14 (£1,325)	

28	Visiting glider pilot drove vehicle over wing-tip of parked aircraft	£80
8	Aircraft launched whilst its cable was under the tail of another	£5
51	Unattended aircraft blown over by wind	£46
35	Pilot opened canopy, which was forced open further and damaged by wind	£5
22	Aircraft unsecured and with insufficient crew blown over	£130
77	Found on Daily Inspection, cracked skid	£4
75	Ditto, bulkhead and skid damaged	£40
74	Ditto, loose wing attachment fittings, due to wood shrinkage	£2
63	Ditto, tail trim lever connected up in wrong sense	Nil
36	Powered aircraft taking off, hit parked glider	£30
1	On being opened, canopy slid off hinges, fell to ground and broke	£25
78	Low-hop pilot doing low hop stalled at 15 feet; attributes accident to not having flown for *seven* months	—
90 Reports	TOTALS, number and cost	11 (£367)

ROBERT PERFECT FLYING SCHOLARSHIP

by G. J. C. Paul

THE Robert Perfect Flying Scholarship was instituted in 1959 to provide an appropriate memorial for Mr. R. V. Perfect, for many years a member of the Air League Council. This year it is intended to provide for six scholars, who will each be given a 14-days' flying training course at Gliding Clubs selected by the Air League in consultation with the British Gliding Association; board and lodging at the gliding site for the duration of the training course is included in the award.

Eligibility

The awards are open to any British subject, either boy or girl, under the age of 21 (at 31st March 1960), who is medically fit, and who has attained the minimum age to fly solo in a glider (which is 16) prior to the start of flying training. Pilots who hold, or have held, civil licences; or who have qualified as service pilots, or who have obtained a C or more advanced gliding certificate, are not eligible.

The Competition

The awards will be made to the authors of the six best essays on the following subject:

"One of the objects for which the Air League was founded in 1909 was to disseminate knowledge and spread information showing the vital importance to the British Empire of aerial supremacy, upon which its commerce, communications, defence and its very existence must largely depend."

Candidates are required to show why, in their opinion, this object is as important to-day as it was in 1909. 3,000 words will be regarded as the optimum, but shorter or longer essays will not be penalised if their quality is right.

The six best essays will be selected by three judges, two of whom will be independent of the Air League, and the third a member of the Air League Council. The following have consented to judge the 1960 competition:

The Rev. D. L. Graham, M.A., Headmaster of Dean Close School, Cheltenham.

Air Chief Marshal Sir Ronald Ivelaw-Chapman, G.C.B., K.B.E., D.F.C., A.F.C.

P. A. Wills, Esq., C.B.E., A.F.R.Ae.S., Member of the Air League Council and Chairman of the British Gliding Association.

Flying Training

The Air League has reserved six vacancies on gliding courses, which begin and end between 7th August 1960 and 10th September 1960. The gliding clubs giving these courses are:

Scottish Gliding Union.
Derbyshire & Lancashire Gliding Club.
London Gliding Club.
Cornish Gliding & Flying Club.

Each scholarship winner will receive a grant of £2 towards travelling expenses to and from the site selected for his training.

The duration of training will be 14 days. No break will be allowed, and the scholarship holder will be required to reside on the site and to conform with all the rules of the club.

If after starting training a scholarship winner is found unsuitable to continue, the award will lapse.

Method of Entry

Entries must be received by the Secretary General of the Air League, Londonderry House, 19 Park Lane, London, W.1. They should be on foolscap, one side only, and may be in manuscript or typed. One copy only is required.

Each entry must be signed by a pseudonym and the essay must include no other indication of the author's name or address. It must also be accompanied by a sealed envelope having the same pseudonym on the outside, and the full name and address of the author within. These envelopes will remain sealed until after the winning essay has been selected.

All entries must be accompanied by a coupon cut from *Air Pictorial*. No other entrance fee is required.

Entries for the 1960 award must be received not later than mid-day on Wednesday, 1st June.

Announcement of Winners

The winners of the 160 awards will be announced in the August issue of *Air Pictorial*. The decision of the Council of the Air League will be final on all matters relating to the scholarship; the League will not enter into discussion or correspondence on any decision.

Airways News

by D. H. G. Ince

At this time of year many of our 1960 cross-countries are in the early planning stage and it is therefore most opportune to review the Controlled Airspace situation.

Since the last report (SAILPLANE & GLIDING, April 1956) the following changes have taken place.

1. AMBER 1 DECCA.—This airway has been introduced for a trial period which is due to finish at the end of February, but will in all probability be extended. At present it does not operate on Saturdays and Sundays. The width—5 miles—is half that of a normal airway, and the centre-line runs west of Amber 1 through the south-west side of the Birmingham Control Zone. The base is stated in flight levels: FL 100 northwards from the south-eastern edge of the Birmingham Control Zone and FL 70 southwards from this line.

Flight levels are defined in steps of 500 ft. by an aircraft flying with its altimeter set to 1013.2 millibars. To convert flight level to an equivalent altimeter reading, multiply by 100—thus:—

FL 35 = 3,500 ft.
FL 70 = 7,000 ft.
FL 100 = 10,000 ft., etc.

If, therefore, you want to know how far you are below the base of Amber 1 Decca, you must *temporarily* reset your altimeter millibar scale to 1013.2.

2. BLUE 26.—This is a "summer schedules only" airway, and is, therefore, effective throughout the thermal soaring season. Its base over land and near the coast is 3,000 ft. a.s.l. and it deletes most of the triangle of previously uncontrolled airspace between Blue 3, Blue 1 and the South Coast.

3. WEST MALLING SPECIAL RULES AREA.—This does not operate at week-ends. From Monday to Friday inclusive, however, it is banned to all flying (apart from aircraft with radio and in contact with West Malling Control) from ground level to 2,500 ft. a.s.l. except in the N.E. corner where the ceiling rises to 3,000 ft. a.s.l. Although there is a free corridor through the area, it only extends to 600 ft. above ground level and is no help to glider pilots.

Altimeter Setting

Apart from the problem created by Amber 1 Decca—with its base defined in flight levels—there is no change in the recommended altimeter setting procedure; i.e., the altimeter must be set to aerodrome height before take-off, and under normal pressure-gradient conditions this will define the glider's height with sufficient accuracy in relation to the vertical limits of controlled airspace (unless these are stated in flight levels). If the altimeter setting is changed to 1013.2 mb. in the neighbourhood of Amber 1 Decca, note the previous millibar scale setting and return to this immediately on leaving the vicinity.

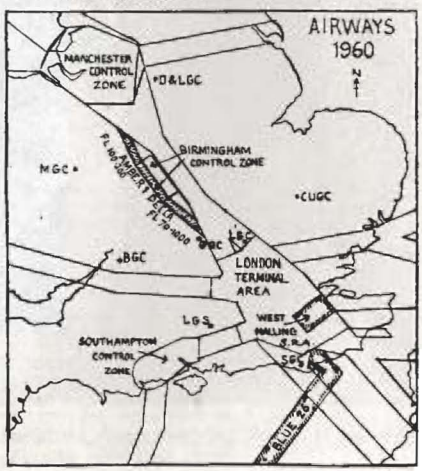
Controlled Airspace: Central

The special dispensation allowing gliders to cross airways in VMC without prior ATC permission continues. Airways should always be crossed as expeditiously as possible.

Unless equipped with radio and thus able to obtain local ATC permission to do so, no glider may fly through the airspace up to 2,000 ft. above an airfield and within 3,000 yds. of its boundaries.

Finally: when flying in controlled airspace, gliders must remain in VMC, i.e.—

Visibility:
5 nautical miles
Horizontal distances from cloud:
at least 1 nautical mile
Vertical distance from cloud:
at least 1,000 feet.





Winchester from about 3,000 ft.: not by any means a vertical shot.



This shot is too oblique to be easily identified, were it not for the Cathedral in the foreground. Camera: Retinette; film, Panatomic X ; 4× Orange filter.

Turning Point Photography

by H. P. Hilditch

MANY glider pilots regard production of photographic evidence of turning points as something rather chancy whose failure may easily nullify an otherwise successful qualifying flight. As a result the Silver or Gold C aspirant tends to think in terms of straight flights, preferably down wind, and in this country a straight task often offers less chance of a 300-km. flight than a dog-leg or out-and-return. In fact, to be able to take turning-point pictures reliably enormously increases the chances of that elusive Gold or Diamond; apart from this, retrieving costs can be greatly reduced. The following deliberately dogmatic notes are distilled from the experience of a certain amount of successful air-to-ground photography, a much greater amount of unsuccessful, and the lessons of developing other people's films, and are dedicated to proving that suitable pictures can be taken reliably.

Equipment

As far as cameras are concerned, the desirable features are:

1. A shutter speeded to at least 1/200 sec. Camera-shake spoils more pictures than anything else; and while a little fuzzing may improve Joe Soap in the T-21, it will ruin an air-to-ground shot. For this reason cheap cameras whose single shutter speed is about 1/30 sec. are not satisfactory.
2. Sufficient exposures to allow a margin of error. The eight frames of a 2¼×3¼ in. (6×9 cm.) camera are just enough for a triangle. One muffed picture can spell disaster.
3. Direct eye-level viewing is essential unless the camera is fixed in the glider. Waist-level or otherwise angled viewfinders are useless.
4. Interlocked film wind and shutter tensioning; it is then impossible to put two pictures on one frame, while a self-cocking shutter can be easily fired by accident in the cockpit. Separate shutter tensioning and film wind are acceptable even though requiring two operations, provided they are interlocked.
5. Aperture and focus setting that stays put, preferably with click tops. This seems to be a counsel of perfection. Unfortunately fiddling with maps seems always to alter anything capable of being altered, no matter how carefully the camera is stowed.
6. A strap to attach the camera round the neck; better still, an ever-ready case.

Filters

Good thermal-soaring days are usually clear enough for scattered ultra-violet light not to be a problem, though a filter may increase image contrast—a good thing. A clear ultra-violet filter for colour and a 2× yellow for monochrome is a good choice, though the principal value of a filter is to keep the lens clean.

Film

The choice of film is more important than may appear. A good air-to-ground shot demands good contrast and fine detail, and on both counts fast film is unsuitable. Add to this the fact that it is difficult not to over-expose fast film in summer sunshine, and it is clear why such film nearly always produces an opaque grainy negative in which fine detail is lost. Fine-grain (slow) film such as Panatomic X, Pan F, KB 14 or Isopan FF will give best results. Next best are medium-speed films such as Plus X or FP 3, but anything faster is to be avoided. Incidentally, the modern tendency is not to use fine-grain developers with fine-grain film, and ultra-fine grain (solvent) developers are unsuitable as they drastically reduce effective film speed. Subsequent remarks on exposure are made on the assumption that this is done.

Selection of Turning Points

These must be readily recognisable in a picture taken from a safe height; the writer's preference is for town centres for the following reason. Aiming a camera from a glider is at best rather uncertain; using a normal lens, the diameter of the photographic field is little more than half one's height, and even if shooting is inaccurate there is a good chance of getting enough to be identifiable on a map or street plan. Railway stations are usually only recognisable by adjacent built-up areas, and aerodromes can come out as an anonymous stretch of runway.

Taking the Picture

Unless the declared turning-point is a well-known landmark, like Tower Bridge, the picture is best taken as nearly vertically as possible to facilitate identification from a map. However, what Nick Goodhart rightly calls the "ghastly aerobatics" necessary for an absolutely vertical picture are not necessary; an angle of 60° or 70° to the ground is enough. Fixing the camera in the glider is hardly practicable in a club machine, though private owners can fix a camera permanently pointing parallel to the wing and use the latter to sight, ignoring the viewfinder; alternatively, it is possible to buy a pistol-grip cable release permitting one-handed operation.

On the other hand, it is quite possible to trim the glider to circle and steepen the turn at the right moment, shooting through the perspex, using one or both hands according to the equipment available. I have found it best to photograph while in a thermal, even if it means an extra mile to find one, as a surprising amount of height can be lost in manoeuvring for position. If shooting through the canopy, it is wise to see that the sun is not shining on the perspex in front of the lens. A better picture is to be expected by photographing through the clear-vision panel, though in most gliders aiming is then a matter of guesswork.

Exposure

The suggested exposures given in the table below apply only to fine-grain film in bright sunshine.

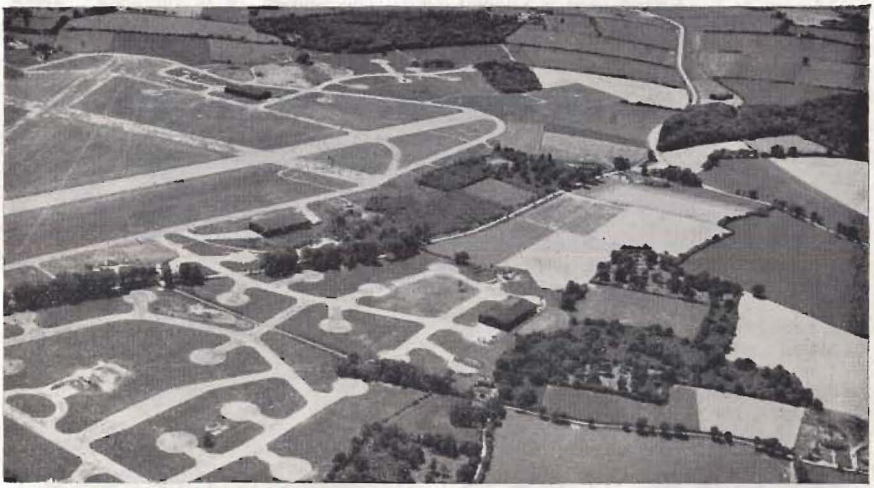
Exposure	*No Filter*	*2× Yellow Filter*	*4× Orange Filter*
1/200 or 1/250 sec.	F 5.6	F 4	F 2.8
1/500 sec.	F 4	F 2.8	F 2
1/1,000 sec.	F 2.8	F 2	F 1.4

Cost

The cheapest camera I know of fulfilling most of the conditions specified is the Halina 35X costing £7 13s. 3d. If desired, an ever-ready case costs £1 6s. 9d., a filter and holder about 12s., and a lens hood about 7s. Several other suitable 35-mm.



Banbury Cross, originally a 12-fold enlargement.



Without familiar buildings or characteristic appearance of runways, one aerodrome is much like another.

cameras are available around £10-£12, e.g. Ilford Sportsman.

35-mm. film cost, as a refill, 3s. 11d. for 36 exposures, or about 7s. in a cassette. Development costs about 2s. 6d. if done professionally, but see that the roll is returned uncut. Prints are not essential, but undoubtedly make identification easier. It should be possible to find at least one club member willing to process films for a nominal cost.

Finally, read the B.G.A. regulations governing photographic evidence of turning-points carefully before starting.

Waves at Issoire

by Tony Goodhart

With this flight Commander G. A. J. Goodhart, R.N., added a third Diamond to his Gold C badge by climbing more than 5,000 metres, and thus became the second British pilot to acquire all three Diamonds.

ALTHOUGH the standing-wave conditions at Issoire have only been used by glider pilots within the last few years, the place bids well quickly to become world famous. Its success is due (in addition to its waves) in no small measure to the enthusiasm and energy of its "Chef de Centre", Monsieur Herbaud, ably assisted by Mademoiselle Trouillard and several more whose names escape me. It is also, unlike many gliding sites, easy to get to, either by train on the overnight sleeper from Paris, or by road on Route Nationale 9, one of the main roads to the south from Paris—or, of course, by air from anywhere you happen to be.

The first time I went there, a few days before Christmas, I was met off the train at 6.45 a.m. by both the Chef de Centre and his assistant and taken, in the dark and the rain, straight to the airfield a mile or so out of town. Here at 7 a.m. the gliders were already out at the launching point and the course members were busy completing arrangements for take-off.

At 7.30 Mlle. Trouillard took off in a Jodel to prospect the wave—the beginnings of twilight were already showing a fine lenticular cloud overhead—and, by the time she landed half-an-hour later to declare the wave good, the first glider was already airborne behind the Fieseler Storch (or rather

the Morane as the French copy is known) with sunrise still nearly half-an-hour away. From then on, all day, the fleet of 6 gliders were practically continuously airborne or being re-crewed and re-launched.

The club operates *every* day except New Year's Day, regardless of high days, holidays or any other days, and if New Year's Day is a wave day (as it was this year) it even operates then (though perhaps a little hesitantly).

There is nothing haphazard about the organisation at Issoire. No pilot, however experienced, may fly solo in the wave until he has

(a) been briefed.
(b) had a power flight round the area with an instructor.
(c) done a dual wave flight.

The briefing has been most carefully tape-recorded by Monsieur Herbaud and lasts, in four parts, for well over an hour. The first half of it is now available on an English tape (i.e. in my version of English on a French tape). If prospective wave flyers really listen to the briefing and "act according", they should have little trouble; though the wave flying at Issoire is by no means always a simple question of a quick up-and-down in clear air.

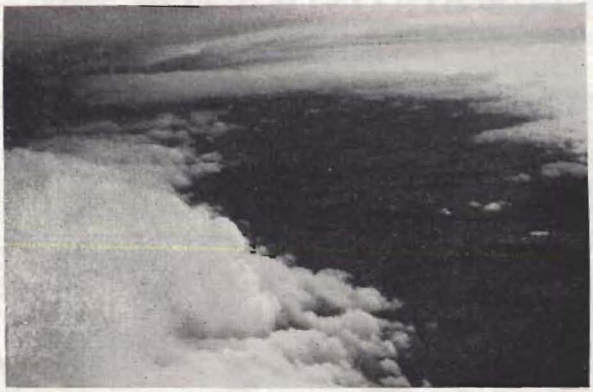
The weather situation necessary for wave development at Issoire is a fairly common one—that of a depression coming in from the Atlantic—and the best waves occur in the warm sector of a depression moving generally up the English Channel, which results in a stable westerly wind meeting the Auvergne Mountains roughly at right angles. Since these mountains form a somewhat irregular chain, the waves are apt to be distinctly broken up, and on marginal days it is quite a struggle, involving frequent changes of position to make good use of them.

Two days before Christmas my turn came to try for my Diamond height in an Air-100, and I was duly towed through the considerable turbulence of the rotor cloud and released in good lift at about 2,500 ft. above aerodrome level (1,250 a.s.l.). Rate of climb 5-8 ft./sec., and I got up to 16,000 ft. very happily—*BUT*—then a great wall of cloud rather suddenly arrived from the west and enveloped me (and four others) in whirling snow.

There is a fairly strict rule that if one loses sight of the ground one comes down—the recorded briefing gives instructions as to how this should be accomplished: these include the use, naturally enough, of the turn-and-slip which I now duly switched on (having tested it before take-off). Imagine my consternation to discover that, although it indicated bags of slip, nothing would induce it to indicate turn, despite the variety of manoeuvres and attitudes to which by now it was being subjected. However, luckily the Air-100 is a fairly positively stable ship, so that it flew itself at a mean speed within rather large limits of 80 km./h. Meantime the snow was whistling in, out and around, and I was not at all happy. It was a distinct relief a little while (it seemed a helluva long while) later to come out of the bottom of the rotor cloud and to find oneself only a couple of miles from home. Of the other four, two reached home, one got lost and landed 30 miles away, and the fourth was most efficiently radio-talked down to Clermont Ferrand aerodrome.

It wasn't till after Christmas that I was able to go again, by which time there was a considerable horde of "velivolistes" competing for the five or six available gliders. There is a close liaison between Issoire and the already well known La Ferté Alais, which provides two or more gliders and an instructor throughout the winter; at the Christmas and New Year holiday the La Ferté Alaisans were there in strength—much to the delight of local pubs. Incidentally, excellent meals are available almost alongside the aerodrome at the excellent and very friendly "routier" restaurant of Maman Thible.

On 2nd January I found myself No. 2 on the list for the Air-100 and was not very hopeful, since conditions were reasonably good and the No. 1 had every intention of staying up. I was even less hopeful at about 10 o'clock when I discovered that No. 1 had muffed his first attempt, had landed and had taken off again without my realising it. However, he and all the others were soon down again and M. Herbaud decided to wait till after lunch for better conditions. Getting away shortly after 1 p.m., I was towed into the wave rather higher than I had hoped (it was not one of the regular tow pilots) and waved off at nearly 4,000 ft. above the aerodrome. However, lift was excellent, and of course dead smooth, and rate of climb between 10 and 15 ft./sec. The sky was overcast, but away in the west one could see small patches of blue sky; position-keeping was easy as the "foehn" cloud



Cumulus sprouting from a rotor cloud, photographed by Tony Goodhart from 25,000 feet.

gap was well marked and one simply had to keep just in front of the leeward edge of it.

At about 10,000 ft. a wall of cloud arrived in very much the same way as it had before but this time the turn-and-slip was more co-operative. As the lift was still 10 ft./sec., I decided to go on up and reached about 19,000 ft. above Issoire before the lift tailed off; this was somewhat annoying as I was about 1,500 ft. short of Diamond gain of height, and I cursed the tug pilot who had towed me so high.

Thinking I might have drifted back in the wave, I put the speed up to 75 knots (having previously been flying at 55 knots) and flew westwards for a few minutes until, quite suddenly, I burst out into brilliant sunshine and back into lift again. By this time my oxygen pressure gauge needle was well "in the red" (the bottle, due to the holiday period, had not been recharged and was only one-quarter full on take-off), and I wondered if I could go much higher.

However, I was spurred on by the sight of a Dutch Skylark II, flown by Joop Jungblut, and together we went up to 25,000 a.s.l. before coming hastily back to allow others to have a go—unfortunately there was nothing really startling to be done afterwards, though we learnt later that evening that a Belgian had also achieved his 5,000 metres gain, flying a Javelot. Incidentally, Jungblut's flight from take-off to 25,000 ft. and back on the ground lasted less than one hour!

The view was terrific from 25,000 ft. with Clermont Ferrand showing up in the cloud gap and with lenticulars all over the place to the north, south and east—but not to the west. What had happened was that the squall line of a cold front had moved through with a marked increase of wind speed which had temporarily boosted the wave conditions, though shortly afterwards the instability behind the front had upset the waves. If one of my photographs comes out, you should be able to see the curious effect of the instability on the rotor cloud which had suddenly sprouted a large cumulus, which a bit later in the afternoon, as the wind died down, became almost a cu-nim.

Altogether a most exhilarating flight, though it was a pity to have to leave 5 ft./sec. lift at 25,000 ft. solely because the oxygen needle was now quite clearly about to read "zero".

I strongly recommend Issoire to pilots who want to wave-soar to considerable heights—the French altitude record of about 33,000 ft. a.s.l. was achieved there—but suggest that you should, if you possibly can take your own glider and so avoid the frustration of watching others, rather than flying yourself.

Thank you Monsieur Herbaud and Mademoiselle Trouillard!

CLUB STATISTICS FOR 1959

Gliding Club	Aircraft 2S	Se	HP	PO	CO	UC	Launches On club site	Launches By club gliders	Hours On club site	Hours By club gliders
BRISTOL	2	3	2	7	—	—	9,094	7,610	1,742	1,032
CAMBRIDGE UNIVERSITY	1	2	1	—	2	1	4,701	5,733	702	1,045
COVENTRY	2	3	1	1	2	—	6,415	6,158	871	720
DERBYSHIRE & LANCASHIRE	2	3	2	6	2	—	4,809	4,067	1,296	709
KENT & ROYAL ENGINEERS	2	1	1	2	—	—	3,859	3,525	336	326
LONDON	3	5	4	13	—	1	14,504	13,356	3,303	2,247
MIDLAND	3	2	4	3	—	—	9,006	7,614	2,432	1,755
NEWCASTLE	1	2	1	5	2	—	3,246	2,830	417	326
OXFORD	1	—	2	3	—	1	4,149	3,760	617	484
SCOTTISH G.U.	2	2	3	2	—	1	3,543	3,286	756	585
SOUTHDOWN	1	1	1	—	—	—	3,723	3,739	432	460
YORKSHIRE	1	4	1	4	1	1	2,541	2,305	953	715
LASHAM CENTRE:							24,077	21,248	6,484	3,366
ARMY	2	—	3	3	—	3				
IMPERIAL COLLEGE	1	—	1	—	—	—				
SURREY	—	—	5	12	—	3				
CROWN AGENTS	—	—	—	—	1	—				
LASHAM SOCIETY	1	—	—	—	3	—				
POLISH AIR FORCE	—	—	1	—	1	—				
ABERDEEN	1	4	—	—	—	3	2,334	2,334	152	152
AVRO	1	1	1	—	—	1	2,114	2,143	156	184
BLACKPOOL & FYLDE	1	2	—	—	—	—	1,172	1,172	200	200
COLLEGE OF AERONAUTICS	1	—	—	—	2	—	381	381	31	31
CORNISH	2	2	—	1	3	1	7,362	7,141	750	642
DUMFRIES & DISTRICT	—	1	—	—	1	—	*Not flying*		—	—
GLASGOW & WEST OF SCOTLAND	—	1	—	—	—	—	*Not flying*		—	—
HALIFAX	1	2	—	1	—	—	860	858	45	45
HANDLEY PAGE	1	1	2	—	—	—	882	1,010	172	225
LAKES	1	2	—	—	—	1	2,516	2,534	223	201
NORFOLK	1	1	—	1	—	—	489	456	37	33
NORTHAMPTON	1	3	1	—	1	1	2,117	2,014	217	192
PERKINS	1	2	—	—	—	—	2,132	2,132	180	180
R.A.E.	1	1	—	1	—	1	1,737	1,608	163	135
B.E.A. SILVER WING	1	1	—	—	—	—	393	393	24	24
SHORT'S	1	—	1	—	—	—	*Not flying*			
TAUNTON VALE	2	1	—	1	1	—	2,980	2,759	246	222
TOTAL CIVILIAN	42	53	38	65	22	19	121,196	112,166	22,937	16,236
ROYAL AIR FORCE:										
CLEVELANDS	1	2	1	1	—	—	1,959	1,958	250	268
CHILTERNS	2	3	1	—	—	—	3,438	3,430	399	396
EAST ANGLIAN	2	3	1	—	—	1	3,197	3,247	429	429
EAST MIDLAND	3	2	1	—	—	1	2,448	2,448	252	252
EAST YORKSHIRE	1	1	—	—	—	—	390	390	29	29
FENLAND	2	2	2	—	—	—	1,467	1,494	174	226
FOUR COUNTIES	2	2	1	—	—	—	2,607	2,607	251	251
RED DRAGON	2	2	1	—	—	—	2,896	2,896	242	242
SUFFOLK	1	3	1	—	—	—	1,765	1,765	107	160
WESSEX	3	2	3	—	—	—	6,655	6,655	1,304	1,304
WINDRUSHERS	2	3	3	—	—	—	7,075	7,031	787	778
ROYAL NAVY:										
PORTSMOUTH	1	8	1	1	—	—	2,447	2,407	223	218
TOTAL SERVICE	22	33	16	2	—	2	36,344	33,921	4,447	4,353
CIVILIAN & SERVICE	64	86	54	68	22	21	157,540	146,087	27,384	20,589
AIR TRAINING CORPS							102,434			

Key to aircraft categories: *2S* = two-seater; *Se* = secondary; *HP* = high-performance; *PO* = privately owned; *CO* = club-operated; *UC* = under construction.

CLUB STATISTICS FOR 1959 (continued)

Flying days		Cross-country miles		Courses		Certificates					Membership		
			By club						(Legs in brackets)				
Total	Soaring	From site	gliders	No.	Pupils	A	B	C	Silver	Gold	Flying	Non-flying	Potential
217	135	4,928	1,920	20	160	32	30	18	6(20)	— (2)	179	72	250
210	136	1,588	2,244	6	52	23	23	13	6(24)	1 (2)	240	1	250
123	71	1,404	330	—	—	27	27	18	4(14)	— (1)	145	11	140
141	72	4,236	697	8	69	8	7	10	— (4)	1 (2)	176	127	300
120	22	192	440	6	60	6	6	7	2(10)	— —	59	29	150
254	160	8,392	4,151	17	200	36	37	21	14(39)	1 (6)	350	70	500
175	130	3,041	901	16	230	40	40	25	4(19)	1 (1)	220	50	300
120	37	320	—	—	—	16	15	14	2 (4)	— (1)	70	30	100
112	75	557	131	—	—	9	9	17	4(11)	—	77	1	100
131	69	278	245	8	64	14	14	8	1(10)	— (1)	83	6	150
109	50	172	500	3	30	4	4	5	1 (5)	— —	83	54	100
122	100	723	471	8	92	10	10	12	7(14)	— —	114	19	—
325	110	44,322	5,663	41	223	42	42	50	24(59)	6 (8)	778	10	1,500
84	7	—	—	8	46	13	13	3	—	—	49	—	—
90	20	—	100	—	—	4	4	2	1 (7)	—	103	10	150
51	—	—	—	—	—	6	5	—	— (1)	—	34	200	45
—	—	115	115	—	—	—	—	—	—	—	28	—	40
211	101	690	558	24	157	41	37	12	— (4)	—	92	35	200
—	—	—	—	—	—	—	—	—	—	—	53	25	80
—	—	—	—	—	—	—	—	—	—	—	34	4	—
43	5	—	—	—	—	1	1	1	—	—	54	8	100
66	31	78	628	—	—	2	2	3	1 (5)	—	23	—	50
88	61	174	—	8	81	—	—	1	—	—	51	19	100
22	2	—	—	—	—	—	—	—	—	—	62	14	120
71	34	82	82	6	36	14	14	19	2 (8)	—	60	28	150
67	24	14	14	—	—	5	5	—	— (1)	—	29	—	—
83	21	—	—	—	—	12	12	—	—	—	66	1	120
21	5	—	—	—	—	4	4	—	—	—	29	—	50
											6	2	30
80	25	—	—	4	28	10	9	7	—	—	61	22	100
3,136	1,506	71,306	19,190	183	1,528	379	370	266	79(259)	10(24)	3,408	848	5,175
101	32	670	730	—	—	14	14	7	1 (6)	—	75	—	100
112	24	454	454	—	—	10	10	4	2 (8)	1 (2)	116	4	150
?	?	688	762	—	—	14	14	13	2 (8)	—	40	3	200
100	?	314	314	—	—	17	17	6	2 (9)	—	40	—	95
11	—	—	—	—	—	5	5	1	—	—	61	1	70
62	?	161	814	—	—	7	7	1	— (2)	— (1)	75	—	125
?	?	340	340	—	—	16	16	4	3(10)	—	56	—	100
200	20	—	—	—	—	12	12	6	1 (2)	—	70	—	120
60	23	—	—	—	—	23	23	9	— (2)	—	60	3	80
127	35	3,903	3,903	—	—	11	11	4	—(14)	— (7)	81	2	150
139	51	1,056	1,056	—	—	23	23	15	4(11)	1 (2)	132	—	200
100	11	—	—	—	—	11	11	—	—	—	72	—	?
1,012	196	7,586	8,373	—	—	163	163	76	15(72)	2(12)	878	13	1,390
4,148	1,702	78,892	27,563	183	1,528	542	553	342	14(331)	12(36)	4,286	861	6,565
						1,986	1,986	30					

NOTE.—The Swansea and R.A.F. Moonrakers and Home Counties Clubs had not sent in returns by the time these tables went to press.

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Wave Safari, 1959-60

THIS year we were as lucky with the weather as last, with over 94 hours' soaring from 98 launches, which included winch and bungey launches from the Long Mynd and aero-tows from Shawbury. The participants were:

Army Gliding Association with Eagle and Skylark 2: total flying 27 hours.

R.A.F. Gliding and Soaring Association with Olympia 419 and Olympia 2b: 24 hours

Surrey Gliding Club with Skylark 2: 9 hours.

Avro Gliding Club with Skylark 2: 9 hours 40 minutes.

Private Owners and Midland Gliding Club with Skylark 3 and T-21: 25 hours 15 minutes.

Total flying: 94 hours 55 minutes.

SATURDAY, 26TH DECEMBER.—A large depression passed through to the north the previous evening, leaving behind strong south-westerly winds. The thought of all this good soaring weather going to waste resulted in a mad dash north by the Southerners in the expedition. By the time things had got under way, however, the winds had backed to the south.

SUNDAY, 28TH DECEMBER.—Only two flights were possible in the morning, but the wind became more westerly after lunch, and a total of 3 hours 45 minutes resulted.

MONDAY, 28TH DECEMBER.—As one would expect, being a Monday it was an excellent soaring day, with a 20-knot wind bang on the hill. Wave was found by a number of pilots up to 4,400 ft. a.s.l. A total of 48 hours 10 minutes soaring was had from 47 launches.

TUESDAY, 29TH DECEMBER.—Clamp all day, with the winds from the south-east and cloud down on the hill. The mid-day B.B.C. weather forecast showed promise for the following day, however, and so the Army and Avro Skylarks were extracted from the pile in the Midland Club hangar then packed into their trailers and taken down to R.A.F. Shawbury to join Anne Burns' Skylark 3.

WEDNESDAY, 30TH DECEMBER.—Call before first light, a hastily cooked breakfast, and then off, leaving behind sufficient only to take advantage of the excellent soaring the Mynd was offering with a strong north-westerly wind and clear blue skies.

On arrival at Shawbury, having collected the tug pilot Paddy Pitt-Roche on the way, we visited the Met. Office, who not only provided a first-class forecast service, but also got things really moving by passing on a report that "wave" had been seen at 10,000 ft. over Newport by a Vampire pilot only some fifteen minutes previously. We then made our number with Shawbury Tower who even with a circuit full of aircraft found time not only to brief us, but also point out a place free of water on the grass so that we could take off into wind.

Anne Burns won the toss, and was thus first in line for a tug. This apparent good fortune proved not altogether a blessing, for shortly after take-off Anne's radio failed, making it impossible for her to contact the tug. This resulted in her eventually having to pull off in rather indifferent lift, which in the strong winds she was unable to hold. In the ensuing dash to the next wave down wind, some 15 to 20 miles away, Anne lost nearly 4,000 ft., making only 50 odd miles, finishing by a valiant attempt to soar a small westerly facing ridge close to the Wrexham-Ruabon railway line, and a difficult landing in most inhospitable country.

Whilst this was going on, the tug had returned to Shawbury to collect the Army Skylark 2 with Ted Stark at the helm. Ted, who until then had been thinking of trying to connect with the wave previously reported by the Vampire pilot in Mid Wales, agreed to change his plan and be towed into the same area as Anne, on receiving the tug pilot's report of waves over the whole of North Wales.

After some 45 minutes on tow, with only one bad moment just short of Ruabon, when the tug on full power started to lose some 500 ft. a minute, Ted cast off and found good lift just to the east of Ruthin in what appeared to be the first lee wave of the Clwydian Range. At this stage contact was established with the ground radio set up in the Midland Clubhouse calling itself "Mynd Tower".

This first wave took him to 8,300 ft. a.s.l. and then he tried moving forward, but alas, with the upper winds well in excess of 50 knots little progress was made, and jumping forward proved out of the question. After retiring to ponder and regain height he then drove down the front of the cloud for some 20 miles, dropping back eventually to a

good-looking roll cloud over Ternhill. After playing in this area for some time in which the best height of the flight was made (9,300 ft. a.s.l.). he continued further south to Shrewsbury, having the pleasure of flying at 100 knots indicated without losing height most of the way. By now he had spent nearly two hours over 8,000 ft. and was beginning to feel the cold; also the winds had started to back towards the south-west, causing the waves to break up and re-form more into wind with remarkable rapidity.

Seeing that further height was not to be had due to the strong winds cancelling out the lift at just over 9,000 ft., Ted decided to explore some likely-looking clouds to the east, finding lift over Wellington, Cannock, Lichfield and just short of Derby, by which time things had started to murk up a little with visibility much reduced. As he passed close to Derby Airport he received a green and thus accepted the invitation. On landing he discovered his was the first aircraft movement they had had that day, and the controller, so pleased to see him, refused to take a landing fee, provided free telephone facilities, and an introduction to a well-stocked bar in which his crew, Peters Hannaman and Ibberson, found him when they arrived. Total time airborne, 3 hours 35 minutes, and a cross-country distance of 74 miles as the crow flies.

The Avro Club Skylark 2 with Colin Horsfall also had a go with the intention of trying for a Silver C distance. However, due to a misunderstanding of the rules, the barograph for the tug aircraft was not placed aboard, and whilst Colin had a most interesting flight, covering some 60 miles with a climb of 6,000 ft. a.s.l. on the way, it was not possible to make an official claim.

Whilst this was going on, the ridge sitters union at the Long Mynd managed over 26 hours 17 minutes soaring, with a very welcome visitor from Holland, Jack Van Eck, making 8,700 a.s.l., the best gain of height for the day, also in wave, during the first slope-soaring flight of his life.



Ted Stark briefs Margaret Lowe and Tim Corbett for a wave flight. Beside the Eagle's nose, Peter Hannaman.

THURSDAY, 31ST DECEMBER.—The winds by now had backed to the south-east in front of a vigorous depression, allowing only circuits.

FRIDAY, 1ST JANUARY.—The first day of the New Year showed very little promise until a slight clearance came just before mid-day.

Again wave activity was found, with David Darbishire and Margaret Lowe going to 6,900 ft. a.s.l. in the Army Eagle, Tim Corbett making 7,400 ft. in the Midland Olympia, and Ted Stark 8,500 in the Army Skylark 2.

There can be little doubt that we were again extremely lucky with the weather, but without the generous hospitality of the Midland Gliding Club and all the staff at R.A.F. Shawbury it could not have been the successful and worth-while expedition it so proved to be.

E.S.

How to Drive a Winch

by Philip Ramsden

The Winch

SINCE it is important in the first place to find out what we are trying to drive, an attempt will be made to describe the sort of machine usually found in clubs.

Unfortunately there has been even more variety in the design of winches than of aircraft and without the same standardised controls, and this makes the task difficult.

However, with very few exceptions they have been based upon road vehicles, and it is usual to find a petrol engine of about 80 h.p. with conventional gearbox and friction clutch. Usually the clutch and throttle are modified for hand operation, working in the sense: clutch lever forward to declutch, throttle lever forward to open. True, there are in use at present, at old-established clubs, winches with diesel engines, hydraulic or even electric transmissions, foot clutches and opening-backwards throttles, and you may meet one of these; but they are exceptions. The engine is coupled, normally with some degree of down gearing, to the cable drum which will be between 1 ft. and 3 ft. in diameter. This drum may be wide, in which case there will be some sort of laying gear to wrap the cable neatly on it, or it may be narrow and have no laying gear. It is beyond the scope of this article to argue the relative merits of each, and anyway it doesn't affect the method of driving.

Forward of the drum and laying-on gear there is found some sort of cable-cutting device which may be anything from a spring or weight driven guillotine to a simple block on which it is possible to chop the cable with an axe. This cable-cutting facility is there to deal with the rare case where the glider fails to release, and is an inheritance of the pre-Ottfur hook days. Since such hooks became common, cases of failure to release have been rare indeed, so you are not likely to be called upon to cut a cable.

Getting back to the winch: still to be mentioned are the rollers or pulleys which are the first things the cable meets on its way into the winch. This device usually consists of four rollers 3 inches or more in diameter, two horizontal and two vertical, leaving a square space in the middle big enough to take cable knots and preferably weak links also. Alternatively, the device is a deep groove pulley of anything up to 12 in. in diameter, fully shrouded and able to rock from side to side. Such a pulley is set low and the cable goes under it.

The Cable

It is usual to use a stranded wire cable of about 3/16 in. diameter; this has a breaking strength of about 1 ton (when new!). Plaited cable or simple piano wire has been used, but is uncommon. There is quite a lot of variety about the gadgetry on the end of the cable. However, common to all systems are a pair of rings, the smaller of which hooks on to the glider, and a weak link to limit the pull on the glider hook to 1,000 lb. There is often a piece of rope to act as shock absorber and perhaps as weak link too, though wire weak links are becoming more common.

There may be a parachute or drogue fastened near the end of the cable, either "series" or "parallel" fashion, to limit the speed at which the cable falls when released, the idea being to reduce cable kinking.

Last but not least you'll probably find a ragged loop of thin wire fastened somewhere—this is a cable-retrieving weak link. The cable towing car pulls by this link so that it and not the main cable breaks when there is a snarl-up at the winch end.

Driving

Now to the driving art. Let's assume that the cable is out, the winch engine is running, there is a glider on the end, and a signal is being given demanding a launch.

Our first problem is selecting a gear. It seems to happen that one gear copes with all states of wind from very light up to moderate, and one only has to consider any other in no wind or very strong winds.

Let us look at the object of the launch procedure. The ideal is to take up the cable slack slowly and then to accelerate the glider from a standstill quickly but smoothly up to 45 or 50 m.p.h. airspeed, and to maintain it at this airspeed as the glider climbs all the way up, irrespective of its weight, height or attitude. Sounds simple, doesn't it?

Looking at the business in more detail, it is convenient to divide it into four phases:

(1) Taking up slack.
(2) Acceleration up to speed.
(3) Transition to climb attitude.
(4) Launch proper.

TAKING UP SLACK is the simplest part. The most important point to remember is to pull it in slowly, slipping the clutch all the time, with enough engine speed to make the process smooth. Try to avoid the cable coming tight with a jerk, as this may unnerve a pupil, and has been known to snatch the wing-tip out of its holder's hand. It is usually pretty clear to the winch driver when he has the slack all in, because he needs a noticeable amount more throttle to move the glider, and since it is usual to wait until the glider moves before giving "all out", that signal comes as often as not simply as a confirmation.

It is ideal, though not always possible, to start the ACCELERATION PHASE as soon as the signal is given, and without letting the cable tension go. This minimises the possibility of snatching. The recommended technique is to increase the engine speed up to something like that which one estimates represents flying speed, then to let in the clutch gradually whilst opening the throttle to keep the engine speed constant. The operation is exactly like moving off in a fairly light, high-powered car in top gear, and it may help to imagine it like that. Having got the clutch in, one accelerates the glider more whilst the pilot lifts it off the ground and allows it to rise on a fairly even keel.

When the pilot begins to pull up into a climbing attitude, you can take it as an indication that he has enough airspeed, and you then prevent the engine speed rising any more. This is the start of the TRANSITION PHASE, which is the most difficult to do consistently well, because so many factors are involved. The fact that the angle between the cable and the line of flight gets larger tends to increase the glider's airspeed, as also does the fact that the glider may be rising through the wind gradient. However, the extra cable pull tends to slow the winch down somewhat, and if you are very lucky you may not have to move the throttle at all to achieve the primary object of constant glider airspeed. In general you'll not be so lucky and will have to close the throttle a bit when the glider is light and the wind strong, or open it a bit when the glider is heavy and the wind light, but in any case the winch speed needs to decrease.

THE BRITISH GLIDING ASSOCIATION
19 PARK LANE,
LONDON, W.1

PERSONAL ACCIDENT INSURANCE

Do you know that you can insure yourself for all risks from the time you arrive on a gliding site to the time you leave?

This cover can be obtained for as little as £1 per £1000. (This applies to U.K. only).

Apply for particulars from your Club or this Office.

When you've had some experience and driven a few launches on a particular day it's easy to get this right, but to begin with just guess and wait till the glider is high enough to be considered in what we've called the LAUNCH PROPER. Until the cable comes completely off the ground the only way of judging the speed is by the response of the glider to its controls.

Sooner or later you'll meet the glider which comes straight for the winch, refusing to climb. The trouble is one of three things:

(1) It's so slow that the pilot dare not pull up.

(2) It's so fast the pilot dare not pull up.

(3) It's a pupil.

Glider control response gives the clue which it is. If the launch is too slow, the glider is mushing somewhat and is obviously soggy, so that in the extreme the pilot's efforts to rock the wings to indicate "too slow" result merely in vigorously flapping ailerons. If too fast, the glider is more nose-down, tight as a drum, and probably twitching in the pitch direction. If you can see neither of these symptoms you've got number 3 and can do nothing but wait.

During the LAUNCH PROPER it is to be hoped that speed errors will be less extreme but similar signs are there and there is a double check on judgement of speed by the bow in the cable. Here too, a lot of experience is necessary to get it exactly right. Broadly speaking, one allows more cable bow for a light machine than for a heavy one and reduces the amount of bow as the glider's elevation gets greater. The amount to allow also depends on how steeply the glider is climbing (the steeper, the less bow required), which in turn depends on how far back its hook is. Invariably, however, it is necessary to reduce the winch speed gradually as the glider elevation increases—i.e., as the launch proceeds, until it becomes a mere tick-over when the glider is nearly overhead—assuming of course that he hasn't released before then. When the glider releases the cable, close the throttle to prevent the winch speed increasing and keep the cable running in until the whole length is on the ground. After that, unless the cable has a delicate type of parachute or a novel retrieving method is used, the cable is pulled all the way in. On multi-drum winches it is essential to pull it in or it gets tangled with the next one dropped on top of it.

Retrieving

As mentioned earlier, it is usual to pull the cable out to the launching point again by some sort of weak link specially fitted for that purpose. It is also necessary to apply some sort of brake to the winch drum to prevent it over-running as the tow-car speed varies. This brake is usually a conventional friction device held on by springs, weights or a ratchet, though in special cases where the drum is light the drag of the gearbox may suffice.

A Safety Note

Although it can be argued that it is the responsibility of the launching end not to signal for a launch unless the coast is clear, it is wise to take a look for gliders on the approach, gliders overhead, and obstructions on the winch line, before pressing on with a launch.

THIS GLIDING

COMMENT in a South African gliding "Talkie" as a pilot is about to take off solo: "He's going into another world, but not, if he can help it, into the next world."

Escapist

"D—— L——, who is the only St. Ives native to take up painting, told me his way of getting away from squabbles and soirées of St. Ives, 'I go gliding. The silence is magnificent'."—*Paul Doncaster in the* News Chronicle.

By Any Other Name

"Before the war I did several tours of Europe. . . . On one occasion I had been staying in Vienna and a high official came to see me off from Aspern aerodrome. He asked me if there was anything he could do; I suggested he should get me a weather report. He came back rubbing his hands: 'Ah, Captain Preston, you are very lucky. There is a lot of wind coming from your behind'.—A new definition of a following wind."—*Col. R. L. Preston, at a Royal Aero Club Dinner in his honour* (R.Ae.C. Gazette).

B.G.A. News

Annual Awards for 1959

FRANK FOSTER TROPHY for fastest speed round a 100-km. triangle: to Col. A. J. Deane-Drummond; 43 m.p.h. in an Olympia 403 on 19th July.

MANIO CUP for best Goal Flight and WAKEFIELD TROPHY for longest distance: to Cdr. H. C. N. Goodhart, R.N., for flight of 360 miles at an average speed of 56.4 m.p.h. from Lasham to Portmoak in a Skylark III on 10th May.

DE HAVILLAND CUP for greatest gain of height: to Philip Wills, C.B.E., for climb of 17,900 ft. in a Skylark III on 10th May.

VOLK CUP for best out-and-return: to D. J. Corbett, for flight of 198 miles from Lasham to Dunkeswell and back in an Olympia 419 on 4th August.

SEAGER CUP for best two-seater performance: to D. M. Kaye and E. T. Martin, for flight of 228 miles from Camphill to Dunkeswell in a T-42 Eagle, on 30th August.

CALIFORNIA IN ENGLAND TROPHY for longest flight by a woman pilot: to Mrs. Anne Burns (for the second successive year), for flight of 282 miles from Lasham to Bellingham in a Skylark III on 10th May.

DOUGLAS TROPHY to the Club putting forward three flights by different members in club aircraft, aggregating the largest cross-country mileage: to Army Gliding Club for flights by Col. A. J. Deane-Drummond, 193 miles; Capt. E. G. Shephard, 205 miles; D. J. Corbett, 198 miles.

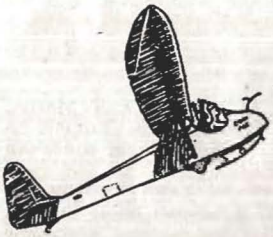
Three Diamonds to Date

THE addition of three Diamonds to the Gold C badge was authorised in 1950, and a list of the first 80 was given in our issue of February 1958, p. 19. Nos. 81 to 107 were given in our February 1960 issue, p. 36. Below we give subsequent numbers up to that of Tony Goodhart, the second British pilot to acquire all three (his brother Nicholas was No. 42 in the list).

The Diamonds are awarded for 500 km. distance, 300 km. goal flight, and 5,000 metres gain of height.

In the following lists, Nos. 109, 110, 131 and 132 acquired their third Diamonds in 1958, and the remainder up to No. 139 in 1959. The totals for the various countries are: Poland 48; France 45; United States 15; Germany 10; Czechoslovakia 6; Yugoslavia 5; Switzerland, Argentina, S. Africa and Great Britain 2 each; New Zealand, Hungary, Austria and Holland 1 each.

No.	*Name*	*Country*
108	Evert Dommisse	S. Africa
109	Aleksandar Saradic	Yugoslavia
110	Joze Mrak	Yugoslovia
111	Wieslawa Lanecka	Poland
112	Leo Allkämper	Germany
113	Robert Lee Moore	U.S.A.
114	Jerzy Konraciuk	Poland
115	Jerzy Adamek	Poland
116	Harland Ross	U.S.A.
117	Joseph Lincoln	U.S.A.
118	Andrzej Brzuska	Poland
119	Leopold Osmecki	Poland
120	Tadeusz Dziuba	Poland
121	Niechwiejczyk	Poland
122	Stanislav Ratusinski	Poland
123	Hans-Günther Heinzel	Germany
124	Franciszek Kepka	Poland
125	Alfons Bange	Germany
126	Henryk Ignasiak	Poland
127	Jersy Dambski	Poland
128	Czeslaw Kocimski	Poland
129	Tadeusz Farsewicz	Poland
130	Leon Sztuka	Poland
131	Karel Valasek	Czechoslov.
132	Vladlislav Zejda	Czechoslov.
133	Rudolf Mestan	Czechoslov.
134	Robert Pechaud	France
135	Régis Godreau	France
136	Marc Zuber	France
137	René Remande	France
138	Pierre Epineuse	France
139	Hans Resch	Austria
140	Edwin Leemann	S. Africa
141	Tony Goodhart	Gt. Britain



ITS - ALL - YOURS

For and About Instructors



THERE can be few people who are not delighted to see the steady increase in the number of gliding clubs in this country, and one wishes the best of luck to all those who are putting in the massive groundwork necessary for their future success.

One of the problems these new clubs have to face is the acquisition of instructors. Some will be lucky and find good ready-made ones living in the district, and longing for gliding to start there, but for others it will be a very difficult problem to overcome. In theory, a club has only to obtain one instructor who measures up to the B.G.A. Category standard and who has a reasonable amount of spare time, to get going. In practice, however, life is rather different, because it is almost impossible to develop a gliding club with only one instructor. If he sits in the two-seater all day, which after a while can be very wearing, there is no-one on the ground to supervise solo flying. If he is ill or goes on holiday, either everything has to stop, or it can continue under his remote influence, which is not always satisfactory.

SHORTAGE OF INSTRUCTORS

At the present time there is a growing shortage of instructors. In addition to the increasing needs of new clubs, the older clubs are acquiring additional two-seaters, which have to be manned. Further, as clubs get bigger, more instructors are needed for the supervising and briefing of solo pilots who are, in increasing numbers, reaching the cross-country stage.

There are only two ways to get more instructors: to train new ones, and to keep the existing ones for longer. Most clubs train their own instructors, and there is no inherent disadvantage in this system, provided that time and launches can be spared to do the job properly. What, however, usually happens, with a few notable exceptions, is that the potential instructor is used as one before he is trained, in order to plug some gap caused by illness, or failure of the roster system; and thereafter, in practice, it just seems to happen that he goes on instructing, and with the best will in the world his training programme fades away.

BADLY NEEDED

What is badly needed is some centrally placed school which will provide training courses for new instructors and refresher courses for existing ones. The British Gliding Association is considering the possibility of such an establishment at the present time, and for 1960 has guaranteed £200 towards the cost of continuing instructors' courses, and the visits to clubs with an Eagle.

In the meantime, it is hoped that every club will give thought to its own instructor-training programme, even if no new instructors appear to be needed locally at the moment. C.F.I. s can do a great service to gliding by talent-scouting for future instructors among their own members, and training them at least up to the stage of being intelligent and sympathetic passenger-carriers, who can fly accurately. This pre-instructor flying is of real value as it gives experience in the taking of complete responsibility for someone else, and in learning to deal with people. This passenger-carrying period should last at least six months, and should not be hurried.

With regard to the experience needed before passenger-carrying, I feel that an absolute minimum should be 20 hours, and that it is most important that the future instructor should have at least a taste of soaring, if not a Silver C. The frustration of being continually tied to the two-seater, and seeing their pupils fly away

in glossy gliders, often leads to instructors losing enthusiasm for the job.

It would be interesting to make a study of why instructors drop instructing, or do so little that they become largely ineffective. Apart from the reason just given, there are, of course, many others: marriage, change of job, home commitments, health, and increasing age or change of interest, are all valid reasons.

FRUSTRATION

The first reason given, that of frustration, is very real, and is worsened by a shortage of instructors. However much an instructor loves instructing, it is wrong that he does it to the exclusion of all other aspects of gliding. If he does not tire of it himself, his instructing will become narrow. He should do some soaring before he becomes an instructor, so that he understands the problems and the delights, and he should be given proper opportunities for soaring and cross-country flying all the time he is an instructor in the club. An attitude exists that because the instructor is getting his flying "free" he is lucky and does not need anything further. Nothing could be more wrong than this; members should realise that instructors want to go soaring and, if anything, are more entitled to do so than most.

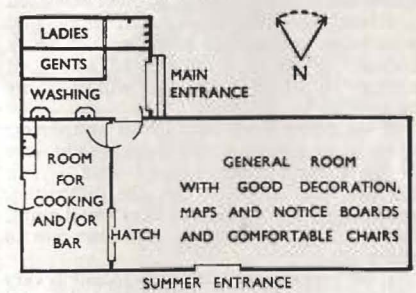
Another reason is that clubs, for financial reasons, take in far too many pupils for the training facilities. Many of them leave gliding through frustration, and the instructor finds that much of his work is fruitless. Instructors are also lost for the same reason that tends to lose clubs their other members, and that is because of the lack of civilised facilities that exist in all but very few gliding clubs. Enthusiastic pilots may be prepared to put up with frustrations out on the field, but their wives, families and friends will not put up for ever with the sordid damp, cold hovels that constitute the domestic "amenities" of so many clubs. The effect of this combination of frustration and squalor is that the more intelligent members, who are also for the same reason often those who cannot afford to waste their time, pack up and go. This in due course includes even some very keen instructors whose families with frozen feet wait long years for the hangar doors to shut.

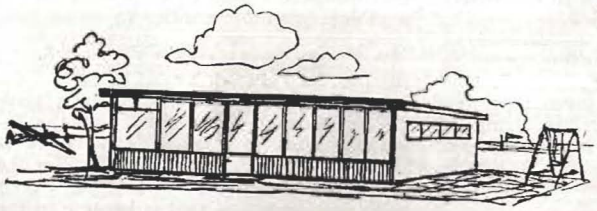
It is at this point that I am going to leap on to my woman's angle hobby-horse, with a few inflammatory words.

CLUBHOUSES

During my visits to clubs to test instructors, etc., I have been overwhelmed with kindness and generous hospitality, but appalled by some of the conditions under which the wives and families have to spend their week-ends. It may be fun to start a club and sweep out some leaking hut and boil tea on a primus, but this amusement soon palls. I know that gliding clubs exist so that people can fly gliders, and not sit in comfort having tea, but gliding is not carried out by a strange race of insensitive airborne bachelors, but by ordinary people with ordinary families. And if those families are made so unutterably miserable every time they come near the club in bad or cold weather, it is only a question of time before the marriage breaks up, or another member takes up boating or gardening. In some of the big and old-established clubs, proper clubhouse facilities exist, and I think it is fair to see that this is one of the reasons why they *are* big and old-established. It is for the smaller clubs especially that I make my plea.

I am not suggesting for one moment that clubs should concentrate their energies into becoming glorified roadhouses, with a little gliding in the background for good measure; but that every club should have a simple, clean, warm, dry club building with large windows and a pleasant outlook, with a mud-free path to it, and a safe space close by for children with one or two amusements like a swing or a sandpit.





One of the simplest forms of modern properly insulated prefabricated buildings would make an excellent home for a small club.

In the clubs there is no lack of wives and friends willing to work. This is apparent when one sees them producing hot meals under conditions which a soldier in war-time would spurn with language no wife would dream of using—at least not out loud; but there is a limit, and quite rightly, to the number of winters that they will tolerate it, while their frozen children tricycle round and round the scrap-heap of dead winches in the dark.

If the same wives or friends had a building, however simple, that gave opportunities for the decorative and furnishing skills, and scope for their cooking abilities, and which they and their families could use in warmth and with pleasure, gliding clubs would be surpised to find how many of their problems are overcome.

At present, apart from discouraging their own members, these clubs are at a distinct disadvantage when showing round, or trying to influence, V.I.P. s or Members of Parliament. Whatever they may think of their own achievements, the V.I.P. must inevitably be given the impression that such clubs are really of little substance or account when he sees the domestic and administrative "facilities". The usual freezing room with damp, glistening walls, a stack of log sheets on a rickety table, a disembowelled and smelly paraffin stove on the floor, and gum boots and muddy flying suits in every corner. If he is persuaded to stay long enough to sit on a chair he will probably be pierced by a spring.

It would be both ungracious and wrong of me to even suggest that clubs are unaware of the present unsatisfactory state. With the best will in the world, the difficulties, particularly for young and very small clubs, are almost insurpassable, and they are in particular:

1. MONEY.—Starting a club to-day is very expensive, even if only one glider is bought. The capital outlay is far greater than is involved in, for instance, a sailing club. In a country area without any large centre of population near by, it is a big struggle to find enough money to get started at all, without going into what, at first sight, appear to be luxuries like clubhouses.

2. DISUSED AIRFIELD ARRANGEMENTS.—Quite a number of clubs operate from disused airfields, where although their rents are low, their rights are almost non-existent. On some of these airfields there are excellent buildings which could be converted both easily and cheaply into ideal clubhouses. Requests to use these empty buildings are either refused on what do not always appear to be adequate grounds, or a rent is asked which is beyond the club's resources to pay, and the club ends up with a dilapidated shed. One hopes for a governmental change of heart that will one day realise that gliding clubs are worth more than every assistance short of help!

There are, of course, other difficulties as well, but more easily overcome: those of planning permission—not complicated in the case of prefabricated temporary buildings—and the realisation in the club that a decent clubhouse, however simple, is of greater value to the prosperity and future of the club than appears at first sight.

I would dearly love to see a national competition, with a clubhouse for the prize, in which clubs submitted detailed plans and arrangements for its decoration and furnishing, including the immediate surroundings, which would have to include a children's play area. I am sure that such a competition would bring to light the very real talent and ability which exists in gliding families, but which at present is utterly frustrated and lost.

Would anyone like to present a clubhouse?

ANN WELCH.

Gliding Certificates

DIAMOND FOR DISTANCE

No.	*Name*	*Club*	*Date*
103	G. A. J. Goodhart	Army Gliding Club	12.6.59

DIAMOND FOR HEIGHT

No.	*Name*	*Club*	*Date*
312	G. A. J. Goodhart	Army Gliding Club	2.1.60

DIAMOND FOR GOAL FLIGHT

No.	*Name*	*Club*	*Date*
241	D. R. Elrington	Derbyshire & Lancashire Gliding Club	9.8.59

GOLD C CERTIFICATE

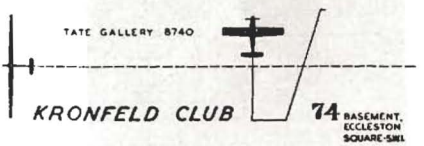
No.	*Name*	*Club*	*Completed*
57	D. R. Elrington	Derbyshire & Lancashire Gliding Club	9.8.59

SILVER C CERTIFICATES

No.	*Name*	*Club*	*Completed*
894	F. A. O. Gaze	Bristol Gliding Club	7.4.59
895	V. Hall	Surrey Gliding Club	17.9.59
896	R. Walker	Southdown Gliding Club	5.9.59

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*
S. J. Green	633 G.S.	S. Bird	Midland	L. J. Edlin	Windrushers
W. B. Knowlman	Taunton Vale	P. J. Chick	Southdown	G. J. O'Connor	671 G.S.
I. M. Cook	B.B.C.	D. W. Gerrard	London	C. H. Wood	633 G.S.
R. F. Elsworthy	621 G.S.	A. Lawson	Wessex	A. J. Miles	Red Dragon
R. G. Chubb	Taunton Vale	D. R. Poole	612 G.S.	W. M. Lay	Moonrakers
D. Hunter	Windrushers	J. M. Sassi	Army	S. B. Rogers	Windrushers



THE Club had a most successful Christmas Party, which was shared with the British Women's Pilots' Association and about 100 people turned up at one time or another during the evening.

Although she has given up as Secretary of the B.G.A. Yvonne Bonham is still arranging most successfully our Wednesday evening events.

During February Ann Welch gave a series of four talks for instructors or potential instructors, these being followed by a series of four instructional talks for beginners. Apart from this, the first Tuesday in every month is devoted to an introductory talk for people who have never glided before.

The other Tuesdays in the month are being devoted to renovations and redecorations and anyone wishing to come along and help should contact Ron Willbie the previous Wednesday.

Diary of Lectures and Film Shows

Wednesdays, 8 p.m.

March	30th	Shell Films.
April	6th	New Rank Gliding Film.
	13th	John Furlong: Around the U.S.A., part 1 (Slides).
	20th	Mike Reilly: Sporting parachuting.
	27th	H. Gordon: The History of the Royal Observer Corps.
May	4tn	Major P. A. Downward, D.F.C., of the Army Air Corps: "Army Aviation, past, present and future."
	11th	John Furlong: Around the U.S.A., part 2.

Your Parachute is Your Friend

by J. N. Goodwin

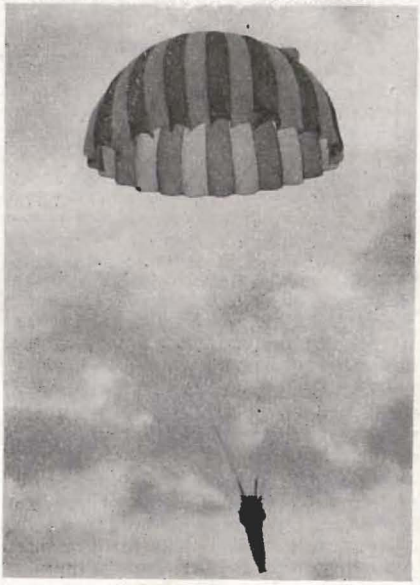
WHEN a novice takes his first look into the somewhat spartan cockpit of a modern glider, after noting the various instruments and controls, his eyes will come to rest on the rectangular pan let into the back of the pilot's seat. What is the purpose of this recess? Is it there merely to cause discomfort to help him keep awake on that 400-mile flight which may bring him a British record? Or is it intended as a storage place for his sandwiches and thermos flask? "No," he is told, "that's where your parachute fits." A parachute? Surely, there is not need for a parachute in a glider! And yet—only eighteen months ago—two gliding enthusiasts saved their lives by the use of this much maligned item of equipment, after losing a wing in a collision whilst flying in cloud.

What is a parachute?—that untidy bag of washing which dangles from your back and makes walking difficult! Only too often is this an apt description. But, given proper treatment and fitted correctly, a parachute is neither untidy nor uncomfortable. That little khaki canvas pack contains a canopy made up from over sixty yards of nylon fabric, manufactured with skill and precision, and rigorously inspected at each stage of production. The Irvin-designed canopy will function perfectly under the most adverse conditions, and this same design has already saved the lives of over 40,000 airmen throughout the world.

Having realised what an important and necessary piece of equipment it is, what steps can be taken to ensure that the parachute gives of its best? If the parachute is well maintained and stored in correct conditions whilst not in use, there need be no fears concerning the equipment itself. It is important, too, that the wearer knows how to fit the harness correctly and has an elementary knowledge of the technique of parachuting.

Parachute maintenance is best undertaken by experts—either someone trained thoroughly by the manufacturers, or, better still, the manufacturers themselves, who will fully service the equipment at modest cost. Ideally, a parachute should be opened, aired, inspected and repacked at regular intervals of two months, but this period may be lengthened if financial or other circumstances make it necessary. It is highly undesirable, however, that the periods between servicing should exceed three months if the parachute is being used, or six months if it is being stored. The respect which is paid to the 'chute in its everyday use will directly affect its efficiency and also its life. Whenever possible, use the travelling bag, keep well clear of oil, acid or any other dubious liquid, place the parachute on a table—never throw it across the room. These remarks may well seem obvious, but how often are they neglected!

After flying ceases for the day, the parachute should be removed from the cockpit and placed in its travelling bag. If possible the complete assembly should then be transferred to a storage room, there to remain until next required. The boot of a car is not the best place to keep a parachute! The ideal, certainly at a Gliding Club or Centre, is for a room to be set aside for the storage of parachutes, but for individual members possessing their own personal assembly, this is probably not practicable. The main considerations to be taken into account for the storage of parachutes are



adequate heating and ventilation, cleanliness and the prevention of damage, either mechanical or otherwise. Assemblies should be placed on slatted racks or shelves, where air can circulate freely round the equipment. Parachutes should not be piled one on top of the other nor exposed to dampness; direct sunlight is also harmful to the fabric. The aim should be to provide a warm, even, dry atmosphere throughout the room.

How many readers have climbed into a Club glider, attempted to fit the parachute harness, discovered that the straps are too short to clip into the quick-release box and have consequently flown without wearing the parachute? In the other extreme, how many have found that, on fastening the harness, the shoulder straps are too long and slip downwards, restricting the arms in a most inconvenient manner? This problem has been reduced by the introduction of a quickly adjustable harness designed to allow the parachute to be used by pilots of varying body sizes without removal from the cockpit for tedious adjustment. A simple routine can ensure a correct, comfortable fit every time the parachute is donned. Before attempting to put the harness round the body, slacken the two upper adjustable straps to their full extent and proceed likewise with the two leg straps. Next, turn the operating disc of the quick-release box into the locked position. It is now permissible to sit in the harness and bring the straps around the body. Bring the loop attached to the harness seat strap up between the legs, one leg strap round each thigh and through the loop, from behind, before engaging the lugs in the appropriate slots of the quick-release box. The lugs on the shoulder straps may be fitted directly into the two upper slots of the quick-release box. Adjust all four straps so that the harness is a comfortable fit, with the quick-release box on or slightly above waist level. A correctly fitted harness is one which is comfortable when the wearer is in the sitting position, but feels too tight when he is standing.

If the parachute is fitted with a harness without quick adjustment, the assembly must be removed from the glider and the adjustments made until a fitting as described above is achieved. This latter type of harness, whilst adequate for a personally owned parachute, is obviously not so satisfactory for general Club use, since it is unlikely that every wearer will take the trouble to make the necessary adjustments.

Three ex-Balloon Winches, Wild Mk IV, suitable for Glider Towing for sale, consisting of Ford V8 Petrol Engine driving heavy duty winch, radiator cooled, 2400 r.p.m., complete with gear-box and operating panel.

NO REASONABLE OFFER REFUSED

Details and photographs from:

ELECTRO MOTION LIMITED

161 Barkby Road, Leicester

Telephone: 66341

We now have a pilot with a well-maintained parachute with a correctly fitted harness. In the event of an emergency, how is it to be used? Having abandoned the aircraft, it is desirable, height permitting, to fall well clear before pulling the ripcord handle with one hard tug to the full extent of its travel. The parachute will then deploy and open in about three seconds, after which no further action need be taken until approaching the ground. To prepare for the landing, the legs and feet should be kept closely together and stretched out in the same direction as the drift. Do not anticipate the impact with the ground, but wait for the feet to strike and then relax, rolling over so that the shock is taken progressively on the side of the leg, the outer thigh and finally diagonally across the back. One further task—having successfully survived your first parachute descent, provided it was made in an emergency and not for the fun of it, apply in writing for membership of the Caterpillar Club!

In conclusion, set out below are the Glider Pilot's Five Golden Rules:

Before starting out on any flight, however short:

(1) Obtain a parachute and ensure that the whole assembly is undamgaed.

(2) Check the log card—if it does not show a servicing in the last three months, borrow your friend's—his parachute, not his log card!

(3) Unfasten the flap over the rip pins and cones—ensure that the red safety thread is unbroken.

(4) Ensure that the harness is correctly fitted.

(5) Ensure that you know exactly where the ripcord handle is located and that you can reach and grasp it quickly and accurately.

Advertisements with remittance should be sent to Cheiron Press Ltd., 3, Cork St., London, W.1. (Regent 5301) Rate 9d. per word. Minimum 10/-. Box numbers 2/- extra. Replies to Box numbers should be sent to the same address.

PUBLICATIONS

"AUSTRALIAN GLIDING" — monthly journal of the Gliding Federation of Australia. Editor, Allan Ash. Subscription 30 shillings Australian, 24 shillings Sterling or 3.50 dollars U.S. and Canada. Write for free sample copy. "Australian Gliding", 34 Oxford Street, Kingswood, New South Wales, Australia.

"MODEL AIRCRAFT"—Official Journal of the Society of Model Aeronautical Engineers. Features contest winning model designs, constructional articles, photographs and reports of international and national contests. 1/6 monthly from any newsagent. Send for specimen copy free from "Model Aircraft", 19-20 Noel Street, London, W.1.

READ POPULAR FLYING the bi-monthly magazine of the Popular Flying Association. Subscription £1 a year. Specimen copy with scale plans of the Hirtenberg HS9A and history of this unique aircraft 1/6d. from The Popular Flying Association, Londonderry House, 19 Park Lane, London, W.1.

SLOPE SOARING with a radio control model sailplane is a fascinating pastime and a typical phase of aeromodelling. Read about this and other aeromodelling subjects in AEROMODELLER, the world's leading model magazine, published monthly, price 2/- MODEL AERONAUTICAL PRESS LTD., 38 Clarendon Road, Watford, Herts.

"SOARING"—Official organ of the Soaring Society of America. Edited by Lloyd M. Licher. Obtainable from Soaring Society of America, Inc. Box 66071, Los Angeles 66, California. Subscription $4.00 in North America and $5.00 elsewhere, apply to your Post Office for a form.

FOR SALE

NEW MOTOR TUTOR FUSELAGE complete with all Fittings. Offers to: Roberts, 28 Mumbles Road, Blackpill, Swansea.

RHONBUZZARD with instruments in excellent condition, recently overhauled, C. of A. until July. £280. Flt. Lt. Boyer, R.A.F. Wattisham, Ipswich.

FOR SALE—cont.

AIRCRAFT TABLE MODELS Scale 1: 50 High-class finish, varnished in either natural wood or ivory. The base is rectangular with a stylised cloud. All types of sailplane cost only 8.50 DM. Flugzeug-Modellbau Werner Reuss, Göttingen, Fliederweg 4, West Germany.

OFFERS wanted for Olympia sailplane, with or without C. of A. and without trailer. Can be seen at Lasham. Write to the Secretary, Surrey Gliding Club, Lasham Gliding Centre, Nr. Alton, Hampshire.

SLINGSBY T 21 B. Recently overhauled with current C. of A. Fully instrumented. Condition as new. £500. GRANAU BABY II B. Very good condition. Current C. of A. Blown, canopy. Fully instrumented. £210. Later also KRANICH, high-performance two-seater, undergoing complete overhaul. Located abroad. Prices are f.o.b. nearest port. Transport can be arranged at £50 per glider. Box No. 60.

T-42 EAGLE 3, excellent condition full instruments, 2 parachutes, Slingsby Trailer. 12 months C. of A. March or when desired. £2,000 or near offer. Apply Silley, 18 London Street, London, E.C.3.

TELECOMM Radio Telephones for Glider, Recovery Vehicle or Trailer use. H.P. terms, discount to Clubs. R.E.E. Telecommunications Ltd., Telecomm Works, Crewkerne, Somerset.

TUTOR BGA 891 fitted with spoilers and three basic instruments. Blue and Yellow. 12 months C. of A. March or when desired. £295 or near offer. Cornish Gliding Club, 31 Boscawen Street, Truro.

1958 VANGUARD Estate Car. Overdrive towbar radio, 2 rear mirrors, 30,000 miles. Looks new. £750. Philip Wills, Kits Close, Fawley Green, Henley On Thames, Oxon.

COURSES

HOLIDAY GLIDING AT CAMBRIDGE. Six courses during July and August. Everybody welcome, beginners and others. Training in T-21 by qualified instructors. Solo in Slingsby Swallow. Every chance of soaring for your 'C' in week's holiday. Details, Secretary, 3 Pembroke Street, Cambridge.

SITUATIONS VACANT

CORNISH GLIDING CLUB have a few vacancies for assistant course instructors between 20th June and 23rd September. Apply Collins, 31 Boscawen Street, Truro.

THE LONDON GLIDING CLUB requires a Temporary Instructor for the summer months—May to October inclusive. Apply, giving details of age, experience, etc., to Manager, London Gliding Club, Dunstable Downs, Beds.

LASHAM GLIDING SOCIETY still require one full time Gliding Instructor during 1960. Employment offered initially for six months, with prospect of permanence if satisfactory. Write, giving details of experience to: General Manager, Lasham Gliding Society Ltd., Lasham Gliding Centre, Nr. Alton, Hants,

FOR HIRE

Our self-drive 1½ litre Bedford Dormobiles give you comfort and economy as a 7-seater or a 4-berth caravan. Equipped crockery, cutlery, cooking utensils, calor gas. KIDDS HILL MOTOR CARAVANS, LTD., Coleman's Hatch, Hartfield, Sussex.

WANTED

PLEASE. Has nobody got a spare copy of Gliding Volume 3, Number 2. (Madrid Championships) for sale. Any reasonable price paid. Box No. 61.

WANTED T21 Fuselage, ailerons struts and tail unit. Also "Prefect" starboard wing fuselage struts and tail unit. Cadet 1 and Tutor complete or parts. Any condition Box 62.

LASHAM AT HOME

The Lasham Gliding Society announces that it is holding an "At Home" at the Lasham Gliding Centre on Saturday, 21st May, throughout the afternoon.

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The Beauty of GLIDING

With a long introduction by Philip Wills, this is a beautifully produced book, presenting nearly a hundred of the finest gliding pictures ever taken. The photographs show every aspect of the sport as seen by the pilot and the spectator, from take-off to landing (and not forgetting the ground crew). There are beautiful shots of cloud, mountains and ground patterns, and aircraft ranging from the pre-war Minimoa to the Breguet 905 Fauvette.

Price 35s. net

PARRISH

55 QUEEN ANNE STREET, LONDON, W1

OBITUARY

N. S. NORWAY

(Nevil Shute)

MY first meeting with Nevil Shute Norway was on Scarborough aerodrome in 1931. We each had a prototype sailplane; mine was the Falcon, his the Tern.

Norway had recently established a new aircraft firm in York, with the help of Lord Grimthorpe, Sir Alan Cobham, Hessel Tiltman and a few others. The name of the firm was Airspeed Ltd., and the Tern sailplane was their first effort.

The Scarborough Gliding Club, one of about a hundred clubs of "mushroom" growth of the early days, enjoyed the services of a full-time German instructor. This man had been a sailplane test pilot for Fieseler of Kassel; hence the gathering on Scarborough aerodrome and the two prototypes.

Norway was a great enthusiast and most exacting in his work on the Tern. Moreover, he put in months of searching for soaring sites, and having similar aims I tagged along with my Falcon. Our wives joined us and shared the tough but enjoyable work dragging the aircraft over rough moorland and slipping into bogs occasionally.

We found a fine site overlooking Ingleby Greenhow in the North Cleveland hills with a beautiful slope facing west, a road of sorts along its edge, and a few heather-padded flat places for landings.

Major Petre of the London Gliding Club was invited along for a few days to make an attempt at a height record for the Tern. More exciting for me was the fact that Major Petre was an official Royal Aero Club observer, and here at last was a chance of having my C flight timed.

Norway and his party got their height record at something between 700 and 800 feet and I got my C. They were almost as thrilled about my C as the record.

We tried all sorts of sites together, including cliffs overlooking the North Sea, and did a few flights along the coast around Robin Hoods Bay.

It all seemed like playing truant from business, and, of course, it never occurred to me that this messing about on the moors with gliders had any real significance; that this busy and enthusiastic fellow with his Tern and his quick temper and occasional stutter would, in a few years, become one of the world's most popular story writers; that his firm with the strange name "Airspeeds Ltd., of York" would get anywhere with its gliders! That little boy on the moors at Stoup Brow who had his ears boxed by Norway for blowing down the pitot tube of the Tern could not have known what had really hit him!

Norway later turned his attention to the design and production of an aeroplane for Sir Alan Cobham and produced the "Airspeed Ferry". The firm intended to build three Terns but completed two, parts of the third and then disposed of the lot, because of the importance of the "Ferry".

After a few years, when Airspeeds had moved from York, I had a letter from Norway saying he was leaving the aircraft business and intended to write. It was a long time before I found out that Nevil Shute was our friend N. S. Norway.

During the War I had something to do with a towed target project for the Admiralty in connection with Naval Gunnery practice. I met Norway, then Lieut.-Commander, R.N., on an aerodrome near Thame one morning after nearly ten years.

I gathered from him that story writing was very hard but creative work, and he was enjoying it. He didn't seem particularly enthusiastic about aircraft, especially targets and such things; but there was a war on and it was a cold, wet morning with targets getting adrift at times.

I wonder what would have happened if Norway had stuck to his sailplane job?

But then again, somebody has to write stories.

F. N. SLINGSBY

BIRDS IN CLOUD

Correction

We regret that an altitude error occurred in the letter from Mr. P. G. Burgess, of Accra, under this heading in the February issue, page 38. In the second paragraph, the altitude of cloud base, into which he saw four vultures disappear, should have been given as 2,800 ft., not 12,800 ft. Will readers please cross out the "1".

BOOK REVIEWS

Airplane Tow, by TOM PAGE. Published 1959 by The Soaring Society of America, Inc., P.O. Box 6607 1, Los Angeles 66, Calif. Price 75 cents.

THIS booklet is a chapter of the American Soaring Handbook which the Soaring Society of America is compiling.

It is interesting and instructive, concisely written and well illustrated and is devoted entirely to aero-tow launching.

There are many important points which will be new to the majority of pilots in this country. Most readers will recognise that some of the American methods are not to be recommended, and there are several additions and alterations which must be made before it becomes a model text book.

However, experienced pilots and instructors, and those clubs considering aero-tow launching, will find this book particularly useful.

A. D. PIGGOTT.

The Beauty of Gliding, with an introduction by PHILIP WILLS. Published by Max Parrish, London. Price 35s. (Obtainable from the British Gliding Association: postage 1s. 4d. extra.)

THIS is a magnificent picture book. It contains 96 outstanding photographs, dramatically reproduced in black and white, selected from sixteen sources—although the majority are by four photographers: Charles Brown, Harry Hensser, Sally Anne Thompson and Philip Wills. A few of the pictures will already be familiar to readers of this magazine, but many others are new and exciting, and the sequence in which they are presented gives an astonishingly effective and complete picture of gliding in nearly all its aspects.

The introduction discloses the Chairman of the B.G.A. in his best lyrical vein and contains accounts of three of his most famous flights: the wave flight from Camphill, the wave flight over Mount Cook and the *Situation Classique du Mistral* during the World Championships at St. Yan.

No doubt the book is designed for a wider public than can be provided from within the gliding movement, and it will surely whet the appetites of many who have long thought that gliding must be rather fun, but have never quite got around to trying it (a situation in which I found myself until four years ago).

But if the book has a primary appeal to the "uncommitted", that is not to say that the established enthusiast can afford to save the 35s. for aero-tows. On the contrary, whether his immediate ambition is his first solo or his last Diamond, he should buy the book without hesitation. It cannot fail to stir his imagination and it is just the thing to place gently in the lap of the next person who starts off "Now what *is* all this about gliding . . . . ?"

PETER SCOTT.

Correspondence

AWAITING HOMOLGATION

Dear Sir,

One day last summer, having landed a little short after a circuit (as is my wont), I was stumbling through the long grass to a telephone when I came across an object, which caused me to stop and look closer. It was round and flat, as a disc, black in colour, with a fine groove on each side, and a hole in the centre.

Is this a record?

Midland Gliding Club C.G.

TWO WORLD CHAMPIONS ?

Dear Sir,

The naming of two World Champions in the proposed rules for the 1960 World Soaring Competition is extremely disappointing.

Continuing the trend towards emphasising the Standard Class will only weaken the development of higher performance sailplanes. Dividing the total body into minor competing groups will further weaken the movement.

Instead of breaking the competition up into two separate groups who are flying different tasks and determining separate champions, all ships should be flying the same tasks and be scored under the same point system. At the conclusion of the meet the Standard Class pilot with the highest number of points would be declared the Standard Class Winner; the Open Class pilot with the highest number of points would be declared the Open Class Winner; and the pilot with the greatest number of points would then be declared World Soaring Champion whether he flew a Standard or Open Class ship.

There actually is not much difference in total performance between ships of the two classes during a 10-day meet because the Open Class ships, though being a little better on strong days, suffer on weak days. In the interest of preserving the Soaring Movement, it would be far wiser to keep both groups together.

Further emphasis in favour of the Standard Class and its design-freezing restrictions can only discourage future experimentation and development of better sailplanes.

If these suggestions are heeded, organisers of National and World Competitions will be spared the additional cost and manpower requirements of conducting two separate contests simultaneously.

Toledo, Ohio. R. E. SCHREDER.

ADVANCED TUITION

Dear Sir,

I refer to John Jeffries' letter in the February issue of SAILPLANE & GLIDING.

While I agree that glider pilots are individualist, I do not agree that this individualism is demolished by dual instruction. If this happens, then it is very bad instruction. I have always believed that instruction was to show the pupil how to fly a sailplane and to understand the conditions in which it flies. There is no question of flying by numbers.

Soaring is a mixture of art and science. Advanced instruction is there to equip you with the tools of the job in the shortest possible time, so that you can prolong your time in the air which, as Mr. Jeffries says, is precious.

Yorkshire Gliding Club. J. C. RIDDELL.

Unsuccessful Incantation for a New Season

by Christopher Hely-Hutchinson

Tiger, Tiger, shining bright,
With your slow, ungainly flight,
Grant me now a precious gift:
Take and drop me off in lift.

After winter's solemn dearth
Buds are bursting from the earth;
Gulls and swallows soaring high,
Even pigeons—why not I?

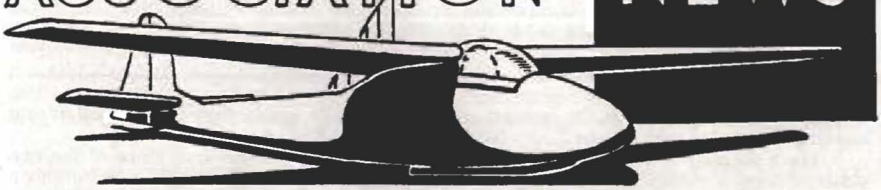
Under black clouds air is green,
Red the blue sky in between;
Colour-blindness is a crime
At fifteen shillings every time.

Every cloud is Silver-lined,
But I hope you'll bear in mind
Some to greater height are built—
Find me one that's Silver-Gilt!

Now it is my time to go:
As I release from aero-tow
Promise me the best of luck.
Oh Damn and Blast, I've come unstuck!

NOTE.—The last line admits of several (unprintable) alternatives.

CLUB AND ASSOCIATION NEWS



As the months come round, we are again thinking of the new soaring season and what it is going to be for us all. Club news is once again showing that the winter is not restricting the activities of clubs as in the past.

This issue for me is a sad occasion as it will be the final one in which I shall take an active part as Club News Editor. By the time you read this I hope to be settling in Canada.

As a member of the Magazine Committee, I have made many friends in various clubs and I shall long remember them.

Yvonne Bonham has taken over and I'm sure you all know how well the B.G.A. Office was guided by her efficiency which I'm sure means that Club News has gained a valuable and willing Editor.

Club Press Secretaries, many of whom I have not met but feel I know through the medium of the post; May I say thank you for all your help and understanding in meeting sometimes some rather difficult dates and requests.

I must apologise for not sending them reminders for copy, this was due to rather hectic days prior to my departure for Canada.

In order to give Press Secretaries a chance to include the news for the Easter Holidays flying, we will accept your reports up to the 20th April for inclusion in the June issue, which is being published early because of the National Gliding Week. As this leaves us rather short for time on our end, we do request you to ensure that you post your news on Tuesday, the 19th April.

Please send copy as usual typed on *foolscap double spaced* to Mrs. Yvonne Bonham, 44 Belsize Square, London, N.W.3.

COLIN MOORE,

ACCRA

A CLIMB to 18,000 ft. in a Cunim by Karl Tiede in his Ka.6 has been the outstanding event in recent weeks. Unfortunately, Karl, poor chap, had the wrong ink in the barograph; it had not registered the climb. The C.I.D. were called in and microscopic examination of the chart showed traces of the needle having topped the 5,000 metre barograph. No hope of a Diamond, but a pity to have missed the Gold C height. Karl has now changed to smoked paper and an 8,000 metre barograph.

Our Tandem Tutor is now back in use after her C. of A. which involved a demonstration of a remarkably prompt spares service by Slingsby Sailplanes. On her first day back in service the T-31B broke an 18 months' old two-up duration record by staying in the air for 91 minutes.

It seems that in another three weeks or so we shall be making our first aero-tows from the site—thanks to the kind offer of the use of his Piper Cub by the Ghana Prime Minister, Dr. Nkrumah. This will improve our soaring prospects considerably because, although it is soarable most days of the year in Ghana, it is often difficult to get away from a car launch.

P.G.B.

AVRO

DURING the Christmas holiday the Club's Skylark 2 participated in the Wave Safari at Long Mynd, eight launches being made for a flying time of 10 hrs. 35 mins. Bob Warburton achieved two legs for his Silver C, climbing to 5,500 ft. and staying up for 5 hrs. The most unfortunate member of the trip was Colin Horsfall who although flying 60 miles was still under the 1 per cent margin, having been released from the tug aircraft at 4,000 ft., missing the third leg of his Silver C.

A fair amount of maintenance work has been carried out during the last few months to the ground equipment. A new 100 B.H.P. Mercury engine has been fitted to our new winch, the old 85 B.H.P. engine being fitted to the auto-tow car, and an overhaul to our Chevrolet engined old winch is progressing. Launches up to 2,000 ft. have been achieved with the tow car, making full use of the 7,500 ft. long runway.

We have just received our new Swallow which brings the club's fleet up to four aircraft. The club's Skylark pilots gave the new aircraft a thorough test flying programme, needless to say. With the arrival of this machine it is hoped to make more away trips with the Skylark this coming summer.

BULAWAYO

SINCE our last Newsletter in October, we now have two more aircraft flying, bringing our fleet up to four. Each of the two new machines in turn has made a considerable difference to our flying activities.

The Wolf which arrived from Cape Town was the first to make its mark. On 12th September Gabriel Kremer who had been falling out of the sky regularly for two years since he sold H.17, decided to show it is the aircraft that counts and not the pilot. He disappeared on his second solo flight and reappeared an hour later with his C in the bag. Two weeks later he stayed up for 5½ hours, spending most of his fligh. avoiding cloud at 9,000 feet, 13,000 feet a.s.l Harry Mason in the Bergfalke was with him most of the time and also did his 5-hour leg, thereby completing the club's second Silver C. Gabriel before being transferred to Salisbury almost completed his Silver C with 3 attempts at the distance, on one occasion being forced down at the wrong end of a storm.

On 12th September Tony Churcher also took the completely rebuilt Grunau up to 8,000 feet on its first flight. Then on the 8th November John Wootton on his third solo gained 6,500 feet above release in the machine to chalk up his C. We specialise in third-solo C's at Bulawayo with flights of at least an hour. Not to be outdone the reconstructor of the Grunau, Gordon Patterson, who was going up for a quick circuit climbed to 11,300 feet, unfortunately without a barograph or this would have been a Gold C leg.

The Bergfalke meanwhile had been making some very good two-seater flights. On 18th October, however, Gordon Hird took off solo at 11.15 a.m. in the machine and arrived back at the airfield at dusk minus his machine, much to the consternation of his fellow syndicate members and wife. He had landed on a farm about 8 miles away having completed his five hours and Silver C distance. He climbed to 11,300 feet and getting lost at his first turning point had to do the first leg of a 60-mile triangle twice.

Since then we have had a remarkable C flight when Mike Browning climbed to 6,000 feet after a shaky winch launch to 500 feet and stayed up for 2½ hours. Reg Gasson has also gained his C with a flight of over an hour in the Bergfalke.

Roy Hester on his second solo climbed to 4,000 feet in the Wolf.

Thermal conditions are excellent with lift of 20 feet per second normal also downdraughts at the same rate and over larger areas, or so it seems. Our worst snag is the prevailing wind takes us into Bechuanaland over hundreds of miles of unbroken bush. Still we have very high hopes for the future and particularly with regard to out and returns.

G.H.

CAMBRIDGE

AS one might expect, our flying activities this winter have so far offered nothing exciting to write about. Let us therefore take the opportunity to draw a brief sketch of the Club's organisation and present circumstances.

As it says in the rules, the Club is known as the Cambridge University Gliding Club and its object is to provide facilities for gliding at the University and to encourage the development of the sport. The Imperial College Gliding Club is so far the only other

University gliding club in this country. Membership is open to all, but the number of non-University members may be limited at the discretion of the Committee. At present the membership fluctuates around the 300 mark; this includes a great many University members who have gone down and are making use of our country-membership scheme. One of the most pleasant aspects of a University club is the annual influx of freshmen who keep the Club for ever young and bring with them fresh enthusiasm, new ideas and a healthy sense of adventure which is sometimes mistaken for irresponsibility. Due to the increasing popularity of gliding courses and due to the Air Training Corps, more and more undergraduates arrive with previous gliding experience, or even with a severe bite by the gliding bug.

The Club's home site is Cambridge Aerodrome, otherwise known as Marshall's. It is only about three miles from the city centre, and is a fair-sized grass airfield with a single concrete runway. Out there we have a hangar, a workshop and occupy a garage. The Club owes much of its facilities to Mr. A. G. G. Marshall, the head of the Marshall Organisation who owns the airfield.

Another great benefactor has been Mr. R. C. G. Slazenger, who helped the Club in acquiring its fleet after the war. At present the Club fleet consists of a Skylark 2, a T-21 with 17,500 launches in her log-book, a Prefect and a Tutor. The Eagle and the Olympia II, though privately owned, are also Club-operated aircraft. A Swallow has been ordered and will take the place of the Prefect which will soon be sold, together with the Tutor. The possibility of buying a Tiger Moth for aero-towing is being investigated.

Launching facilities are provided by a two-drum winch, a large chunk of engineering known as "the Brute". A Ferguson tractor is used for cable-retrieving. There is also a stand-by single-drum winch and the monumental hulk of metal looming at the back of the garage is our new two-drum winch under construction which is called "the Beast". Aero-towing is carried out by the Tiger Moths of Marshall's Flying School.

Weather and Flying Control permitting, flying may take place on any day when there is a demand; usually we fly on 180-200 days a year. Twice a year a Club camp is held at the Long Mynd, and there are gliding courses during July and August at Cambridge. The countryside around Cambridge is essentially flat. There is no soarable slope within 30 miles. However, Cambridgeshire is good thermal country and a good starting place for Silver C and Gold C distance flights. Almost a tenth of all the 900 British Silver C pilots have gained at least one leg with the C.U.G.C., and many of them did their 5 hr. flights in thermals over East Anglia.

The only full-time employee of the Club is Ted Warner who is a qualified Ground Engineer and Instructor. The President, Dr. J. W. S. Pringle is also the Chairman of the Committee which consists of the usual officers of a gliding club, such as the Treasurer, the Assistant Treasurer, the Secretary and the Assistant Secretary, the Chief Flying Instructor, the Chief Engineer and a number of other members. By the way, the Treasurer reported that last year the Club's income exceeded the expenditure by a substantial amount for the first time in the Club's history.

The C.U.G.C. is now in its 25th year and, so we claim, has lost none of its vitalit.y

G.S.N.

CORNISH

For some considerable time Harry Hooper has been observing standing wave phenomena in the St. Tudy area, in the lee of Bodmin Moor, during periods of East and North-East winds. It is difficult at this stage to determine the origin of these waves, but it appears probable that Brown Willy and Rough Tor are actively concerned and on suitable days possibly reinforce wave motions which started earlier over Dartmoor. (For the uninitiated, Brown Willy and Rough Tor are not the names of Club members, but Cornwall's "mountains".)

On Sunday, 10th January, wave conditions appeared likely, and the C.F.I. set off in the Olympia behind the Tiger to investigate "Hooper's Wave." Unfortunately the upper wind was stronger than anticipated, and the Tiger was low in fuel, so the Olympia was not able to reach the area in which the main wave was anticipated. Nevertheless a small wave was contacted and soared twice to 4,600 ft. and later near Wadebridge, another smaller wave was found. A landing was made at St. Eval and later an air retrieve to Perranporth. Exciting possibilities are opened up

by this flight, and plans are being laid for a week-end camp in this area in the Spring.

Fred Breeze is hard at work giving the T-31 a much needed overhaul, and the Swallow kit is being gazed at in awe. An all-out effort on the kit is planned, and we hope to have it flying in record time. With C's. of A. coming up, the workshop programme is assuming formidable dimensions, However, having a full-time engineer on the spot is providing a great fillip to the Club.

January was a miserable month for flying, only seven days being possible. However, so far February has been much kinder, and ridge soaring frequently possible. The cliffs are pushing off regular thermals from the unstable air coming in from the sea, and from 750 ft. on the ridge it has been possible to soar to 1,700-2,000 ft. and return to the ridge to wait for the next one. We have been very fortunate to escape the snow, but it has still been a little chilly. The T-21 canopy has proved a godsend—it's been the warmest place on the airfield.

Preparation for National Gliding Week in June is well under way. A planning committee has been beating its brains out for months trying not to overlook anything. This is our first attempt at anything like this, and we are determined that it will be a success.

Five-hour flights are possible again now that the westerlies are back. John Fielden completed his Silver C in January, and Mike Armstrong did his 5 hrs. on 15th February.

P.V.P.

COVENTRY

THE beginning of a new year is customarily a time for taking stock, and the statistics for 1959 show our main advance over previous years to be found under the heading "Cross country Mileage". This totalled over 1,400—more than double that of 1958; whereas the totals of hours (871) and launches (6,415) show no improvement. In order to rectify this, we have now acquired a Tiger Moth, and hope to achieve a considerable improvement in 1960. In the course of the year, 27 A and B certificates were gained, also 18 C's and 14 Silver C legs. Four members completed their Silver C's.

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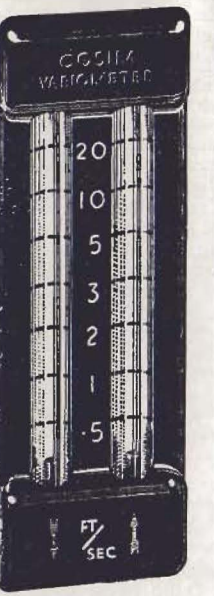
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In the last issue we noted that the Viking had rejoined the fleet, and we are pleased to be able to report that she now flies better than ever. The Viking trailer is now undergoing rejuvenating treatment, and another chore which has at last passed from the "pending" tray—the painting of the clubhouse—has been undertaken by a fourteen-year-old member, Nigel Riley.

The Club is due to act as host for participants in the August Soaring Week, which may seem rather a long way off at present, but nothing arouses anticipation as much as the first thermalling of the year —which we experienced, appropriately enough, on 14th February, St. Valentine's Day.

P.M.

DERBY. and LANCS.

ONE of the great advantages of a hill site is that the soaring season continues throughout the year. Let us be honest and admit that we have not flown one really good wave this winter and that there has been little flying and even less soaring. The cause? Just bad weather.

The Christmas Party in the Club was even happier than usual because, in spite of the large attendance, no one starved in between the courses. The "Bernard Parties Without Anguish Plan" proved to be effective.

A brand new Rolls Royce two drum winch has been conjured up by Cyril Kaye and just fits into one end of the new winch house built by his son, Michael. We understand that the design comes from the Cambridge Club, although this is the first to be completed. The winch is driven from a roomy and well glazed driver's cab and the same powerful engine will move the winch up the steepest and wettest slope, as well as drive the drums, all from the same seat. The cable drums tilt from side to side, thus replacing the pay-on gear but as with all new things, this will require some more development work.

Another newcomer is a Pfeifer Cable Retrieving Winch. Peter Mackenzie, Denis Ward, Ken Blake and Keith Johnston have formed themselves into a special winch committee to administer and operate all this highly complicated equipment and we look forward to a great improvement in the height and regularity of launches.

Quite apart from this, the T-42 group have completed their own private winch specifically designed to give the T-42 a safe launch in any weather.

The usual number of gliding courses have been organised for the middle and late summer and one of the second National Gliding Weeks will be held at Camphill.

O.W.N.

DONCASTER & DISTRICT

YORKSHIRE is now seething with gliding clubs. The Doncaster and District has now been formed and will be flying by the time this appears in print. Fleet to date—one T-31, a Tutor and a Cadet, but watch this space for further developments. Lasham will no longer be the "Hub" but one end of the axis!

We think we've done fairly well since Jim Durdy held the inaugural meeting in the Trades Club on 29th January last year. As well as the aircraft we have a club-room and bar, and without boasting it is the best gliding club bar in the country.

Heartiest congratulations to Tony Williams and his stalwart band of helpers. Also thanks to all the other clubs who have weighed in with advice and help.

The clubhouse is located on Doncaster Airport, telephone No. Doncaster 56066, address: Doncaster Airport, Ellers Road, Doncaster. Visitors are welcome, bar open every evening.

M.C.U.

EAST MIDLANDS R.A.F.G.S.A.

AFTER a long absence from these pages we appear once again to give news of our activities.

In recent months many changes have occurred; firstly we bade farewell to our C.F.I. Brian Carroll, who ran the club for over a year with many frustrations and few helpers. Thank you and best wishes Brian, from all here.

Congratulations to Geoff Barrell upon his promotion to C.F.I. and welcome to Dave Tennyson and Pete Davidson who take over as i/c. and deputy. The Eon Baby arrived in early February, thanks to the assistance of the Cranwell Chipmunk and Doug Bridson. Jack Ward has been steadily working to repair our tired winches and we can look forward to a very promising season thanks to his endeavours.

Our auto-towing has not been a glorious success but we are fettling our vehicle and

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hope to try again shortly with new cable. Having kept up a steady 100 launches a month with one winch, we are hoping to break even last year's all time high this summer, with two winches and the auto-tow.

May we wish all our gliding friends "Many Happy Thermals", and lapse into silence until our members give us some Gold C's to write about. (Perhaps!)

R.A.H.

EAST YORKSHIRE (Driffield)

I AM pleased to report that progress is steady, regardless of the hostile forces of nature in the north and the seasonal festivities during the month of December, when only thirty launches were added to our good start. Nevertheless, Bailey got his B and Sgt. Herring upgraded his instructor's category.

January started the New Year well with 170 launches and with the following members getting their B's, Herring, Jnr., Sgt. McGregor, U.S.A.F., Capt. Ott., U.S.A.F., Master Eng. Goode and Flt. Lt. Fletcher. Last week two more pilots, Flt. Lt. Orr, our flying doctor, and Chief Tech. Christie qualified for their B certificates and so far for this month we have carried out 75 launches. Flt. Lt. Orr leaves the R.A.F. within a week or two and takes up practice in Brough. We all wish Brian and his good lady the best of luck, and hope that they will visit us regularly.

On the equipment side of the organisation we are still pressing on with one winch, the Grunau and the T-31. The latter, at the moment, is undergoing an extensive glued joint and major inspection, and the person who is doing all this wonderful work is named appropriately enough, Sgt. "Timber" Wood. Thanks to the efforts of Master Eng. Goode we have added a trailer for the Grunau to our collection of equipment, so look out Sutton Bank, we're on our way.

Finally, for those interested in statistics, we have in four months of winter operations achieved the following:—

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HANDLEY PAGE

LAST year saw us break records in all three Gliding parameters, launches, cross-country miles and hours. Totals for 1959 were:—

1,050 (980) launches, 600 (225) miles and 225 (130) hours, 1958 totals bracketed. Notable events included our first entry in the Nationals at Lasham when we came 22nd in League 1, the Portmoak Expedition and the Dunstable Rally. All of these events would not have been so successful, and our year's figures not so encouraging, had we not had the Skylark; which arrived last March as a gift from Sir Frederick Handley Page.

What does 1960 offer? This is a question which members are keenly endeavouring to find out. At the moment there is much talk on going to Switzerland, and also on entering the National Soaring Week competitions. Plans for more Silver C's this year are also being discussed and in all 1960 should prove very interesting. With all this planning the aircraft are now being prepared for the coming soaring season and are having their annual inspections and overhauls. At the time of writing the Tutor is almost finished, and the T-31 well advanced. The Skylark is about to be started; however, the Rhönbussard remains at one side. This latter aircraft requires much work, by more expert hands than ourselves, and a decision on its future should have been made when these words appear in print.

As can be imagined with all this work being carried out there has been little chance of flying, although the Skylark has been seen aloft from time to time. The opportunity was therefore taken to overhaul the two Humber towing vehicles. The Box Humber now being ready after a very big check over and the other receiving attention now.

Changing the subject from the Hangar to the Home, the main news is that last December our Treasurer, John Essex, was presented with a second daughter by his wife, Toni—we wish hearty congratulations to them both.

With the arrival of the new, we also had to say our goodbyes to one of our keenest members—Mike Whitby. We thank him for all his hard work on the M.T. side and wish him success in his new work and hope that we shall see him from time to time in the future.

L.W.D.

KENT

FLYING has been very limited for the last two months, but we are hoping that the worst of the winter rains which have frequently left the field waterlogged is now over, and that we shall be flying as usual at week-ends from now on.

Fred Wilson's Grunau has made its long-promised appearance, and been flown for the first time at Lympne. The C.F.I. himself made the first flights in it.

Plans are well under way for this summer's courses. It is intended to hold eight of these, starting in Mid-July, and including one for club members only.

We wish the best of luck to Colin Moore, who is leaving England to live in Canada. Colin is a founder member of the present Kent Gliding Club, and was on the Committee from 1956 till 1958.

The social activities of the club this winter have included a dinner held at Slippery Sam's restaurant on Stone Street between Lympne and Canterbury on Saturday, 19th December, which was voted a great success by all who attended. A New Year Party was held at Greenways, West Malling on Saturday, 2nd January. About 50 members were there, including some we have not seen for a while, with the result that most of the evening was spent in conversation, though one or two members did take a turn on the dance floor.

We were very sorry to hear of the death of George Court on 9th February. George joined the club soon after its formation in 1956. The Court family's association with aviation began with George's father, who helped Sir Hiram Maxim to build his steam aeroplane, and George himself was the inventor of the lightweight diesel engine for model aircraft. He was also a member of the original Kent Gliding Club which flew from Tophill Farm, Lenham, before the war. Present Kent Gliding Club members will miss his tremendous enthusiasm and very material help.

P.B.

LASHAM

WE are building up a fine fleet of launching vehicles for the coming season: Bedford TS3 Diesel, Ford F-100, and Chevrolet 3½ litre towing cars; and two winches—a new 2 Drum Diesel (Commer

TS3 engine) and the present 2 Drum with a new engine; also a new Pfeifer retrieving winch. So providing nothing blows up, there should be plenty of launches for everybody.

We expect delivery of a new Slingsby Swallow at the beginning of March. The Boy Scouts now have their own T-21, and Leighton Park School's "Min" is back in service.

A new building is being erected by members alongside the old Clubhouse which we hope to make into a comfortable new lounge and bar. We have not managed to scrounge much furniture for it yet.

Two excellent films are being shown at the Club on Saturday, 26th March—"How an Aeroplane Flies" and "High Speed Flight". This is also the night of the A.G.M. so we hope to have full attendance. A week-end School on Meteorology is being arranged for some time in April.

Seven pilots at Lasham enjoyed their first thermals of the year on 5th February. A total of about 4½ hrs. actual soaring was done between 2 and 4 p.m.

A few statistics: a total of 14,088 launches were done by instructors last year, 5,775 of these by voluntary members. 2,207 aerotows were done by tug pilots last year. A very fine effort, please keep up the good work in 1960.

Ab initio courses for non-members are being run throughout the year, and Instructors' courses can be made available if required.

J.F.

LONDON

THE winter has nearly passed but without the usual glut of hill soaring, up to the middle of February, we have had a continued lack of westerlies at the week-ends. In the last four months we have had only one "five hour duration" and that mid-week and by a visitor! The lucky individual was "Kiwi" Zotov from the R.A.F.G.S.A. at Cranwell, who spent a week with us in December.

S. Beck, T. Marshall, J. Saunders, and June Zealley qualified for their C's once again all mid-week. Messrs. Marlow, Saunders, Barlow, Wilson, and Hargreaves, obtained their A and B certificates.

One of the few bright spots was the record number of launches done in January nearly 500, despite two week-ends being unflyable.

Preparations are being made for the spring thermals and indeed one or two people had short thermal flights from the winch on Sunday, 7th February. Most of the club fleet have had their C. of A's completed during the winter and the private owners are to be seen most week-ends working on their aircraft. The workshop have completed the rear fuselage for the Kestrel two-seater and we are now awaiting the delivery of the front end from Vic Ginn who has been held up by low temperatures for glueing. We hope that this year will see the first Gold C distance to the North from this club, with Neasham aerodrome, South of Darlington, as the goal.

Godfrey Harwood brought his Swallow up here for our test group to do some inverted flying tests with it; the test group have also been flying the Skylark II, fitted with camera and all necessary instrumentation to obtain an accurate polar for the aircraft.

We are running the same number of courses as last year and the bookings appear to be coming in better than any other year. For our own club members Elementary soaring week will be held as usual the week before Easter and Silver C week immediately following.

J.F.W.

MIDLAND

ON 20th December we held our annual Christmas "do" in the Clubhouse, at which over ninety members and friends sat down to a really first-class lunch, cooked to a turn by Ruth, Brenda and Mrs. Gretton, whose cooking is so consistently "A1".

Immediately after Christmas, a camp for visiting aircraft was held and nearly 100 hours were flown in hill and wave lift. For the second year running, this camp was extremely lucky as regards weather, as very little flying has taken place in the past two months apart from the camp period.

This is a busy time for Teddy Proll, who has his hands full with C. of A. inspections of Club aircraft, all ready for the first local instability which heralds spring.

The T-21 trailer has now been recovered, and soon will be ready for use, and the same treatment is about to be applied to our Olympia trailer, which broke anchorage in an autumn gale, and was considerably damaged. The same night, it is said that Jack Minshall thought he was about to make a bottom landing in his caravan, which

stands very much exposed on the top of the Mynd, but he survived.

Entries for our Easter Rally came in thick and fast, and the list was closed very quickly. Late entries unfortunately have had to be refused owing to our limited launching facilities, and to those we refused . . . sorry.

We ended the year with a record number of launches, over 9,000, but our hours flown was below our best, in spite of running more camps in 1959 than ever before, and we look forward to a record year in 1960, to make up for it.

As this goes to Press, we are well and truly snowed up, with drifts up to the hangar roof. Getting to the Club means a walk up from Asterton through waist-deep snow, which sorts out the keen types, who, on Sunday 14th February, were rewarded with a few hours' hill-soaring, the first for a long time.

We would like to offer our best wishes for the future to Bob Oldershaw, and Maragaret Price who are getting wed on 20th February, and also to Jack Minshall, who has decided that his bachelordom must cease forthwith, and he is marrying Ruth, our chief Fairy in March. Good luck each.

G.B.

MOONRAKERS G.S.A.

In spite of the seasonable weather of rain, snow and fog, the Club has been pressing on with the winter training programme and already the Upavon thermals have been sampled by several members. Cyril Wade in the Olympia II even found a wave from a winch launch, he coaxed her up 500 ft. and remained aloft for 40 mins. Recently the Chipmunk emerged from the Hangar for the first aero-tows of the year and as a result, several members have been checked out for solo tows. They were so elated that they could still smile after the sub-zero tows in the Kite I.

Thanks to the Midland Gliding Club Wave Safari, a group of members had their first taste of wave soaring at the Mynd, plus bungey experience for the majority. Gp. Capt. Cooper completed the second leg of his Silver C with a climb of 4,700 ft. and J. T. Eddie Hodges was once again defeated by a sticking barograph. J.T. Geoff Chandler produced the best Moonraker height of the meeting with a climb to 6,600 ft. and the Club chalked up a total of 23 hrs.; in brief a good time was had by all (excluding the Studebaker when confronted with the hill!)

Due to lack of club accommodation, the Club rarely has a social gathering, however the night of 23rd January, was an exception. The Royal Oak—Pewsey was the venue, and over the odd glass of beer there was much talk of past activities and things to come. Sgt. John Williamson (C.F.I.) organised a couple of gliding films which went down very nicely, coupled with the usual exclamations of Ah! Gee! etc. and that inspiring feeling that made the individuals visualise themselves in the Championships of the future. J.T. John Dock was due to receive the Novice Trophy, but unfortunately he could not attend, however the cup was presented by Valerie Reeves to Geoff. Chandler who was just a few points behind in the No. 2 position. The Party was a most successful "do", it was amazing that gliding types could look so respectable.

The Eon Primary is still in demand by the hardy members who find joy in braving the wintery blasts and at the other end of the fleet, the magnificent Olympia 419 continuously probes the sky in search for something to arrest the descent. At present the flying has been reduced slightly as the annual inspections are in hand, however, the winter has been the most active one ever known by the Club.

E.R.

NEWCASTLE

As is usual at this time of the year there's very little to write about as far as flying is concerned, operations having been overshadowed by the news that Air Ministry have finally decided to dispose of Usworth and the club is under notice to quit, the deadline being 15th April. It is almost six years since we started flying at Usworth and in that time the club has made steady if not spectacular progress and

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though we've always been under the shadow of the axe, the news that we would have to move, did come as a bit of a shock. We are fortunate however, firstly that the Air Ministry have given us permission to stay on a day to day basis for as long as circumstances permit and secondly, unlike other occasions when we have had to move, we have a place to move to, namely our new site at Carlton.

The story of Carlton is far too long to tell here, so I will confine my remarks to saying that the site is an extremely promising one from the flying point of view, and the terrific amount of work put into it by the members which includes the laying of an access road, the levelling of parts of the three projected runways and the site for a new hangar and the erection of a temporary hut has made the site usable, but a considerable amount of work remains to be done before it becomes another Long Mynd or Great Hucklow.

In view of our enforced move, a General Meeting was called for 31st January, and was attended by about 60 members to hear the committee's report and proposals. The report on Carlton was that a twenty-one year lease had been negotiated and was ready for signing, and planning permission had been granted for the building of a hangar, but with regard to the acquisition of another more local site the news was not so good, as the only suitable one was being used for unspecified experimental purposes and was therefore not available, while other possibles were also not available for one reason or another, so the decision was taken to continue the development of Carlton borrowing the money for the purpose (the estimated cost of the original scheme being £2,500), and if not possible, to develop the site on a smaller scale than that originally planned, while using our remaining time at Usworth to prepare as much as possible for the move.

The fact that we are on a day to day basis after 15th April, has given rise to the minor headache of where to store our equipment if the move has to be made in a hurry, and the construction of the Olympia trailer, originally intended to encourage cross-country flying, is being pressed forward in order to provide at least one of our aircraft with a permanent weatherproof home. Our thanks on this score must also go to the Yorkshire Club, who have offered us storage space at Sutton Bank if it should become necessary, and also to Cliff Sculthorpe, who has given us the use of his trailer which is empty at the moment, thus solving one at least of our problems.

Well, the die is cast and it looks as though we'll be moving to Carlton sooner than expected, but with the co-operation of all concerned, it should become a going concern in the fairly near future with consequent benefits to flying time and the members both past and we hope, future.

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NORFOLK & NORWICH

THE gliding section of the Norfolk and Norwich Aero Club is developing well now that we have started training with our recently acquired Swedish aircraft. On New Year's Day we rendezvoued with members of the Gothenburg Club in Denmark, having gone over with an empty trailer on the Harwich to Esbjerg Ferry. We have bought from Sweden an Olympia plus a spare starboard wing and a Kranich with a very nice tubular steel trailer. Both aircraft are in very good condition, the Olympia particularly so, and they are each fully instrumented. For instance, the flying hours of both aircraft are less than 500 each and as they have always been aerotowed, the launches are each under 900. Actual purchase price of the lot was £650,

although transportation and customs duty has added rather considerably to this bill.

As far as our training programme is concerned, as we have one two-seater glider plus two Tiger Moths, ab initios will be given five hours training on powered aircraft then on to the Kranich for approximately ten aero-tows or so, and then solo on the Olympia. A new Skylark II from Slingsby should be delivered by April and of course there will be Skylark III available for the more experienced instructors.

Application has already been made to the B.G.A. for membership and our bet is that the gliding section will, in the months to come, develop far more than the powered side. Pilots will, of course, be encouraged to take their flying licences as this will add to the reserve of tug pilots available.

We have already written to Wally Kahn suggesting that Swanton Morley might be a good starting place to have in mind at Easter, if the N.E.'s are in the offing. You might well mention this to one or two other would-be Diamond C distance aspirants.

The circuit gets a little complicated at Swanton Morley what with A.T.C. winch launching, aero-tows, and power flying training, but a system is gradually being evolved to suit these various operations.

We should be grateful if you could put us in contact with a qualified engineer who would be prepared to carry out C. of A.'s on the Kranich, Olympia and probably the Skylark III. The work could be done at Swanton Morley, and indeed, as far as we are concerned, it would be preferable.

A.H.W.

NORTHAMPTONSHIRE

To all appearances this has been a very quiet period for us, but in fact a great deal of work has been done on our new premises, and on the arrangements connected with them, which are far more complicated than would appear, since about four Government Departments seem to be directly interested in all we do.

We now have a water supply, electric light and power, a start has been made on the decorating and furnishing of the club-house, and the hangar has been made usable. The end wall was removed, and very dangerous it looked, an enormous steel girder was slipped in under the unsupported bricks before they could notice anything, and when everything was quiet again a steel roller shutter covering the whole end of the building was hoisted into position by a couple of silent blokes who appeared one day. Considering the apparatus is about as big as a sixteen-inch gun, we were rather relieved that they took the job over. The hangar now accommodates five fully rigged gliders, two with 60 ft. wingspan, and two trucks without any attempt at packing, so it looks as if we shall not outgrow our premises for a few months, at least.

On the 18th December we held an inaugural party, when the house got really warm for the first time, with about a hundred people there to help. An impression seems to have got around that it was a fairly successful effort, but as I ran it I can't say too much!

B.C.H.

PERKINS

During our long absence from these columns, we have "retreated" to Westwood Airfield at Peterborough, after being ousted from Polebrooke by American Intercontinental Missiles.

Our use of Westwood is entirely through the goodwill of Mr. H. Horrell, a local Councillor and farmer, and Mr. G. Clifton of "Spalding Airways"—without the kindness of these two progressive individuals, we would not have an airfield now.

Equally, we are indebted to the Cambridge G.C. for letting our members fly with them and housing Daisy May—our T-21B, during the months between leaving Polebrook and commencing at Westwood.

Thank you, Cambridge.

Mainly because of our uncertain existence the last soaring season was not taken *full* advantage of. Only Tony Casbon managed to arrange a cross-country attempt and after ten bucketing miles the Variometer bottle came adrift and fell forward amongst the rudder pedals—with a useless 'vario', and a good chance of his controls being jammed, Tony landed the Baby Eon on the large R.A.F. Airfield, which very considerately presented itself directly underneath.

Generally, flying has consisted of training circuits and local soaring in Daisy May with George Bell, assistant C.F.I. in the left-hand seat. Circuits and attempted soaring in the Tutor by new A and B pilots, and some creditable local soaring by Messrs. Casbon, Taylor, Tinkler, Hickson, Falkenbridge and Baldwin, in the Baby Eon.

On the inconvenient side, rigging and

de-rigging is still the order of the day, as hangar space is limited, while on the convenient side the very large railway marshalling yard on our West boundary affords some thermal activity under quite stable general conditions.

At time of writing, the T-21B, is nearing the end of its annual C. of A. and is resplendent in flame and yellow—all our machines will be these colours as they come up for C. of A. and we hope that "red and yellow" gliders will be seen all over the place this year.

Our Annual Social Dinner Party was held on 30th January, at the "George Hotel", Peterborough, and Flt. Lt. Clarke of the R.A.G.S.A. responded on behalf of the visitors.

In closing, may we wish everyone all success for the coming soaring season.

S.W.H.

PHOENIX (Germany)

As spring and the start of the new season draws near, a nucleus of club members is working to a tight schedule to make ready our four gliders for this season's flying. Newcomer to the club, Junior Technician Harry Howitt, late of the Gliding Club at St. Athan, heads a working party of some of the more technically able members in the task of majoring our two Grunau Babies, the biggest job of the winter. The Weihe is having its wings overhauled by a German firm; the fuselage is having a respray in the paintshop here. Recently we took delivery of a Ka-2 two-seater, our new trainer, as a replacement for the Kranich which served the club so well last year. The Ka-2 was test flown early in January and the club is looking forward to the opening of the season's flying in March.

The Pfeifer winch, with its mighty V8 motor, has been transported to Oelen, in Belgium, where some Army types are overhauling it, and the Roeder winch is in the capable hands of some more Army types in Muenchen-Gladbach. These will be completed, we hope, before the target date, 4th March.

All this hard work was preceded by the Christmas Dinner, which was held at a local bierhaus on 11th December. After the consumption of large amounts of chicken (and beer), Herr Albert Schmeltzer, of the Viersen Gliding Club, produced a cine projector and showed some films he had taken at his club.

At the beginning of the New Year we said goodbye to Corporal Pete Dawson, who did so much for the club last year; he has been posted to R.A.F. Duxford and the East Anglian Gliding Club. Corporal Max Harden, one-time Secretary, has also left us to return to England, along with Corporal Jerry Francis and S.A.C. Arthur Lloyd.

A warm welcome is extended to J./T. Harry Howitt, who is to take over the instruction along with Flying Officer Clive Wallis. At present Flying Officer Wallis is our Treasurer and will take over as C.F.I. and Officer i/c when Flight Lieutenant John Boyle, the present C.F.I., leaves us in May. S.A.C. Ron Clarkson is the new secretary, filling the post vacated by Cpl. Harden recently.

With all our equipment in topline condition, the launch rate per flying day is expected to top the hundred mark. There are murmurings about a retrieving winch, and if one does materialise, this figure should be comfortably exceeded.

A scheme is afoot for club members to buy a barograph by private subscription. This is to be presented to the best ab-initio pupil each year, as well as being used for the usual purpose.

R.L.C.

SCOTTISH G.U.

OUR report is again more a catalogue of non-flying activities, since the weather has not made this a very active winter, and merely a periodic airing of the aircraft.

The start of 1960 was marked by the informal opening of our new conveniences, and we feel that we have reached a further milestone in our advance to civilised club amenities, or, is this a sign that we are no longer the hardy types of "Balado-days"?

Early applications for the Summer Courses show a very healthy interest and promise full bookings within the next few months, if not weeks. Our first enquiries for group bookings from Clubs have resulted in our nearest club (Aberdeen) booking a week, and a number of smaller groups following suit. So others interested, please book early to avoid disappointment since there is a limit.

A scheme of tasks has been introduced as a method of scoring points for the Club Championship. The aims at stimulating a more competitive spirit among our high performance pilots, plus a means of recognition to the most consistent performer in this group.

The last Sunday of this period (14th February) surprised and deterred many, but the few who managed to attend, despite icy roads and early morning blizzards, found Portmoak basking in bright sunshine and enjoyed some pleasant soaring over Benarty on its northern slopes. This being our first opportunity in 1960 of using this hill and using a rather belated north wind when compared with previous winters.

W.A.S.

SHORTS

THE New Year has seen a rebirth of the club after nearly two years inactivity following the accident to the Nimbus. Most of the old members have returned however, and a number of new faces have appeared.

On 8th January the acquisition of a Skylark II put the club once more in the air. Wilf Monteith, who made the delivery flight from England with the assistance of Douglas Kirkpatrick and one of Ulster Flying Club's Tigers, found I.T.V. cameras waiting to record his arrival at Newtownards airfield. This was the first time a sailplane has reached Ireland in this way.

Operations are now being conducted at Newtownards in conjunction with the Ulster Flying Club. The use of aerotowing is helping to provide some really painless gliding. The training programme awaits the completion of repairs to Nimbus which are well under way.

We are sorry at this time to lose the services of Stuart Morison who as C.F.I. helped to put the club back on its feet. His place has been taken by David Cooke. Stuart is keeping in touch with the club from across the water.

Members are now anxious to meet the challenge from the Dublin club and make the first flight to the other club. It is understood that the successful pilot and his crew will be suitably entertained.

D.A.C.

SOUTHDOWN

SUNDAY, the 8th of February, saw the bungey being taken out to the ridge for a grand day's soaring. A stiff north-easterly and a good turn-out of members kept the aircraft flying until dusk. Over 17 hrs. of hill soaring were put in by the club aircraft, including a successful C flight by our new President, Les Allard, and our first silver C leg of the year is Beresford Taylor's well deserved 5 hrs. in the Tutor. We were also joined by a visiting Skylark flown by John Holder.

Looking back over the past year the records show a healthy increase in flying figures, even allowing for the exceptional summer. Launches for 1959 were 3,752 with 462 hrs. flown and a total cross-country mileage of 549 of which 172 miles were from Firle, a record for the Club. Outstanding amongst members' achievements was Ray Marshall's performance in the Championships with a cross-country mileage of 321 and a final placing of 10th in League 2. Certificates gained during the year included five C's, eight silver C legs and three silver C's completed. A gold C we cannot yet claim, but we hope to rectify this before next year!

Three courses were held at Firle during the Spring and Summer. These were well attended and logged over 40 hrs. flying.

Members' expeditions last year ranged from Cambridge to Bristol in this country and from Spain (first pioneered by Dawn Reynolds) to the Pyrenees on the continent. Plans are already afoot for a club expedition to Norfolk during May and with the completion of our second Olympia, we hope to organise some mid-week expeditions to other sites.

SURREY

JANUARY weather was not particularly kind for flying. Thick snow during the second week made Lasham a children's playground—children both large and small! A little ingenious thinking turned some broken skids into bob-sleds and these were towed up and down the main runway with some intrepid aviator hanging on for dear life. Speeds of 30 m.p.h. were attained but for those riding on the sled it felt more like 60 m.p.h.! Mike Neale and Bob Ward made use of the icy conditions to test their skill at braking and skidding.

Hugh Hilditch has made good use of the inclement weather by laying the keels of three trailers, all based largely on George Burton's design. The workshops are a high-class production line at the moment, with club members working with a spirit and enthusiasm not seen for some time. Nick Goodhart opened the soaring season with a flight of 2½ hrs. on Friday, 12th February. He took the 419 up to 9,000 ft. and, on returning to the airfield, bombarded the runway with ice which detached itself at

5,000 ft. This flight was done in a cu-nim.

The week-end also provided a little soaring—the T21B managed two flights of over 10 mins. For those members who were not fully aware that it was soarable interest centred on the new Skylark 3 F which arrived at Lasham for testing. This machine has the new canopy and canvas seat and also tabbed ailerons while the most noticeable feature is the small-chord tailplane. The mass-balance has now been incorporated in the tailplane instead of being housed in the fuselage as previously.

Private owners are wondering what goal to set themselves this season. One suggestion is a 500 km. triangle—Lasham, Yeovilton, Leicester, Lasham. Who will be the first . . .?

C.J.W.

YORKSHIRE

THE recent weeks have seen the Club preparing for the coming season. Henry Doktor has completed the Canopy on the Tutor which also has spoilers. The T-21 is also finishing the C. of A. Fortunately the supply of Aircraft instruments has improved and we have been able to take advantage of this to fit out our Aircraft.

The Annual Dance was held at the Fleece Hotel in Thirsk recently. This was the occasion of a new and exciting game, Bungey Launching; but this time you do it without a sailplane. Techniques were developed to slow roll and loop. There were some sore heads in the morning!

This dance was also the opportunity to say goodbye to Peter Ibbotson, who was a prominent member of the Army Club and did a great deal of useful flying in the Spring and Summer last year. He has taken a job abroad on his demob from the Army.

J.C.R.

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