Sailplane and Gliding

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SAILPLANE AND GLIDING

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Cover Photograph.—*Denis and Anne Burns at the last National Championships.*

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World Record Out and Return

by Denis Burns

THE general impression seems current that my record out-and-return from Kimberley to Westleigh rail junction and back in South Africa recently was a mere chance flight slipped in while my wife Anne was for a moment pausing in the course of a series of World Records. This is not so. I had been planning for a long time, ever since it was finally agreed with Boet Dommisse some time ago that Anne and I would go out to the Union, that I would have a crack at this record if the opportunity arose. Not that this showed any particular intelligence on my part, as Boet Dommisse himself had had at least one crack at it (which jolly nearly came off) from Baragwanath aerodrome, near Johannesburg, in his Skylark III, and Eddi Leeman, of Jo'burg, had also had his plans laid. All this I knew well, so my flying at Kimberley tended to be beamed on this one purpose.

FIRST FLIGHTS

The first cross-country flight I had from Kimberley was not at all in what one might call "barn door" conditions. It was two days after Anne had done a Diamond Distance flight to Volksrust aerodrome; a fresh breeze was blowing from the south-west and I had hopefully declared Carolina in the Eastern Transvaal for a world goal record. Anyway, what I really did was to reconnoitre the route for a possible world out-and-return. I left the airport firmly in a straight line from 3,000 ft. above ground, after a weakish thermal at approximately 11 a.m., and soon found myself making an approach to land on Kimberley race-course about 5 miles out, the only safe landing place that I could descry amongst the local thorn trees and ant-heaps.

After getting away from this, at about 500 ft., things went slowly but fairly surely, until some 70 miles out on track in the Free State, when, once again, I was on my final approach low down to a field near a farm—always one lands near a farm, otherwise one may be in for an extremely long trek on foot—only to get away on a strong dust devil just in time. Thereafter things improved vastly and conditions might conceivably have been termed "barn door", but on arrival over the new Free State goldfields I calculated I had taken 3 hours to do 120 miles; so, with a possible total 8 hours of flying time, Diamond Distance was a possibility, but despite this I decided to cut the flight. I figured that if I just *missed* the Diamond I would be doubly sad at being away the whole of the next day on a tiring retrieve and thus possibly badly placed for a crack at the out-and-return, should the wind have died down. I came in from 4,000 ft. above the deck at Odensdaalsrust aerodrome in the heart of the goldfields, an aerodrome with not a soul there—only a herd of wild antelope, and a flock of somewhat supercilious storks soaring over my head in lofty disdain. Anyway I was back at Kimberley (thanks to Boet) by midnight and fresh and ready for the fray next day.

In fact I did not get an opportunity to fly again until the day after, when once again a 15 m.p.h. wind was blowing from the S.W. I elected to try and beat the British Out-and-Return Record by flying out to Theunissen just on the southern edge of the Free State goldfields, and back. The flight out would therefore be down wind and I had hoped the wind would die down for the return. In the event I averaged 60 m.p.h. out to Theunissen—some 122 miles. Here was a poser! Diamond Distance was almost certainly on if I continued past Theunissen on the same course as the wind was showing no signs of abating. I felt my crew, still at Kimberley, might not take kindly to being told, probably not until about 8 p.m., that I was some 700 motoring miles away in the Transvaal, if I effected this change of plan.

TURN FOR HOME

More important, to me at any rate, it would mean that I would be away from base for about three days, and that would mean three days missed for possible attempts on the world out-and-return. So I photographed the railway station and turned for home! In the event I only just failed to get back in the teeth of the S.W. breeze, which continued to blow unabated until sundown in a heartbreaking manner.

The final fly-in from Boshoff, 30 miles out from Kimberley, was nerve-racking, as I knew I had barely enough height and the lurid sunset obscured all view of the ground ahead until the sun, just going down behind the Kimberley horizon, allowed me a less blinding view forward of the approaches to the airport and a clear perception of the fact that without another thermal I might not get in. The final 2 miles of the approach was very hazardous for snap landings, so I decided to proceed till midway across De Beers famous diamond mine adjoining the airport, and, if down to less than 1,000 ft. there, to turn tail down wind and run for a field I had marked out on the fly-in, amongst the thorn trees and ant heaps. This, in fact, I had to do but, alas, the shadow effects with such a powerful sun so low on the horizon made the view down wind entirely different, and my lone field was effectively lost in this camouflage. I was gloomily contemplating a vast acreage of densely packed antheaps and an almost certain write-off, when a cart-track clear of obstructions appeared to starboard. Boet's words, "cart tracks in the dundu are often quite safe," rang in my ears, the dive brakes came out with a resounding clang and we were safe on the ground in a trice.

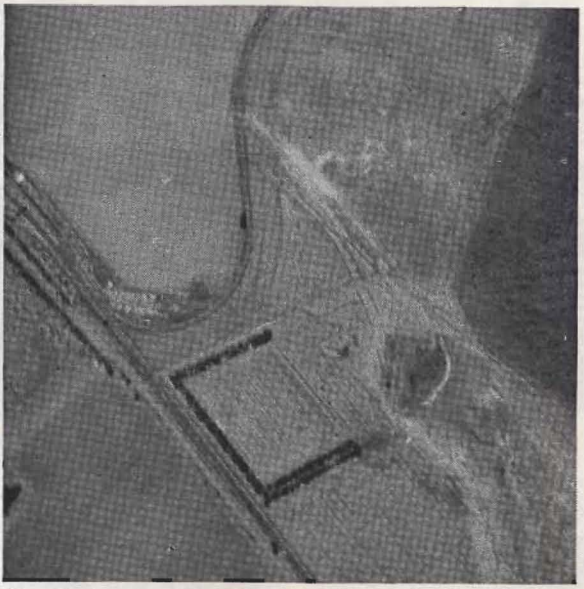
THE GREAT DAY

I had to wait another two days before flying again. This was to be my great day. The wind was about 10 knots, more west than S.W., and I again hoped that it would die down as the day wore on. Selection of a turning-point had to be well considered; a reasonable positive margin over the statutory minimum excess over Schreder's record was of course the first essential, but the other was to define a spot point on the earth's surface that a surveyor would be able to locate with a high degree of precision. A railway junction on the main Jo'burg line just north of Kroonstad in the north central Free State seemed ideal, and as I had already twice flown two-thirds of the way there, navigation was no problem. Despite my intense keenness I was only able to get away second, a Hungarian pilot in the Jo'burg Ka-6 being first off. I cast off upwind of the airport at 11.10 and almost immediately struck strong lift, which took me up to 6,000 ft. above ground at some 4 metres/second. I belted off at 80 knots and soon had the satisfaction of passing, at high speed, over a sadly circling Ka-6 somewhat low down.



Turning-point photograph taken by Denis Burns on his out-and-return record flight, showing Kroonstad aerodrome in foreground and Westleigh Junction towards top left corner.
For this and other places mentioned, see map on page 87.

Getting a good start like this is a great fillip when setting course from Kimberley, as the first part of the track to reach the Free State border and the start of farming land at Boshoff, some 30 miles out, is soon cleared. Near Boshoff I ran into a celebrated South African Down, accelerated to 100 knots to clear it, and found myself waffling about in weakish stuff on the far side of it before regaining a satisfactory operating height. The choice of correct operating height band in South Africa can be absorbing. Remember that the greater part of the terrain is about 5,000 ft above sea level, and on top of this it may be possible to operate in thermals up to 16,000 ft. a.s.l. from mid-day onwards. The thermal strength may be consistent all the way up, or it may start strong low down and get progressively weaker. Considering the effect of altitude on the difference between indicated and true air speed and its effect on climb meters, one wants to be in a flexible state of mind to select best operating height band. Of course if one can fly for considerable distances under cloud streets at great heights one has no problem. This, that wise old pilot Heine von Michaelis, one-time South African Champion, was able to do by superior course selection, to Hanover and back in the Cape Province, at right angles to my choice. However, Heine's flight that day, which beat the South African out-and-return record, is another story. Beyond Boshoff the morning clear-air thermals began to pick up considerably, and, by the time the Free State goldfields were reached, high cumulus was forming all over the sky at 12,000 ft. a.s.l., and cloud base was, moreover, continuously rising as the day wore on. More important, the breeze with its westerly component was, thank heavens, visibly abating, if my judgment of the speed of the cloud shadows on the terrain far below could in fact be trusted. I was now going very fast at inter-thermal speeds varying from 70 to 100 knots, well strapped down to take the negative "g", with the big healthy-looking farming metropolis of Kroonstad coming up fast on the starboard quarter. Westleigh Junction was soon located, but on rounding it I came face to face with a South African Airways Dakota



A confirmatory photograph by Denis Burns, showing Westleigh Railway Junction.

A car to boggle at!



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which deviated not an inch. My avoiding action to starboard brought me on the return track a little closer to the railway junction than was comfortable for best photography. However, if the F.A.I. want confirmation of the turning-point I have no doubt that South African Airways will oblige. The day was now all that Boet Dommisse had ever promised us; cloud base was up to 16,000 ft. a.s.l. and thermal strength 5 to 7 metres/second. The Free State goldfields were soon passed on the way back, and apart from an unplanned descent to 2,000 ft. above the terrain near Bultfontein everything was going according to plan and I had high hopes of reaching base.

FINAL GLIDE

A good thermal, which I thought my probable last, caught at 5.30 took me to about 17,000 ft. a.s.l. near Dealesville, some 60 miles from home. Reckoning on some 1,000 ft. in hand at Kimberley airport, I set course, at optimum glide, in the dead calm evening air. It would take some 1½ hours to glide in, and owing to the sunset I would not see my goal for some time. I relaxed at last in the cockpit, slackened off the straps, straightened and unstraightened my back to get the crick out of it, drank the last of the water bottle and started idly to wonder about many things, amongst which was how Boet and Debbie Dommisse, Anne and the others were enjoying the Mayoral party at the airport (in honour of the Kimberley Gliding Safari 1961 which was making the headlines), and whether there would be any champagne left for me. Shading my eyes for a moment from the glare of the sunset to look at the instrument panel, I unbelievingly saw some 1½ metres/second registering on the Horn. Hardly daring to breathe, I carefully circled and, wonderful to tell, the altimeter started to rise, confirming that it wasn't just the Horn stuck up.

I had flown into a dead calm mass of air slowly rising which took me to 16,000 ft. a.s.l. and this at 7 p.m.! From then on I was just singing with joy.

How different now the fly-in at some 120 knots in the cool evening air, compared to the last nerve-racking glide over the De Beer diamond mine! A few high-speed circles over the Control Tower, which was already lighted up for the party, and we were safely down to enjoy the champagne in a big way.

In retrospect I might regret that I did not set 400 miles and leave the Russians and Americans something more difficult to break, but would it have come off? The initial fumble of the Ka-6 was not necessarily poor pilotage, and, coming home later, I would not have run into that last evening thermal and would probably have been on the ground short of the airport.

I don't expect this record to last more than a season, as next year Pat Beatty of Johannesburg will be flying his new conception, the wonderful B.J.2.

With such pilots as Boet Dommisse, Eddi Leeman and Pat Beatty himself available in South Africa, 400 miles out-and-return should be on. For that matter, in such a wonderful gliding country, why not the World Record Goal Flight as well? May it keep fine for them—they are indeed a grand bunch of chaps.

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FEB. ISSUE: FAULTY COPIES

We regret that a number of faulty copies of the February issue were sent to subscribers. These will be replaced free of charge on application to the B.G.A.

Chairman's Report on 1960

AFTER the wonderful weather of 1959, the dismal and dripping days of 1960 gave few opportunities for outstanding flights last year. However, Flt. Lt. G. J. Rondel put up the National Gain of Height and Absolute Altitude records to 29,100 ft. and 30,580 ft. on 18th June with a remarkable flight in cumulo-nimbus cloud, and Mrs. A. Burns established two further Women's National records on 200 km. and 300 km. triangles. Mrs. Burns now holds ten of the eleven Women's records in the single-seater class. She had better take care, or she will shortly be growing feathers!

In the World Championships Commander N. Goodhart once more missed victory by sheer ill-luck, but put up a performance in his Olympia 419 which earned the admiration of every nation. The Argentine pilot, Hossinger, flew his Slingsby Skylark IIIB to victory, and on 18th December, S. H. Georgeson, in his Skylark IIIF achieved for New Zealand the first post-war World Record to be gained in a British sailplane with a gain of height record of 34,000 ft., flying in the famous North West Arch, near Christchurch, which he has done so much to explore. On 8th Jan. 1961 the irrepressible Anne Burns popped up again unexpectedly in Kimberley, South Africa, where in a fortnight, flying a Skylark IIIF borrowed from Boet Domisse, she established four Women's World records, one open World record, eight Women's National records, two Open National records, and completed her three Diamonds. Her husband, Dennis, chipped in and won back for the men her Open World and one Open National record, and also completed his three Diamonds. No British pilot of either sex has, to my knowledge, put up a similarly dazzling display in any field of aviation since the beginning of flying history. And I think the same can be said of the aircraft. A New Zealander flying a Skylark IIIF in waves in New Zealand, an Argentinian flying a Skylark IIIB in poor conditions in Germany, and an Englishwoman and her husband flying a IIIF in strong conditions in South Africa, has made for this British sailplane a niche amongst the famous aircraft of all time. British pilots and British aircraft continue, therefore, to hold our place amongst the world's leaders.

An exceptional growth of gliding has this year taken place in the Royal Air Force Gliding and Soaring Association, and the scope of their enthusiasm is underlined by the gaining of Silver C No. 964 by their President, Air Chief Marshal Sir Theodore McEvoy, and No. 1000 by Sgt. E. F. Edwards. In the R.A.F. it can now be said that every Aircraftsman may carry a Silver C in his knapsack.

The development of our movement has this year been marked by an increasingly fierce struggle for sites and against unduly restrictive Air Traffic Control practices. On the major issue of Lasham, our efforts, at the time of writing, seem likely to bear fruit, and at last we may hope for a solution which will enable us to pursue our major ambition to build this into a Commonwealth Gliding Centre. Other clubs to acquire sites include Newcastle at Carlton Moor, Essex at North Weald, and the West Wales Gliding Association at Haverfordwest. The site problem, therefore, has on the whole progressed more favourably than at one time seemed likely, although there are still many more people wanting to join our sport than we can accommodate.

The possession of sites to start from, however, will be of no use to us if we are not allowed reasonable freedom of air space, and in this field we have been forced to fight hard for a policy which will combine safety with the maximum freedom for all users of the air. So far as we are concerned, we must continue to point out with all the force at our command that there has never, in the history of flying, been a "near miss", let alone a collision between a glider and an airliner anywhere in the world.

This is probably due to a combination of factors, including the slow speeds, good pilot visibility, and even silence of gliders and, above all, to the fact that a glider cannot fly cross-country at all in a fog or under instrument let-down conditions or in most peak traffic periods such as the morning, late evening or Winter weather.

Up to now we have been permitted to fly in fine weather even through the London Zone (which has a traffic density one-quarter of that of New York) without incident. This is about to be stopped, and we do not

propose to resist this in spite of this record. But during 1960 all glider flying up the West coast has been permanently stopped, even in fine weather, by the imposition of an impermeable control zone of ridiculously large dimensions over the Manchester zone, from as far East as Buxton to the coast beyond Liverpool. This area has a traffic density less than one-fifth of that of London (one-twentieth of that of New York) and extends to cover Speke, which peaks on a few summer days to 2½ aircraft an hour! Such an irrational attitude to collision risks would be laughable were it not so serious in its future implications for the well-being of our aviation and of our country.

As an indication of how far we lag behind in our country and of how empty is our airspace, there are in the U.S. over one hundred times as many private aircraft as here; in France six times as many; in Germany seven times as many gliders. Civil traffic in the U.K. is slowly increasing, probably counterbalanced by a decrease in military traffic. London Airport is now classified as 82nd in the list of busiest airports; no other U.K. airport comes in the list at all. We have a very long way to go before we need start worrying about our "overcrowded" air. The worry rather should be how we can most rapidly encourage increased traffic, so that some of our airports can start to pay their way.

All the experience of the last sixteen years, here and elsewhere in the world, indicates that gliders offer no hazard to other air users, and no new factors are in sight to give reason to think that they will do so in the foreseeable future. On this, therefore, we base our request to be left alone to develop our activities which are not without their national values.

Lastly, in my 1959 report I proposed the establishment of a National Flying Trust to take the place of the Kemsley Flying Trust, and I am happy to report that this appeal has not fallen on deaf ears. At the time of writing there is ground for hopes that, with Government encouragement, something very much on these lines will be established by one or more industrial consortia.

Committee Panels and Officials

DURING the year the following Committees and Panels were set up under the Chairmen listed below:

Technical Committee: F. G. Irving.
Airways Committee: D. H. G. Ince.
Instructors Panel: Mrs. Ann Welch.
Accident Analysis Officer: Air Cdr. G. J. C. Paul.

Reports from the above panels and committees are published separately.

Flying Committee: E. J. Furlong
Equipment Committee: E. J. Furlong.
Magazine Committee: P. A. Wills.
Sites Committee: A. L. L. Alexander.
Publicity Panel: Mrs. Anne Ince (Retired September. No appointment has been made).
Handicapping Sub-Committee: D. D. Carrow.
Articles of Association Committee: J. E. G. Harwood.
C.C.P.R. Representative: W. A. H. Kahn.
O.S.T.I.V. Representative: A. H. Yates.
Representatives on M.C.A. Standing Joint Committee: P. A. Wills, Mrs. Ann Welch.
Representatives on the Royal Aero Club Aviation Committee: P. A. Wills, D. H. G. Ince.
World Championships Master and Pilot Selection Committee: E. J. Furlong.
Technical Design Committee: F. G. Irving
Design Panel: B. Jefferson.

Sites Committee:—The Committee was formed in April 1960. The membership is as follows:—A. L. L. Alexander (Chairman). B. A. G. Meads, Major J. W. E. Berry, J. C. Riddell.

The Committee does not meet, but problems relating to sites sent in by clubs are dealt with on a local basis by the member nearest to the spot.

Assistance has been given to a number of clubs over the year, chiefly in regard to obtaining permission from Government bodies to use disused airfields. The only problem which has so far reached a satisfactory conclusion is the long-standing one of the Essex Gliding Club, who are now housed at North Weald.

The main difficulty confronting the Committee still remains speeding up correspondence with the Governmental organisation.

Equipment Committee:—Again the source of much of the revenue which enables your Association to carry out its work. A worrying factor for this coming year is that supplies of surplus winch cable seem to have dried up, and this source of profit to the B.G.A. and of economy to its member clubs seems for the time being at an end.

The Flying Committee examined and made recommendations for the administration of the Alex Orde Fund.

The Regulations of the National Gliding Week and Aerobatic Contest were examined and any variations carefully considered before placing before the Council for acceptance.

As has been stated before, the Official Observer situation calls for attention. A number of Official Observers do not appear to take their appointments seriously and continue to send in doubtful and sometimes very stretched claims. The movement is not too well off for Official Observers in some areas which makes the Committee reluctant to suggest the cancelling of appointments. However, if these few careless Official Observers do not improve, action will have to be taken. The Committee has done all it can think of to assist Official Observers, such as the issue of the Observers Guide to Documentation.

It has become necessary to redraft the claim form for Silver, Gold and Diamond Badges. This has been gone over many times and it is now before the Council for its approval or otherwise.

There were ten records broken during the year which were examined and approved before placing before the Council. Examination of claims for the Annual Awards and the selecting of the winners is also part of the Committee's work.

Magazine Committee:—SAILPLANE AND GLIDING goes from strength to strength, due largely to the devoted work of its Editor and part-time staff and the increasing flow of first-rate contributions. It has been necessary to enlarge the size of each issue, and accordingly to increase the price to 3/- or £1 p.a. post free, indications so far are that this will have little or no effect on circulation.

Publicity Panel:—During the year Mrs. A. Ince was forced to give up her excellent work for us in this field, and so far we have been unable to find a successor, but are trying urgently to do so.

O.S.T.I.V.:—The 8th O.S.T.I.V. Congress was held in Cologne during the 1960 World Championships. One hundred and sixty delegates from 17 countries heard the usual high standard of technical and meteorological lectures.

The O.S.T.I.V. working group presented their Proposed Airworthiness Requirements for Standard Class Sailplanes. B.S. Shenstone and Cedric Vernon played a large part in securing wide agreement on these.

The O.S.T.I.V. section in the monthly Swiss Aero Revue continues to provide excellent technical reports on gliding matters. Editor B.S. Shenstone is also preparing a second volume of *The World's Sailplanes*, following the great success of the first which Betsy Woodward initiated.

The 1960 O.S.T.I.V. Plaque for the "most noteworthy scientific and technical contribution to the advancement of soaring flight" went to Boris Cijan of Jugoslavia. Runner-up was Dick Scorer of Imperial College, London, nominated by Italy. Alan Yates was re-elected to the O.S.T.I.V. Board of seven members.

The World Championship Master Committee

The Master Committee organised and arranged the British Team entering the World Championships held at Butzweiler in Germany 28th May to 20th June.

Membership

During the year the following new clubs were elected to Membership:

Doncaster and District Gliding Club.
Swindon Gliding Club.
Norfolk and Norwich Aero Club Gliding Section.
East Midlands (Leicester) Gliding Club.
West Wales Gliding Association.

The Cornish Gliding and Flying Club has been elected to full membership of the British Gliding Association.

Our membership now is: (1959 in brackets)

Full Member Clubs	19	(18)
Associate Member Clubs	26	(23)*
Overseas Associate Member Clubs	4	(4)
Private/Group Owner Members	86	(77)
Individual Associate Members	42	(43)

* During 1959 the Isle of Wight Club resigned but the adjustment was not made on the figure reported in the Chairman's report.

The Association is currently giving help to the following clubs that are in the process of formation:

Essex Club (Should be flying in the early spring).
South Wales Gliding Club.
Border Soaring Centre.
Dorset and Bryanston School Gliding Club.

The Kent Gliding Club are still having a problem to find a suitable permanent site. The negotiations with the Air Ministry for permission for the Essex Club to use North Weald are at last nearly completed and the Dorset Club have obtained the use of Henstridge Airfield.

Operations

The clubs report that from club sites they have flown a total of 24,400 hours involving 164,997 launches. This shows a decrease of 2,976 hours and 7,457 launches more in comparison with 1959. The weather which was most inclement, accounts for the lower figures this season. 337 gliders were operating at the clubs during 1960 (this figure includes 74 two-seaters and 90 privately owned aircraft). The number of pilots flying this year was 4,749, which shows an increase of 463 for the year. 38,032 miles were flown cross-country including many 500 kilometre near misses.

Included in these totals are the returns from the 13 R.A.F.G.S.A. clubs and one R.N.G.S.A. club who together reported 5,514 hours, 42,984 launches with 82 aircraft and 1,062 pilots.

186 Gliding Holiday Courses were held during 1960 and were attended by 1,687 pupils.

Gliding Certificates were issued as follows:—

(1959 figures in brackets)

A Endorsements	613	(542)
B Endorsements	617	(533)
C Endorsements	388	(342)
Silver C	99	(94)
Gold C	17	(12)

These were made up as follows:—

Endorsements	Civilian	Service
A	382	231
B	386	331
C	204	134

The A.T.C. report a total of 115,203 launches (an increase of 54,228 over the 1959 figure) and 2,313 cadets trained up to A and B standard. 62 A.T.C. cadets gained their C certificates.

Finance

Once again the accounts for 1960 show a surplus comparable with previous years and made possible largely because sales to members of books, haberdashery and numerous other items of equipment have been maintained to a satisfactory level—such sales, in fact, account for more than 50% of the revenue of the Association. It has been necessary to increase the office staff and to review wages and salaries all round in order to place them in line with commercial firms, and the effect of the increases made as well as the extra rent accruing from the need of more office space are not fully represented in the results of 1960, but will have full impact in 1961.

Shaw Slingsby Trust

The second year's operation of the Shaw Slingsby Trust has been as successful as the first, but of course the Trust is still in an early stage and must not over-extend its resources. We must thank not only the many folk who continue to assist the Trust with deposits, but also Mr. F. N. Slingsby and the staff of Slingsby Sailplanes who continue to build and sell magnificent aircraft all over the world.

Secretariat

During this year we managed to obtain an extra room in Londonderry House and though at one time the pressure of work nearly got out of hand, now, by replanning and slightly increasing the staff, the affairs of the Association are running smoothly again. To be a member of our Secretariat amounts to more than doing a job of work, it is a vocation, and everyone in the movement owes them a debt of gratitude.

The Future

There is a feeling abroad that at last the Powers that Be are willing to help beyond the merely negative sense of leaving us to be our own masters and of verbal encouragement. If the Lasham proposals are implemented and the proposed new Trust comes into being, the results will be of the greatest value to the gliding movement and the Nation as a whole.

P. A. WILLS, *Chairman.*

FORTHCOMING EVENTS

31ST MARCH-4TH OR 5TH APRIL: Rallies at Long Mynd, Swanton Morley and Sutton Bank, and start of R.A.F. practice meeting at Bicester.

7TH-21ST MAY: Austrian National Championships at Zell am See.

13TH-14TH MAY: International Glider Trade Fair at Lasham, Hants.

13TH-22ND May: National Gliding Championships at Lasham, Hants.

21ST MAY - 4TH JUNE: Dutch National Championships at Terlet, nr. Arnhem.

4TH-18TH JUNE: Polish National Contests at Leszno; "one-design" (Mucha Standart).

14TH-23RD JULY: Huit Jours d'Angers, France.

15TH-30TH JULY: Newcastle Gliding Club Camp at Carlton (visitors invited).

29TH JULY-12TH AUGUST: Coventry Gliding Club Camp at Camphill.

1ST-10TH AUGUST: United States Championships at Wichita, Kansas.

1ST-13TH AUGUST: Italian Championships at Rieti.

5TH-7TH AUGUST: Lakes Gliding Club, Bank Holiday week-end "At Home".

Dick Georgeson Beats a World's Record

The following description of a flight by S. H. "Dick" Georgeson in New Zealand, which beat the World's Record for gain-of-height, has been written by Philip Wills from a letter he received from Georgeson, and is reproduced by permission from "Flight". Georgeson gained 34,300 *ft.* (10,455 *metres*) *and reached an absolute altitude of* 35,700 *ft. The previous gain-of-height record was* 31,709 *ft. by Karl Bauer in a cumulo-nimbus cloud in Germany.*

NOTABLE NEW ZEALAND WAVE FLIGHTS

1951-2: S. H. Georgeson in Prefect, 10,600 ft. absolute, 7,380 ft. climb (date not given).

1952: Georgeson in Prefect, 13,000 ft. abs., 5,000 ft. climb.

1952-3: G. A. Hookings, 11,300 ft. abs., 10,300 ft. gain, 66 miles distance.

Feb. 1953: Georgeson in Weihe, 16,000 ft. abs., 12,000 ft. gain, 90 miles distance.

25th March, 1953: Georgeson in Weihe, 22,000 ft. abs., 205 miles Christchurch to Dunedin.

29th Nov. 1953: J. Evans, Snr., and J. van Til in T-31, 19,000 ft. abs.

16th March 1954: Georgeson in Weihe, 26,000 ft. abs., 21,000 ft. gain.

9th Oct. 1954: Mrs. Helen Georgeson in Weihe, 13,200 ft. abs.

29th Dec. 1954: P. A. Wills in Weihe, 30,400 ft. abs., 28,200 ft. gain.

24th March 1956: Georgeson in Weihe, 24,000 ft. abs.

26th Jan. 1957: Georgeson in Skylark 3b, 25,000 ft. abs., 204 miles out-and-return, all above 20,000 ft.

25th Feb. 1957: J. Hamilton in Skylark 3, 28,000 ft. abs., 25,000 ft. gain.

30th Oct. 1957: K. Wakeman in Skylark 2, 18,000 ft. abs., South Island to North Island, 270 miles at 95.5 m.p.h. average.

26th Oct. 1957: North Island: R. Court in Skylark 3, 25,000 ft. abs., 200 miles in 2 legs.

13th Dec. 1957: North Island: G. A. Hookings in Skylark 3, 23,000 ft. abs., 329 miles in 3 legs.

ON the evening of 15th December the weather office forecast a westerly wind which would last for two days. Gerald Westenra drove in to Christchurch from Dunsandel, 30 miles away, and collected the Eagle. Georgeson left Christchurch at 4.15 a.m., towing his Skylark III, and arrived at Dunsandel at 7.30. Warren Denton, the official observer, took a day off from his sheep-shearing to come and launch him. Both aircraft were rigged, oxygen aboard, barographs sealed, and at 8.30 a.m. the Eagle was aero-towed off on a 300-km. Gold C attempt. Shortly afterwards the

Skylark was off on a 500-km. Diamond flight, but an hour and a half later both were back on the ground.

At 1.50 p.m. Westenra went off again, closely followed by Georgeson. The Eagle came unstuck and landed away from the field. The Skylark was towed 10 miles to Hororata, and released at 3,200 ft. in a strong downcurrent.

After much struggling, Georgeson contacted what is locally called "thermal wave". The technique for working this is to do two or three circles, after which the lift dies, then go forward to the same spot and wait for the next surge and circle again, and so on. The overall effect is a slow gain of height, which on this occasion brought Georgeson after an hour to 5,000 ft. At this height he went quietly into weak, smooth wave lift, a delightful change after the violent surges of the lower air.

Overhead the sky was completely overcast, with cloud base at 17,000 ft. rising to 19,000 ft. some 15 miles upwind over the Rakaia Gorge area. By now it was clear that Diamond distance was out, and altitude was very much in. He continued his climb to 25,000 ft., and the air became white and opaque with so terrific a glare that it was difficult to see, but he realised that he was in the lee of a gigantic lenticular which he knew formed part of the main North-West Arch. He forced ahead into wind at 100 m.p.h., through a downcurrent that brought him down to 9,500 ft. over Highbank—half-way to the leading edge of a big cloud—but here another wave took him up to 16,000 ft., and forward again into the glorious sunshine ahead of the Arch, where he could look up at the mighty 16,000 ft. cliff of this gigantic lenticular.

Here, extraordinarily enough, there was no lift in a three-mile band in front of it, so he flew back to the secondary wave over Highbank, climbed to cloud-base, and then went forward again just under cloud



At 16,000 feet, forward of the leading edge of the big wave cloud; no lift was found here though there was plenty higher up.



At 25,000 feet, smooth lift of 500 ft. per minute was found by Dick Georgeson, in front of the wave cloud.

to the leading edge. Quietly and smoothly he began to rise, amongst the most stupendous cloud scene ever seen by man.

Georgeson says he has never been so excited in his life. All his attention was focused on the A.S.I., oxygen blinker and the two variometers. Towards the top both variometers became misleading. With an external temperature of minus 50° the Cook showed no lift, while the Cosim kept sticking at 4-5 ft./sec. up which wasn't there. At maximum altitude the ailerons became very stiff and the canopy completely covered with ice, but otherwise the Skylark flew perfectly.

He removed his oxygen mask to try to hear if the barograph was still ticking. It was fortunate that he had been in the decompression chamber at Wigram a few days before, for he now noticed his fingernails becoming blue. Having recognised the onset of anoxia he replaced the mask quickly.

On the way down, odd patches of cirrus streamed in through minute crannies and filled the cockpit with white powder. Georgeson called up Harefield on his radio, told the controller what he had done, and was thrilled to receive his congratulations and a friendly "good-night".

On landing back at the field, Westenra and Denton greeted him, the latter extracting from the Skylark, and guarding with his life, the large iced wedding-cake, which the recording barograph had now become. Westenra had had bad luck in the Eagle. On his third attempt he encountered extreme turbulence, his head went through the canopy, and a subsequent gust blew a large part of it away completely. These big waves are not to be taken lightly.

An hour later, the metal parts of the dismantled Skylark were still, in the warm summer, covered with frost.

EDITORIAL NOTE.—On 4th Jan. S. Jozefczak gained 35,760 ft. in Poland, and on 25th Feb. Paul Bikle gained 42,303 ft. in California, reaching 46,267 ft. a.s.l.

AIRWAYS COMMITTEE REPORT

MEMBERS of the Committee are: D. H. G. Ince (Chairman), Ann Welch, C. A. P. Ellis, O. W. Neumark, B. A. G. Meads, J. N. Cochrane, P. Minton.

General

During 1960 we have really begun to feel the effects of an A.T.C. policy which could ultimately result in our exclusion from *all* controlled air space at *all* times. To make matters worse, there is a continual demand for more controlled air space.

As a result of the many changes which are now being planned or put into operation by the Ministry of Aviation it has become extremely difficult to attend all meetings, and to keep track of events with voluntary effort alone. For this reason the Airways Committee was re-organised and strengthened earlier in the year. The problem, however, is still with us.

The following major events occurred during the year under review:

1. AIRWAYS

(a) Revised Lower Limits

Airways lower limits were revised on a six months experimental basis from mid-summer. These revisions brought a notable improvement under Amber 1 and 2 South Daventry, but a 500-ft. reduction in the Amber 1 "Buxton Triangle" immediately west of Camphill. The experimental period is now being extended until 30th June 1961.

(b) Permanent IFR

As a result of the 1960 Air Navigation Order permanent IFR procedures on airways can, and will, now be made mandatory. The Ministry have, however, acknowledged previous undertakings to us, and it has been stated in writing that the dispensation for gliders will continue. It is clear that this dispensation will be heavily attacked and we must continue to guard it carefully.

(c) Amber 25

This new "Summer Schedules only" airway from Manchester to the Channel Islands will replace ADR 160 as soon as sufficient facilities become available. It is slowly being steered into existence by a working party on which the B.G.A. is now represented. The proposed routing and bottom levels are reasonably acceptable from our viewpoint, and the situation is being watched carefully for any adverse changes. An attempt is being made to introduce Amber 25 in 1961 but it is not yet known whether this will be successful.

2. CONTROL ZONES

(a) Manchester

IFR procedure under all weather conditions were introduced into the Manchester Control Zone for an experimental period commencing in the late Spring. Following a storm of protest from various Sporting Aviation interests the geographical boundaries of this Control Zone have been slightly modified but the procedures are to continue and will shortly be confirmed on a permanent basis.

(b) London

Discussions are to be held on the introduction of permanent IFR into the London Control Zone. The Ministry hope to advise this "before the end of this Winter."

FUTURE A.T.C. POLICY

Events in the planning stage of which we are aware include the following:—

1. A re-organisation of the London TMA and Airways in S.E. England.
2. A Southend Control Zone.
3. An increase in the size of the Scottish TMA.
4. Extension of permanent IFR to *all* Control Zones and TMA's.
5. Low altitude helicopter airways.

Sufficient to say that in the face of this policy the future of British Gliding could be very bleak indeed.

D. H. G. INCE,
Chairman, Airways Committee.

Key to initials.—A.T.C.=Air Traffic Control; I.F.R.=Instrument Flight Rules; A.D.R.=Advisory Route; T.M.A.=Terminal Area.



by Alfred Warminger

It really seemed a shame to throw it away. Here we were in mid October thermalling merrily above Swanton Morley—Bill Reekie in the 2, Alan Jefferies in the Swedish Meise, and yours truly in the Skylark 3. Obviously the soaring could not last more than perhaps a couple of hours; however, in spite of the weak autumn sun and the very wet land surface, the cold, drying, light N.N.E. was stirring things up—at least it was up top at 2,000 ft. plus. What a blessing aero-tows are on such a day.

It was a different story for the Sedberghs of 611 Gliding School, A.T.C. At their release height of 1,000 ft. they struggled without avail to gain altitude in the somewhat deadened lower levels. But back to No. 44—already at 12.45 the clouds over Swanton Morley seemed to be thinning. I edged a bit westwards towards Wendling airfield, where it looked healthier, to give myself a few minutes to decide what to do. In the meantime, the 2 and the Oly sank over the Home airfield. It looked that if I wanted to stay up, I'd better pack my bags. Why not? A cross-country even of a few miles would help shorten the winter's vigil. Which direction? Why not due west for a change? After all, if I had been unduly hopeful, the Fenlanders at Marham, 18 miles away, would provide a convenient reception committee.

The decision cast, tail high, "44" dived westwards towards a developing bank of cumulus two or three miles away. Reaching it at 2,000 ft. we were soon circling in strong lift, cloud base at 3,000 ft., and up we went At 6,000 ft. the two balls started to dance—oh well, not to worry; 290° or so on the Cook and off again. We broke cloud at about 4,500 ft. between Swaffham and Marham. The sky was looking good now—masses of Cu and tops well up—into another wall of white matter, and within a few seconds the green ball rose to the top of the Cosim—"Getting like old times", I thought. At 8,500 ft. the ball came down, so round to 290° again and on course for some minutes before coming out into the "blue" a few miles short of King's Lynn.

Now things seemed to be getting out of hand. There to the west, barring my path, was a complete build-up—or so it seemed—of cumulus. A detour to the north meant going out over the Wash, to the south, it seemed to stretch some miles. Anyway, I had planned to go west. Yes, but what if it is solid? After all, with a cold N. blowing, cloud base in precipitation might be down to within a few hundred feet of the ground; anyway the Fen area isn't the easiest of country to retrieve a glider from. What are you worrying about with 6,500 ft. on the clock? You're bound to make Whittlesea; and your old C.F.I. at Westwood, now the local schoolmaster, will lay on all the help needed. All right, I'm convinced; so off we go westwards.

It was wonderfully exhilarating, ploughing into mass upon mass of billowing clouds with all the turbulence and instability of a summer's day, the earth unseen several thousand feet beneath. Wonder what the

chaps at Swanton Morley are saying. No one had mentioned cross-countrying; anyway a retrieving crew won't know in which direction to go—must get to a 'phone quickly after landing. After what seemed an awfully long time but perhaps not more than 10 or 12 minutes, "44" broke cloud just north of Wisbech—on to Whittlesea and thermalling above the chimneys of the brickyards, but rather inconclusively; so over to Peterborough. Heavy rain showers were now apparent and the surrounding area getting uncomfortably overcast. This was the lowest height—3,000 ft.—since leaving Swanton Morley. Several miles to the S.W. it looked fairly promising, but according to the map there were only disused airfields there, and the prospect of a retrieve in the dark at some outlandish spot wasn't very attractive.

Wittering seemed the haven to head for, but I did not like the look of the overcast. We passed over Westwood at 2,500 ft. The Perkins Club members were doing their stuff. A few miles further, we hit the rain belt and the gliding angle suffered accordingly—what should have been a comfortable glide to Wittering turned out to be an arrival at 500 ft. What, no flying control? (It had been demolished since my last visit and rebuilt about 1½ miles further to the west.) Well, here are the main hangars, so it will have to be the grass by the peri. track. Why, at 14.30 hrs., all those hundreds of figures on the runway a little way off? Hope I haven't interrupted an A.O.C. inspection or something similar. (No need to worry, it was Northants A.T.C. holding their Annual Wing Parade!)

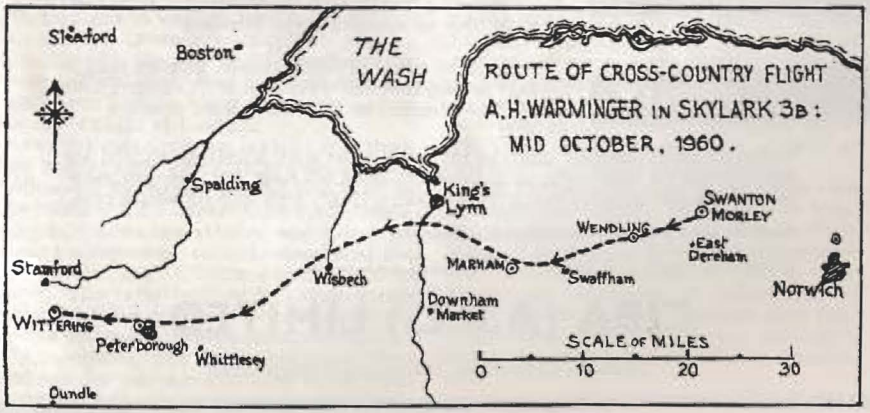
In due course a Land Rover arrived, when I was taken to the Flight Dispersal Hut. After ten minutes of a somewhat guarded telephone conversation by the Chief Technician in charge and the Duty Officer, I was collected by the Service Police and escorted to the Station Duty Officer. A quiet and polite interrogation proceeded—decision—transfer to the Guard Room, would I kindly remain there until the retrieving vehicle arrived?—the airfield being under strict security guard.

So for 2½ hours I happily drank cups of coffee, read all the security notices, refreshed my memory with the duties of a Guard Commander and reciprocated my hosts' hospitality by polishing the guard room floor with the foot blankets provided. In an incredibly short time—at 6.0 p.m. to be exact—the crew arrived and the outside door unlocked with the S.A.D.O. help and the service of the Station Police, we were soon loaded and on our way.

Modesty, or perhaps it was a feeling of apprehension in being so close to Robin Hood Country, decided me against disclosing my Civic Identity* at the time. However, when the provincial press got the story from our Club's Newsletter, a few weeks later, they had other ideas—I must admit their version seemed a lot more entertaining than this one!

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* Mr. Warminger is Sheriff of Norwich. —Ed.



GLUES FOR GLIDERS



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B.G.A. News

Annual Awards for 1960

DE HAVILLAND CUP for greatest Gain of Height: to Flight Lieut. G. J. Rondel, 29,100 ft. on 18th June in an Olympia IIb.

MANIO CUP for best Goal Flight and VOLK CUP for best Out-and-Return: to A. J. Stone for flight of 222 miles from Lasham to Bridgnorth and back on 31st May in a Skylark IIIB.

WAKEFIELD TROPHY for the longest Distance: to P. Scott for flight of 298 miles from Nympsfield to Cockburnspath on 14th May in an Olympia 419.

CALIFORNIA IN ENGLAND TROPHY for the longest Distance by a woman pilot: to Mrs. Anne Burns for flight of 189 miles over a 300-km. triangle, Lasham-Frome-Banbury-Lasham, on 1st June in a Skylark IIIB.

DOUGLAS TROPHY to the Army Gliding Club for the following 3 flights done by club members which totalled the largest cross-country mileage of 575 miles: S. Morrison, 168 miles on 30th April (Olympia 419); Capt. E. G. Shephard, 157 miles on 27th July (Olympia 419); W./Off. E. Stark, 250 miles on 31st July (Skylark IIIF).

FRANK FOSTER TROPHY to Col. A. J. Deane-Drummond for average speed of 44.3 m.p.h. over a 100-km. triangle on 7th May in a Skylark IIIF.

SEAGER CUP for the best performance in a two-seater glider: to Commander H. Dimock for climb of 13,500 ft. on 2nd August in an Eagle.

THE BRITISH GLIDING ASSOCIATION
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THE INTERNATIONAL GLIDER TRADE FAIR

As the 1959 International Glider Trade Fair was so very successful, the B.G.A. has decided to stage another this year to coincide with the National Championships to be held in May. The Fair will take the same form as before and will be housed in the new hangar at Lasham.

At the time of writing, it looks as if there will be many more exhibitors than in 1959, both inside the hangar as well as outside in the "static park". Apart from instruments, oxygen, paints, parachutes and all other gliding equipment, we understand that the new revolutionary Clayton winch will be on show. This is the brilliant two-drum winch which launches gliders at a direct operating cost of about one penny a launch for fuel.

A completely new device will be on show and sale for the very first time at the Fair. Although still very much on the secret list, it is an attachment to the electric Crossfell Variometer which will completely change present soaring techniques. It promises to outdate all other variometers. It is an electronic device which will cost about £10.

It is hoped that details and photographs of a new British high-performance glider will be on display as well as a number of new and "forthcoming attractions".

The Fair will be open to all comers on Saturday and Sunday, 13th and 14th May, and admission will be free. We cordially invite all gliding and flying enthusiasts from this country and abroad. If you or your friends are interested in exhibiting, do please write to the Fair Manager: Sqn. Ldr. J. C. Ward, Nettlebed House, Nettlebed, Oxon.; or to the British Gliding Association.

W.A.H.K.

TECHNICAL COMMITTEE REPORT

MEMBERS OF THE COMMITTEE:—F. G. Irving (Chairman), J. Leach, K. R. Obee, C. O. Vernon, L. Welch, R. C. Stafford Allen, B. E. Warner, H. U. Midwood, J. D. Jones.

Advisors to the Committee are:—Sgt. J. S. Williamson (Radio), M. J. Neale (Motor Transport).

Terms of Reference

To advise the Council on Technical matters, in particular to supervise the Airworthiness scheme.

1. Supervision of the issue of Certificates of Airworthiness.
2. Supervision of the approval of Inspectors.
3. Consideration of all Technical problems.

Work of the Committee

During 1960, eight meetings of the Committee were held. 260 Certificates of Airworthiness have been issued (219 in 1959) of which 62 were initial applications (32 in 1959); and 10 involved "Ten Plus" inspections; 16 new Inspectors were approved and 55 Inspectors and five Firms renewed their approval. As a consequence of the scheme for major inspections of old gliders coming into effect, 15 Senior Inspectors were appointed. The Examiners (R. C. Stafford Allen, assisted by B. E. Warner) made many visits to applicants for Inspection and Senior Inspection approval.

The Committee is most impressed by the conscientious manner in which inspections of old gliders are being carried out. Judging by the lengthy strip reports submitted there was a genuine need for such a scheme which, although involving some expense, should endow the machines concerned with a new lease of life.

As forecast in last year's Report, Issue 2 of British Civil Airworthiness Requirements, Section E, was published in May 1960 and contains a graceful acknowledgement of the work done by Mr. Vernon's Airworthiness Sub-Committee. In the preparation of these requirements there were inevitably some difference of opinion between the representatives of the Board and the B.G.A. respectively, but these were resolved satisfactorily after much amicable consultation. Despite their many other onerous duties, members of the Board's staff carried out a great amount of work on these Requirements. We are most grateful to them—Mr. H. Winton in particular—for making the whole exercise an exemplary display of co-operation between an official and an amateur body.

A Certificate of Airworthiness was granted to the German Ka-7 two-seater, the work of the Committee being greatly facilitated by the comprehensive documentation provided. Another application for certification of a foreign type was not granted. This action was naturally a disappointment to the potential importers, but it now seems to have encouraged the country of origin to adopt some of the criteria of B.C.A.R. Advice to those wishing to obtain certification of a foreign type was published in SAILPLANE AND GLIDING for October 1960.

As a consequence of various applications for extension of the permitted manoeuvres on certain types of glider, an investigation of speeds, loads, and control deflections involved in evolutions such as slow rolls has been started. Apart from approval of specific types the object of this investigation is to attempt to frame rational design requirements for such manoeuvres. Due to the complexity of the investigation, progress was initially rather slow, but results are now emerging.

A scheme for the issue of "Experimental" Certificates of Airworthiness has been started. The object is to enable suitably qualified persons to make modifications and carry out experiments without having to make detailed reference to the Committee on a day-to-day basis. It is intended that the issue of such Certificates should be very restricted, so that they are limited to those with a genuine need for such a procedure. The qualifications required are high and the

procedure involves numerous safeguards. It should be stressed that the granting of such a Certificate does not absolve the owner of the glider from any "airworthiness" clauses in his insurance policy.

Much of the time of the Committee is devoted to matters of detail: approving modifications, noting defects (a defect reporting procedure is now in operation), and making recommendations to manufacturers. As always, the manufacturers are most generous and co-operative in helping the Committee.

Whilst new problems are always appearing, a large proportion of the work falls into fairly well-defined categories (approvals, C. of A. renewals, checking of calculations, modifications, etc.). In a rather more normal fashion than previously, individual members of the Committee have agreed to deal with these different aspects of the work. It is hoped that the Technical Committee will thus be able to improve its services to British Gliding and at the same time enjoy rather shorter meetings.

The Association's secretariat is, of course, our mainstay, particularly in such matters as the routine renewal of Certificates of Airworthiness and the recording of Minutes whose complexity and jargon content increas.s incessantly. We are most grateful to them.

F. G. IRVING,
Chairman, Technical Committee.

INSTRUCTORS PANEL REPORT

MEMBERS of the Panel 1960: Mrs. Ann Welch (Chairman), Sgt. J. S. Williamson, D. Darbishire, B. Thomas, K. Machin, J. C. Neilan, G. Collins, T. E. Davidson, A. D. Piggott, B. M. Masters, D. Goddard.

During the year 17 category tests were carried out, bringing the total of categorised instructors to 108. There is, however, still a shortage of trained instructors.

The main reason for this shortage is that the rapid increase in the number and size of clubs in the U.K. is creating a continuous demand for more instructors. Since new instructors have to be trained in their own clubs, the instructor shortage steadily becomes more acute, since there are insufficient instructors to teach both pupils and new instructors.

The Panel is attempting to form a small Central Instructors' School, using a club's launching facilities, which will offer instructor training, both elementary and advanced, and also visit outlying clubs during the winter months. It is essential that the School possesses, at least, a 2-seater glider and trailer, and is in charge of a very able and qualified man. Unfortunately, it has not been possible to obtain money to start the school to date.

During the winter the Panel has brought about changes in the Operational Regulations regarding instructor qualifications, in order to attempt to reduce the number of gliders which are, at present, being broken. It felt that the minimum qualification and experience of people doing the job of C.F.I. should be raised, and that more instructors should be up to category standard. To this end, it will be necessary now for all professionals to hold a category, and for all ab-initio courses to be in the charge of a categorised instructor. In addition, all other instructors must be registered with the B.G.A. with a record of their flying experience and an endorsement for physical fitness, although no test will be required until they come up for a category.

The Chairman feels strongly that until a Central Instructors' School is in existence, it will be overwhelmingly difficult to either increase the number of instructors, or to raise the standard of instructing to any really effective extent.

ANN WELCH,
Chairman, Instructors' Panel.

Skylarking in Earnest

by E. Dommisse

THIS story started about a year ago. It was about a week before our South African National Championships and the inverter of my electric horizon had suddenly hurled in. An urgent cable was sent off to the Glider Doctor asking for one to be air-freighted out. That was on a Friday. On the Monday it arrived. Such service really shook me. There was a little note with it from a character called Denis Burns, to the effect that it was a gift from one glider pilot to another and he wished me all success. To this day I have not yet quite fathomed out how it all came about.

A lengthy correspondence now started between Denis, Anne and myself. I had it all worked out to the effect that they could easily fly their Distance Diamonds here and Anne could clean up a few feminine world records to boot.

Thinking superficially, one would say that to fly world records you need only a few very simple things. You need a good sailplane with instruments and good weather. That is all. Except that you also need some helpers and official observers and a bit of met. forecasting. You could now virtually sit down and tally up the results.

If it was that easy, it would no longer be necessary to actually fly world records or world championships at all. You could merely appoint a venue and an international Jury and send them the performance figures of your latest design on the drawing board. The Jury would set the tasks with the help of good met. men and calculate who the winner must be.

Actually however, results still depend on the pilot. Not just any pilot but one with health and strength. Not just brute force but strength coupled with sensitivity, intelligence and endurance. Endurance is no good if not coupled with the ability to concentrate for long hours of intense effort. Concentration is no good if not coupled to good judgment. None of this is any good if you do not love the sport, or lack sportsmanship and the will to win. Nor could you adjust to strange and difficult conditions away from home if you are not adaptable. Nor can you engender enthusiasm in your helpers if you lack charm. Especially if you are a man.

I have never felt so flattered in my life as I was when Anne and Denis Burns accepted my invitation to come and fly my Skylark III in South Africa. I was particularly pleased that Anne was willing to come, as my calculations showed clearly that at least four feminine world records were possible. All I lacked was a good (fem.) pilot.

The records I had in mind were for speed over the three triangle courses and for the out-and-return record, which I considered to be the easiest one of all to beat.

As soon as all our plans had been finalized and a date set for the Burns' arrival here, the weather started to misbehave and news came through from the F.A.I. concerning newer and higher claims in the record categories that I had in mind for Anne.

This was lovely for my peace of mind. Flying world records becomes really hard work if the scale goes up and the weather goes flat. I enumerated all the qualities in my mind that I believed a record-breaking pilot should have, and worried and wondered. Kimberley is a dry, hot place. The face of the earth looks inhospitable and fierce around there; you have to be careful in drinking the brackish water except from the City taps. The met. is not always as good as it should be, nor the weather, nor the phones, nor are people always at home in the widely scattered farms that pass below your wings. Some of the dust roads can be terrible. We would look rather silly if it was hardly possible to fly at all, as it was for the whole of November and December and, horror of horrors, for the first week after the Burnses had arrived and we sat brooding in Kimberley.

On the last days of December and the 1st of January it rained intermittently. I took Anne around in the Piper Cub and we had a good look at all the turning points. She was somewhat shaken by the look of the vast stretches of barren emptiness. It certainly was no place where you could simply land anywhere; if you did, you would have to walk for miles across empty space to the nearest road or farm. We had a good look and to my relief she cheerfully

accepted the situation as she found it.

On the 2nd it rained heavily all day and all night. On the 3rd it looked better. A fresh West wind blew and there was only a bit of cu. at about 2,500 ft. The met. forecast was that there would be less cloud to the east and that the wind would also die down. Cloud base would be lower to the east and about 4,000 ft. above ground at best.

This was no day to choose for great deeds, but at least we could fly. I talked Anne into setting her goal about 260 miles away and assured her that she would be a hot pilot if she could navigate and fly there. She was all for doing the 500-km. distance, and I was all for saying that it could not be done. So we left it at a 260-mile goal declaration.

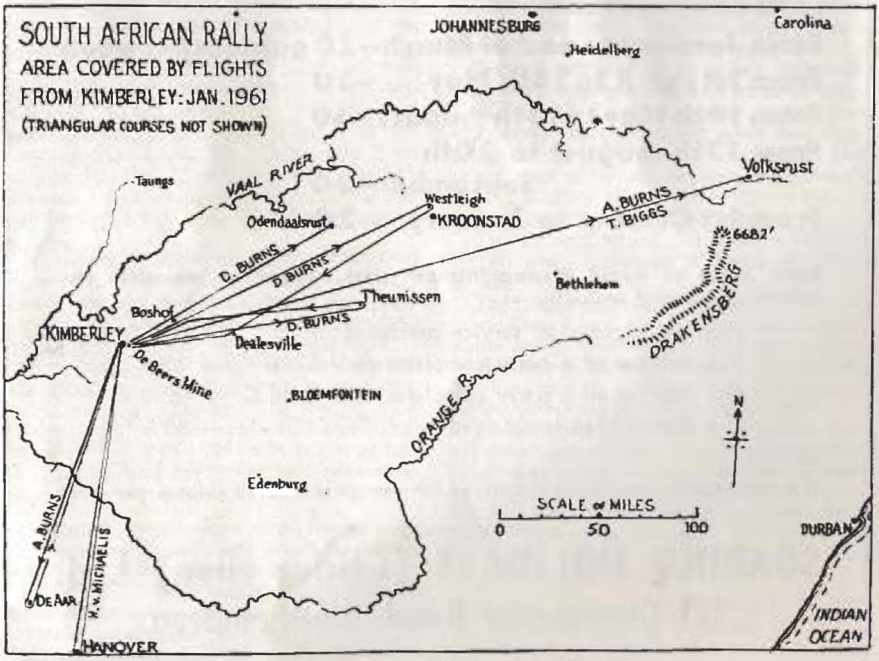
She towed off, released low and slowly circled up, then went off with little height, straight and true downwind, committing herself to going at once. She circled up slowly under the next ragged cloud, turned and disappeared.

Denis, Deb and I followed up with car and trailer. It was hard to say if the day was good or bad, though it looked better than predicted. We were left in suspense until we walked in to our final check point which was an hotel in Bethlehem. As we walked in, a call came through. Anne was on the aerodrome at Volksrust, which is 325 miles east of Kimberley. I nearly hit the roof. We sat down to a quick dinner. Halfway through, a call came through with the news that Tim Biggs in the Air-100 had also landed at Volksrust. The score was: 4 diamond badges completed for England and 3 for South Africa.

The skies cleared the next day and we had a few absolutely cloudless days with light winds and great heat.

Anne did not like the look of this, so Denis flew on an attempt for his distance diamond, but conditions were simply not good enough.

SUNDAY, 8TH.—Very Hot. Not a cloud, and a bothersome breeze from the north. Anne agreed to attempt a 300-km. triangle record. Tim was to try and improve the figure for our 200-km. triangle. Conditions



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were poor and Anne came back soon after crossing the starting line. My hopes faded. Anne struggled around without landing and then set off across the starting line for a second time and got away in much better style. Tim also set off.

After nearly 3 hours, Tim came limping back to report that he could not make it against the wind on the second leg.

Deep gloom prevailed. We even began to wonder if Anne would get back at all when suddenly, an hour before we expected her, she was seen to be coming in low and fast, to flash by the starting line in fine style.

We were all very elated at the attainment of this claim to a world record, but Anne was very quiet and trembling with relaxing tension.

She wanted Denis to fly the next day, but I felt that it was too good a day to waste on a mere diamond for Denis, nor quite the right day either. I begged her to go and clean up the out-and-return record and reluctantly she agreed.

She simply did not like the idea of blue thermals over awful-looking country; but crosswind south to De Aar and back it had to be. The day started poorly and it took a long time before she disappeared into the cloudless blue.

At about 6 p.m. Bobby Clifford returned, having completed the same task in the Air-100. He had not seen Anne. More than an hour passed. The day faded and the Evening Star appeared. Denis and I sat glumly by the phone. I was worried. Perhaps I was pushing her too hard. She had looked a bit tired. Bad country down south.

Then a great shout arose from Deb, and Anne was seen coming in high and very slowly, drifting past the Evening Star. She made a wide slow circuit of the airfield and settled gently down. It was nearly dark.

This time Anne was really exhausted. She stood by, pale and shaking and very quiet, while we exulted. The terrible look of the country down south had somewhat unnerved her, though it really is not as bad as it looks, and her going had been slow because she persisted in staying very high.

JANUARY 10TH.—This was the day of days such as all sailplane pilots dream of. It was very hot without a breath of wind or wisp of cloud. High flat cu. were predicted for later in the day and they duly appeared.

Denis nominated the rail junction at Westleigh, to the east, as the turning point on his out-and-return attempt. If anything the wind would be westerly, but nothing could persuade him to go down south. It is a very different type of country to the east, wide and very flat with endless cultivated fields.

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Heini von Michaelis nominated the Hanover Church spire to the south as a turning point and achieved his 320-mile out-and-return in 6 hrs. with the Ka-6. Geoff Lloyd, flying a Skylark IIIB, merely wanted his Gold C and Diamond round a 300-km. triangle, so we did not bother to time him officially. We were all astonished when he completed the task in 3½ hrs.

Denis completed his flight too, purposely taking his time at the end to make us stew, landing as it got dark, a very happy man who could hardly believe what had happened to him. Nor could I. After all, I had never even remotely contemplated Men's World Records in my early calculations.

That was the kind of day it was.

Tim cleaned up my old 200-km. triangle record also, achieving a speed of about 75 km./hr.

The next day was also good, but it started very late and soon overconvected. Anne was in great form and made good use of the odd good hours by going round the 200-km. triangle in great style for a claim on the world record for this event also.

I was still keen for Anne to go get that distance goal record, but there was little wind and much overconvection. Denis grabbed an opportune moment and flew his Diamond Height. Only just, but only just is, of course, enough. The score on Diamond badges completed was now: England 5, South Africa 3.

FRIDAY, 13TH.—Denis refused to fly, and he and Anne tried to persuade me, but I felt that Anne should have a lovely little

last nibble at a big chopper, of which the sky was full, as a final little memory of her trip.

Anne was finally persuaded to go on a 100-km. speed attempt, but she soon gave up because of large storms on her route, and came back over the aerodrome, getting very low. Here she picked up lift and was soon at the base of a fat little cu. to the west, which she entered. The fat little cu. joined hands with his little brothers and the little brothers became as one to form a little chopper. And the little chopper started to blow and puff and spit and Denis and I held on to our hats down below and felt very frightened for Anne. Soon the little chopper was a very, very big cumulus culumbus indeed, darkening the sky from horizon to horizon and pouring out very heavy rain, hail and strong winds and nasty lightning.

It got rather late and very quiet after the storm collapsed. Everyone walked and spoke softly. The tension was really mounting rapidly to bursting point when at last the phone rang. Anne was on the wire, very cool and calm, explaining briefly where she was and that she was very sorry for the delay in phoning and for having to land out because of the storm over the airport. I could hardly believe that that was all, asked how she was and what her best height had been, and she spoke very seriously to me saying that everything was fine but I had better not know how high because she did not want people unduly excited and . . . I screamed back: "How high?!!" and she said about 34,000 ft.

It proved to be high enough for a feminine world gain-of-altitude record claim, just one more that I had not sort of considered in my calculations.

I have met many men who have all the qualities to make a great sailplane pilot. Many even have a few additional qualities left over, but there are few such women.

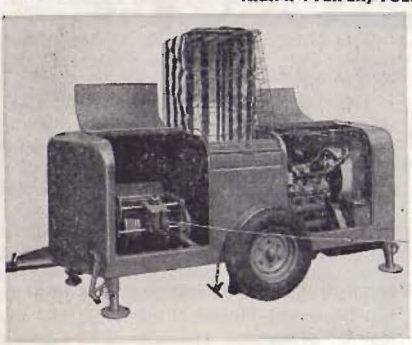
We are proud of Denis, but after all he is a man and a competent pilot and South African born; but long after Anne's records are perhaps forgotten or exceeded we will still remember her. A woman with quiet charm and great ability.

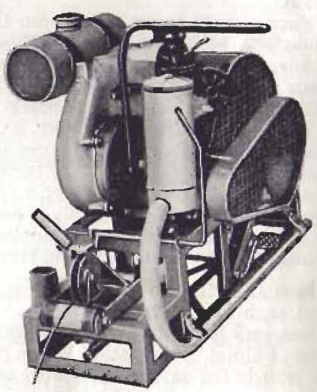
Their presence made our Performance Camp at Kimberley a great success. It would be a great idea if more such meetings could be held at places and times when exceptional weather can be expected. Such performance camps would be the finest meeting ground for all the hot pilots of the world to gather with their super birds.

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Flying The Choucas

by Roger A. Neaves

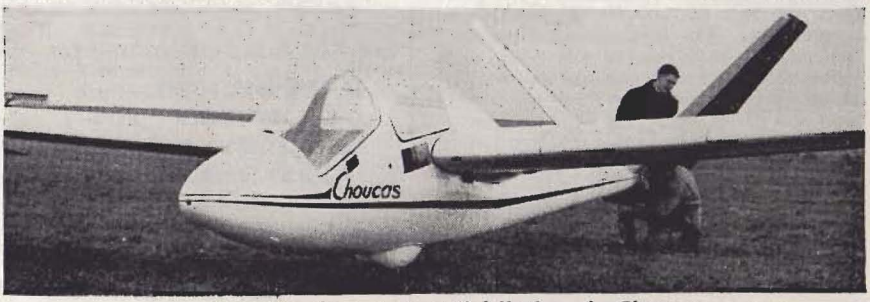
THE B.E.A. Club have been looking, for some time, for a high-performance two-seater, and our attention was drawn to the Breguet 906 Choucas. On paper this machine fulfilled all our requirements, being light, robust, easy to rig and having a good performance. At the invitation of Breguet, Ken Wilkinson, John Ellis, Peter Brookes and myself went to Paris to fly this machine. On arrival we visited Tony Goodhart at his rather splendid barge for a few noggins, and next morning we journeyed to a small grass airfield at Chavenay accompanied by Breguet's London representative, Tony de Graff. The Choucas, a Fauvette and a Storch tug had been positioned there for our benefit.

As the Choucas was a prototype, to our amazement the Fauvette had to be flown first. Since we were flying the Choucas with a test pilot, this put us in the unusual position of flying solo before a dual check. However, none of us was worried (we maintained) and we were hauled off in a 25-knot wind for our Fauvette flights. These are beyond the scope of this article, but it is enough to say that this delightful little machine fully came up to our expectations.

Next came the meat, the Choucas. We were the first non-Breguet people to fly it and felt suitably honoured. The front seat was occupied by M. Merloz, who gave a remarkable demonstration of *sang froid* while we threw his machine about.

The immediate impression gained when settled in the rear cockpit was of the excellent all-round visibility. The blown canopy, higher rear seat and swept-forward shoulder-wing gave the best view of any two-seater yet flown. The take-off was normal, with no tendency to pitch during the ground run. With the controls held neutral, unstick was in a slightly tail-down attitude. Once the climb had commenced, the lack of wind noise became evident and it was possible to converse in normal tones. On tow, handling was pleasant and no trouble was experienced in keeping station. The ailerons were slightly high-geared by common standards, but were not out of harmony with the other controls.

At 600 metres, after releasing, the aircraft was trimmed at 80 k.p.h., the recommended best glide speed. Stability tests were carried out at this speed and showed positive lateral and directional stability. In pitch a phugoid of constant amplitude developed with a period of 10-15 seconds. This showed no sign of getting out of hand. The stick fixed and free stabilities were just positive, with very light forces in the free case. The tail trimmer, which operated on both "ruddevators", was effective through the speed range of 70-140 k.p.h. Stalling in level flight was quite straightforward and occurred at about 60 k.p.h. There was buffeting followed by aileron snatching at about 5 k.p.h. above the stall. Unless induced, there was no wing drop; in a turn the inner wing dropped, but it could be prevented from further dropping with opposite rudder. The ailerons were effective almost down to the stall. Although spinning trials had been done, the prototype



Removing the castoring tail dolly from the Choucas.



M. Merloz (in front cockpit) and Ken Wilkinson.

was not fully cleared and only incipient spins were tried and recovery was completely normal. Owing to the Vee tail arrangement, full rudder and elevator could not be applied together, but this did not appear to be a handicap. To reverse a 45-degree banked turn took 4.5 seconds at 80 k.p.h. This was achieved with full aileron and enough rudder to co-ordinate. The airbrakes were very efficient and the operating forces were normal. A T.V. dive was not attempted owing to the low altitude.

On the approach the airbrakes gave a good steep descent path, and small field landings will be no problem. Below 90 k.p.h. with full brake the elevators seemed to lose some effectiveness. Breguet are fitting larger tail surfaces to overcome this and improve horizontal stability. The view from the rear seat on the approach was magnificent. On landing there was no tendency to pitch on to the nose, and although the wheel brake was not particularly effective, the landing run was short. This was partly due to the wind and partly to the nose-up ground angle which increases the drag.

The only faults noted were: non-standard D.V. panel, small release knob and a rather primitive fastening for the back canopy. As already stated, the tailplane is to be enlarged.

There is no doubt that Breguet have produced an excellent glider for basic and advanced training and one that will, when flown solo or dual, be able to compete on equal or better terms with many single-seat types. It must be appreciated that the Choucas is a high-performance aircraft in its own right and therefore has the appropriate handling characteristics needed for all types of training, now that more and more flying is being done on "Hot Ships". This machine has just won a French Government contract for 100 to re-equip the state schools and clubs. It if can be marketed in the U.K. at a competitive price, it is thoroughly recommended to anyone needing a two-seater.

Finally we would like to express our appreciation of Breguet's efforts and in particular to commend M. de Graff for making our trip so pleasant.

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Accidents Analysis for 1960

THE process started last year of re-checking all reports received since this analysis was initiated has been continued, and the results appear in TABLE ONE. The object has been to classify, so far as is practicable, the various significant types of accident. Accidents can be "significant" either because of their frequency or because of the amount of damage done. There will, of course, always be occurrences which cannot easily be fitted into any sort of classification scheme; but it is, nevertheless, an aid to study, and its chief merit is to show clearly where things most often go wrong. TABLE ONE is, therefore, a catalogue showing where the attention of all glider pilots, and in particular Instructors, is most needed.

TABLE TWO shows what happened in 1960, catalogued under the same headings as those used in TABLE ONE. Here costs are shown also, and it will be observed that, not only was 1960 the most costly year yet, but also that the trend remarked upon in the last three annual reports has continued, and even intensified; it is that the preponderance of significant accidents are caused by pilots with over five hours but who have not yet attained their Silver C.

This has quite clearly become the "dangerous age" in gliding; and increased importance attaches to this class of pilot because of the great expansion now in progress in gliding all over the country. There is every chance that, by the end of 1961, there will be as many practising glider pilots as there are licenced power pilots. But the numbers of B.G.A. categorised Instructors has declined since 1956, and they are now altogether too few in number to carry the load that is constantly increasing.

One result of this shortage of Instructors with the fullest qualifications is that gliding instruction is increasingly concentrated upon giving more and more newcomers ab-initio training, often, as on many of the summer courses, not even up to the first solo stage, whilst the swelling numbers of pilots attaining the "dangerous age" receive steadily diminishing guidance and supervision.

But this is not all. TABLE TWO also indicates that the quality of existing Instructors is too often inadequate. Not only are there cases of Instructors themselves having accidents which they should not have, but some of the accidents to pilots with under five hours solo clearly indicate deficient training.

THE MAIN CONCLUSION DRAWN FROM THIS ANALYSIS, WHICH IS SIMILAR TO THE CONCLUSIONS IN THE THREE PREVIOUS YEARS, IS, THEREFORE, THAT THE MOST URGENT AND ESSENTIAL STEP TOWARDS ACCIDENT PREVENTION IS MORE INSTRUCTORS OF BETTER QUALITY.

Despite the emphasis which has been placed upon this recurring conclusion, no effective action has yet been taken. If the expansion of gliding continues in 1961 as in previous years, and if more and better

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instructors are not forthcoming, then a serious and possibly disastrous lowering of piloting standards is inevitable. In terms of accidents, the cost, and the damage to the reputation of the gliding movement, could be fatal. There is nothing new in a situation of this sort; it happened to the Royal Flying Corps in 1916, and the cure was effected by the creation of the Special School of Flying at Gosport, and the systematic production of Flying Instructors properly taught to teach. The system is perpetuated in the Central Flying School of the Royal Air Force; in the instructional methods of nearly every flying school in the world; and in England in the civilian Flying Instructor categorisation scheme supervised by the Guild of Air Pilots and Navigators on behalf of the Ministry of Aviation. Only in the gliding movement do we still consider it possible for any pilot to instruct without first learning how.

WHAT IS NOW NECESSARY GOES FAR BEYOND THE TESTING AND EXAMINING SCHEME HITHERTO DISCUSSED. FUTURE INSTRUCTORS MUST GET SYSTEMATIC INSTRUCTION IN HOW TO INSTRUCT: AND THERE MUST BE INCENTIVE TO OBTAIN THE QUALIFICATION.

This is, in fact, accepted by many people familiar with the problem. But the objection constantly raised against any effective scheme is lack of money. TABLE THREE has therefore been prepared to show what we spend on having accidents. It shows, for example, that every glider pilot contributes out of his or her own pocket over ten shillings per hour extra for their flying, because of these accidents. Some, there are, who still believe that the Insurance pays; it is time that they all understood that Insurance is a means of ensuring that the cost of every single claim is spread over everybody who pays insurance; and insurance is one of the heaviest charges paid by clubs.

For people paying Insurance rates as they are now, it is absolute nonsense to say that the money cannot be found to set in motion the best means of reducing accidents. It is absolute nonsense to say that we cannot afford to give proper training to our instructors; properly qualified Instructors should be looked upon like a blue chip investment, and this kind of investment is essential to secure the future of gliding.

This report results, therefore, in one recommendation only. THAT ARRANGEMENTS SHOULD BE MADE WITHOUT DELAY, TO INCREASE THE NUMBERS OF B.G.A. CATEGORISED INSTRUCTORS UP TO WHATEVER IS NECESSARY TO TRAIN AND TO SUPERVISE THE EXPANDING GLIDING MOVEMENT!

G. J. C. PAUL,
Accidents Analysis Officer.

TABLE 3.—COSTS OF ACCIDENTS

	1956	1957	1958	1959	1960
Hours flown in year*	13,596	17,996	17,798	22,937	19,136
Total number of B.G.A. Categorised Instructors	104	97	96	85	98
Flying membership of Clubs	—	—	3,147	3,408	3,366
Annual cost of accidents	£3,110	£6,987	£9,634	£8,332	£9,999
Cost per hours flying out of each member's pocket	4s. 7d.	7s. 9½d.	10s. 9½d.	7s. 3d.	10s. 5½d.

* Excludes Service clubs and A.T.C.

Note: FOR TABLE ONE AND TWO SEE NEXT PAGES

TABLE 1.—ELEVEN-YEAR COUNT OF ACCIDENT REPORTS

	In 1960	*In 5 years 1955 to 1959 incl.*	*In 5 years 1950 to 1954 incl.*
TAKE-OFF			
(1) Airbrakes out, or opened during launch	—	6	3
(2) Hit obstruction during launching	2	6	Nil
(3) Inability to cope with cable break, or power failure	9	26	20
(4) Dived in during, or immediately on release from launch	—	1	1*
(5) Loss of control on aero-tow launch	—	2*	Nil
(6) During Bungey launching	1	2	3
(7) Other miscellaneous launching accidents	2	9	15
IN FREE FLIGHT			
(8) Collisions	—	5**	7*
(9) Dived in	1**	Nil	Nil
(10) Loss of control, including failure to recover from spins	2	5	3
(11) Hit obstacle whilst low flying	2	3	2
APPROACH TO LAND			
(12) Hit obstacle during approach	4	17*	11
(13) Wing-tip hit ground during low final turn	3	14	2
(14) Loss of control due to stall or spin, resulting from slow or stretched glide	3	27*	18
(15) Undershooting landing area	7	31	11
(16) Accidents similar to 12, 13, 14 and 15, but clearly due to leaving decision to land too late	1	7	4
(17) Other miscellaneous accidents on the approach	—	—	11
LANDING			
(18) Instructor failed to take over in time	4	18	5
(19) Rough ground	3	16	9
(20) Obstruction in Landing area	6	18	7
(21) Overshooting landing area	5	13	6
(22) Heavy landings	10	35	12
(23) Landing too fast	2	6	4
(24) Out of wind, or with drift	3	21	8
(25) Ran back after landing up slope	1	7	1
(26) Other miscellaneous landing accidents	1	6	31
WEATHER			
(27) Damage due to weather phenomena, including icing	—	2	Nil
PILOT NOT IN CHARGE			
(28) Careless ground handling	3	15	6
(29) Damage due to wind blowing away unsecured gliders	—	13	7
(30) Other miscellaneous accidents whilst a pilot was not in charge	—	14	7
TECHNICAL DEFECTS			
(31) Attributable to mishandling by pilots	—	1	Nil
(32) Attributable to faulty maintenance	1	6	1
(33) Attributable to faulty material	1	7	Nil
(34) Cockpit canopies coming off	4	11	Nil
(35) Other Miscellaneous Technical Defects	1	5	6
FOUND ON INSPECTIONS			
(36) Damage found on inspections and not attributable to any specific event	2	4	3
HOPS AND SLIDES			
(37) No longer of any significance, but included to show numbers before 1955	Nil	1	18
	84	380	242

* Fatalities (One for each asterisk).

TABLE 2.—ACCIDENT ANALYSIS REPORT FOR 1960

B.G.A. No. 1960	Type of Accident or Incident	Ref. to Table 1	Class of Pilot and Cost of Damage				Type of Glider
			Under 5 hrs. solo	Over 5 hrs. solo	Silver C or better	Instructor instructing	
66	During launch, live cable picked up inactive cable, crossed with it, which fouled OTTFUR release. Pilot landed safely ahead	2	£Nil	—	—	—	Tutor
53	Aircraft launched facing across slope. Up-slope wing tip hit ground	2	—	—	£60	—	Skylark 2
3	Inability to cope with loss of power on winch	3	£32	—	—	—	Olympia
17	Ditto	3	—	£80	—	—	Skylark 2
40	Ditto	3	—	—	£30	—	Skylark 1
45	Ditto	3	£10	—	—	—	Tutor
71	Ditto	3	—	£50	—	—	Skylark 2
7	Inability to cope with cable break	3	—	—	—	£10	T-31
41	Ditto	3	—	£10	—	—	Prefect
44	Ditto	3	—	—	—	£150	T-31
68	Ditto	3	—	£200	—	—	Swallow
74	Bungey wrongly attached, fell off too soon. Wing tip held on one side only swung a/c across 22 kt. wind	6	—	£100	—	—	Prefect
20	Wheels dropped too low, bounced and hit tailplane	7	—	—	£10	—	Olympia
2	Weak link broke during launch. Free end trailed back and wrapped round tailplane	7	—	£Nil	—	—	Olympia
80	Aircraft dived vertically in, killing pupil and instructor	9	—	—	—	£850	T-21
58	Pilot spun off a turn at 400 feet, recovered, spun again at 200 feet into trees	10	£130	—	—	—	Tutor
60	Pilot spun off a turn and failed to reeover	10	£200	—	—	—	Cadet
12	Pilot flying too close to hill, caught wing tip in a bush	11	£80	—	—	—	Tutor
83	Pilot flying too close to hill, caught wing tip in a tree	11	—	£100	—	—	Tutor
23	Hit post with wing tip on final turn-in before landing	12	—	—	—	£1	T-31
32	Hit parked aircraft whilst on final turn	12	£205	—	—	—	Tutor
34	Hit stone wall on approach	12	—	—	£850	—	Olympia
56	Hit, and severed, 11,000 volt power cables on approach to field	12	—	£15	—	—	Kite 2
28	Final turn too low, wing tip hit ground on approach to away landing	13	—	£250	—	—	Olympia
42	Ditto	13	—	£250	—	—	Olympia
65	Ditto, by Instructor giving dual on home airfield	13	—	—	—	£50	T-21
62	Stalled and lost control on the approach, on home airfield	14	—	£850	—	—	Olympia
64	Ditto	14	—	—	—	£250	T-31
75	Ditto	14	—	£1000	—	—	Skylark 2
4	Examiner testing U/T Instructor; undershot	15	—	—	—	—?	T-21
21	Undershoot into trees on boundary of selected landing field	15	—	£700	—	—	Olympia
43	Instructor giving dual undershot home airfield after circuit	15	—	—	—	£160	T-21
61	Pilot with passenger undershot home airfield after circuit	15	—	—	£150	—	T-21
63	Instructor giving dual circuit undershot on home airfield	15	—	—	—	£180	T-31
69	Pilot carrying passenger on local circuit undershot on home airfield	15	—	£20	—	—	T-21
84	Local circuit, followed by undershoot	15	—	£75	—	—	Tutor
46	Left decision to land until too late, and undershot into a stone wall	16	—	£75	—	—	Swallow
35	Instructor failed to take over in time to prevent slip into ground on final turn	18	—	—	—	£200	T-31
39	Instructor failed to take over in time to prevent nose first landing by pupil	18	—	—	—	£160	T-21
47	Instructor failed to take over in time to prevent pupil landing on bicycle	18	—	—	—	£100	T-21
77	Instructor failed to take over in time to prevent pupil landing with drift	18	—	—	—	£4	T-21

18	Landed on rough ground away from home airfield	19	£5	—	—	—	Tutor
48	Ditto	19	—	£50	—	—	Kite 2
72	Ditto	19	—	£10	—	—	Olympia
10	Hit parked a/c whilst landing on home airfield	20	—	—	£1	—	Weihe
24	Ditto	20	—	£90	—	—	Tutor
37	Pilot carrying passenger caught wing tip in standing corn beside R/W of home airfield	20	—	£25	—	—	T-21
49	Pilot landed away from base in standing corn	20	—	£130	—	—	Prefect
57	Ditto	20	—	—	£98	—	Skylark 3
82	Pilot on home circuit ran into concrete in long grass	20	—	£3	—	—	Grunau
9	Pilot on cross-country overshot into far hedge of field	21	—	—	£1	—	Skylark 3
29	Instructor giving dual landed down wind and overshot on home circuit	21	—	—	—	£250	T-21
36	Overshot after tight circuit following cable break on home airfield	21	—	Nil	—	—	Olympia
59	Pilot on cross-country overshot into far hedge of field	21	—	£150	—	—	Skylark 3
73	Undershoot of intended field became overshoot into one before (cross-country)	21	—	£10	—	—	Olympia
6	Heavy landing	22	£45	—	—	—	Tutor
15	Ditto	22	—	£1	—	—	Tutor
19	Heavy landing in small field	22	—	—	£30	—	Skylark 3
11	Very heavy landing on home airfield in gusty conditions	22	—	£300	—	—	Olympia
25	Heavy landing on home airfield	22	—	£30	—	—	Swallow
26	Ditto	22	£150	—	—	—	Grunau
30	Ditto	22	£60	—	—	—	Prefect
38	Ditto	22	—	£4	—	—	Prefect
52	Heavy landing in field on cross-country	22	—	—	£5	—	Swallow
67	Heavy landing on home circuit	22	—	£2	—	—	Cadet
14	Fast landing	23	—	£1	—	—	Olympia
54	Field landing—pilot forced a/c onto ground to curtail landing distance	23	—	£300	—	—	Skylark
22	Landing with drift, after low final turn	24	£5	—	—	—	Cadet
31	Landed out of wind in field landing, and blown over by gust	24	—	—	£200	—	Krajanek
70	Landed with drift	24	—	£7	—	—	Grunau
33	Landing up-hill in field, and ran back	25	—	£200	—	—	Olympia
78	Club reported accident, but failed to complete form or to answer queries	26	—	—	—	£ Not known	T-42
	Damage						
16	Damage by car to parked aircraft — £1	28	—	—	—	—	T-21
79	Aircraft on runway damaged by cable — £25	28	—	—	—	—	T-21
50	Glider pushed into obstruction — £30	28	—	—	—	—	T-21
60	Loss of elevator control during circuit because unsecured clevis pin fell out, no split pin having been put in after previous inspection — £Nil	32	—	—	—	—	Prefect
76	Fractured skid — £6	33	—	—	—	—	Olympia
5	Pilot's leg fouled release cable, caused premature cable release — £Nil	35	—	—	—	—	Swallow
1	Canopy incorrectly locked; came off in flight — —	34	—	—	—	£25	T-42
8	Ditto — —	34	—	£25	—	—	Skylark 2
27	Ditto — —	34	—	—	£10	—	Skylark 3
51	Ditto — —	34	—	—	£40	—	Skylark 2
55	Damage to seat bearers found on D.I. — £25	36	—	—	—	—	Olympia
81	Rudder cables to rear rudder bar found broken after heavy landing — £32	36	—	—	—	—	Kranich
84 Reports	TOTALS, number and cost — 8 (£89)		12 (£922)	35 (£5,113)	13 (£1,485)	16 (£2,390)	

TOTAL DAMAGE—£9,999

CLUB STATISTICS FOR 1960

Gliding Club	Aircraft						Launches		Hours	
	2S	Sec	HP	CO	PO	UC	On club site	By club gliders	On club site	By club gliders
Bristol	2	2	2	1	5	2	6,266	5,965	1,155	811
Cambridge University	1	—	2	2	1	—	4,904	5,593	911	1,094
Cornish	2	3	1	3	—	1	6,156	5,850	654	502
Coventry	2	3	1	—	3	1	6,354	6,026	723	631
Derbyshire & Lancashire	2	4	2	5	6	1	4,797	4,240	775	467
Kent & Royal Engineers	2	1	1	—	2	—	1,557	1,960	172	167
London	2	5	5	—	15	—	12,370	10,143	2,996	1,930
Midland	3	2	4	—	3	1	7,123	6,806	1,932	1,593
Newcastle	1	2	1	—	6	—	1,735	1,635	227	204
Oxford	1	—	2	—	5	—	4,060	3,549	727	493
Scottish Gliding Union	2	1	3	—	2	1	3,910	3,637	649	475
Southdown	1	1	2	—	1	—	3,888	4,133	425	474
Yorkshire	1	3	2	1	4	—	4,635	4,029	978	685
Lasham Centre							20,693	18,973	3,845	2,663
Army	2	—	4	—	1	2				
Imperial College	1	—	1	—	1	—				
Surrey	—	—	6	—	23	—				
Crown Agents	—	—	—	1	—	—				
Lasham Society	1	—	1	2	—	—				
Polish Air Force	—	—	1	1	—	—				
Aberdeen	2	1	1	—	1	—	2,153	2,097	144	139
Avro	1	1	2	—	—	—	1,935	2,004	140	165
Blackpool & Fylde	1	2	—	—	—	1	1,059	1,059	200	200
B.E.A. Silver Wing	1	1	1	—	—	—	1,565	1,565	122	122
College of Aeronautics	1	1	1	—	—	1	271	271	17	17
Doncaster & District	1	1	—	—	2	1	4,434	4,317	289	270
Dumfries & District	1	—	—	1	—	—	445	535	27	38
East Midlands (Leicester)	1	—	—	—	—	—	1,183	1,173	86	83
Glasgow & West of Scotland	1	1	—	—	—	—	76	76	4	4
Halifax	1	2	—	—	2	—	750	725	40	37
Handley Page	1	1	1	—	—	—	654	654	58	58
Lakes	1	2	—	1	—	—	1,064	1,057	162	159
Northampton	1	2	2	1	—	—	2,958	2,843	256	237
Norfolk	1	1	1	—	3	—	3,907	3,653	366	306
Norfolk & Norwich	1	—	1	—	2	—	410	297	175	90
Perkins	1	1	1	—	—	—	2,298	2,298	164	164
Royal Aircraft Establishment	1	2	1	—	1	1	2,177	1,970	110	90
Short's	1	1	1	—	—	—	134		33	—
Swansea	2	1	—	—	—	—	1,286	1,286	78	78
Swindon	1	—	—	—	—	1	1,357	1,298	96	89
Taunton Vale	2	3	—	1	—	—	4,579	4,534	432	422
West Wales Gliding Assoc.	1	—	—	—	—	—	40	40	4	4
Total Civilian	49	50	54	20	89	14	122,557	115,605	19,094	14,883
Royal Air Force										
Bannerdown	4	1	1	—	2	—	638	618	49	47
Chilterns	2	3	1	—	—	—	2,992	2,992	352	352
Clevelands	1	2	2	—	—	2	2,924	2,924	382	382
East Anglian	2	2	2	—	1	—	4,556	4,556	764	764
East Midland	2	2	1	—	—	—	2,868	2,888	335	355
East Yorkshire	2	2	1	—	—	—	2,712	2,712	258	258
Fenland	1	1	2	—	—	—	1,400	19	210	218
Four Counties	1	2	1	—	—	—	2,262	2,275	239	244
Home Counties	2	2	—	—	—	—	1,911	1,911	126	126
Moonrakers	2	2	3	—	—	—	5,210	6,266	724	883

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

CLUB STATISTICS FOR 1960 (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
191	97	2,861	622	21	160	11	11	6	6(15)	2 (6)	201	54	250
213	125	977	1,167	6	72	26	26	15	10(30)	— (1)	240	1	240
201	117	2,765	754	19	145	23	23	13	1 (8)	—	138	23	200
117	53	764	191	—	—	24	24	13	3 (8)	1 (4)	128	13	150
105	48	1,685	363	9	89	13	13	7	6(14)	2 (2)	180	120	300
82	15	12	223	6	72	6	6	—	1(–1)	— —	73	19	150
262	131	6,958	3,544	17	180	21	19	16	—(23)	2 (2)	350	100	500
174	110	4,375	973	20	284	37	37	35	5(15)	— —	220	50	300
79	16	150	—	Me	n.a.	n.a.	n.a.	n.a.	3 (8)	1 (2)			100
100	72	761	25	—	—	9	9	5	— (8)	— (1)	80	1	100
136	70	92	92	9	72	14	14	5	—(11)	—	102	5	150
93	42	95	253	3	30	10	10	6	3(14)	— —	98	53	100
171	94	108	330	9	104	9	9	8	2 (4)	—	105	25	200
306	138	9,710	1,824	46	279	44	44	27	9(22)	4(14)	743	22	1,000
72	22	35	35	5	40	7	7	1	— (2)	—(—)	50	—	100
93	22	—	100	—	—	6	6	2	1 (1)	—	100	10	150
39	—	—	—	—	—	4	2	1	— —	— —	34	200	45
47	20	—	—	1	4	8	8	6	— (1)	— —	65	—	100
13	2	—	—	—	—	—	—	—	— —	— —	n.a.	n.a.	n.a.
21	20	192	42	1	28	29	28	5	—	—	104	46	125
41	3	—	—	—	—	3	3	—	— —	— —	27	10	90
36	12	—	—	—	—	4	4	—	—	—	57	22	100
6	—	—	—	—	—	1	1	—	—	—	43	—	60
25	—	—	—	—	—	4	4	2	— —	— —	46	15	100
38	11	—	—	—	—	4	4	—	1(—)	—	25	—	40
62	44	n.a.	50	4	44	3	3	3	— —	— —	46	21	100
103	36	140	80	3	24	17	17	3	1 (3)	1 (1)	82	24	200
110	30	390	33	—	—	30	30	12	—(10)	— —	80	8	120
50	19	411	—	—	—	9	9	5	1 (5)	—	162	39	—
83	—	—	—	—	—	9	9	2	—(2)	—	36	—	—
81	35	35	345	All	year	14	14	8	2 (4)	— —	64	1	100
24	10	—	—	—	—	1	1	—	—	—	15	—	40
70	12	—	—	—	—	6	7	—	—	—	42	—	90
62	—	—	—	—	—	9	9	1	— —	— —	60	12	75
130	35	185	185	7	60	12	12	10	—(2)	—(—)	80	—	100
3	1	—	—	—	—	—	—	—	—	—	30	1	50
3,369	1,450	32,290	11,231	186	1,687	421	416	217	55(209)	13(33)	3,864	895	4,885
32	9	—	—	—	—	5	5	—	— —	— —	89	—	150
108	29	135	259	c.t.		13	13	9	— (3)	—	88	7	130
94	35	450	450	—		15	15	10	1 (3)	— (2)	111	4	150
120	40	1,574	2,337			27	27	13	3(16)	1 (3)	50	—	200
129	61	176	354						—(13)	— (1)	48	—	65
96	40	—	—			26	26	17	—	—	52	—	120
69	23	660	748	c.t.		8	6	2	— (4)	— (2)	127	—	150
79	—	205	205			6	6	11	4 (8)	— (1)	70	—	120
81	29	—	—	—	—	9	9	2	— (1)	— —	38	—	50
135	44	807	1,483			27	27	12	4(15)	—	74	—	100

Me = members' camps only; n.a. = figures not available; n.k. = not known; c.t. = continuous training. Midland and Cambridge membership figures are approximate. Swansea not included in totals.

CLUB STATISTICS FOR 1960 (continued)

Gliding Club	Aircraft 2S	Sec	HP	CO	PO	UC	Launches On club site	By club gliders	Hours On club site	By club gliders
Red Hand	—	2	—	—	—	—	—	—	—	—
Suffolk	2	2	2				3,062		321	
Wessex	3	2	3	—	—	—	5,406	5,406	736	736
White Rose										
Windrushers	2	2	3	—	—	2	7,093	7,014	1,077	1,058
Royal Naval G.S.A.	2	4	1	1	—	—	2,212	2,147	180	170
Service Total	28	31	23	1	3	4	45,246	41,728	5,753	5,593
Service & Civilian Total ..	77	81	77	21	92	18	167,803	157,333	24,847	20,476
Air Training Corps	159	10	—	—	—	—	115,203	115,203	7,522	—

GLIDING SITES IN THE U.K.

Two corrections have been notified in the table published in our February issue. The Oxford Gliding Club's site (page 13) is a grass-covered aerodrome, without runways. Finningley aerodrome, where the White Rose R.A.F. G.S.A. Gliding Club operates, is 6 miles south of Doncaster, not 2 miles north (page 14). Will Gliding Clubs please note that any changes in the particulars given in this table should be notified to the B.G.A. before the beginning of December, 1961, when the next table will be going to Press.

COSIM VARIOMETERS

"COOK" ELECTRIC VARIOMETERS

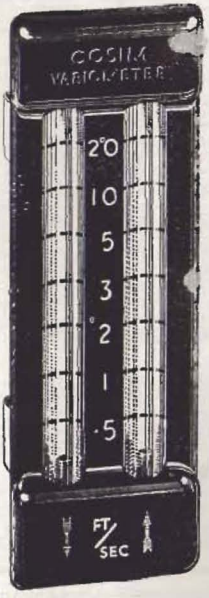
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CLUB STATISTICS FOR 1960 (continued)

Flying days		Cross-country miles		Courses		Certificates					Membership		
Total	Soaring	From site	By club gliders	No.	Pupils	A	B	C	(Legs in brackets) Silver	Gold	Flying	Non-flying	Potential
—	—	—	—	—	—	—	—	—	—	—	—	—	—
											70	—	—
106	22	993	993	—	—	15	15	5	2 (3)	1 (1)	85	—	120
137		847	842	—	—	30	30	11	5(22)	— (2)	160	—	200
91	14	100	—	—	—	8	8	2	— (1)	—	70	—	—
1,277	346	5,947	7,671			189	187	94	19 (89)	2 (12)	1,132	11	1,555
4,646	1,796	38,237	18,902	186	1,687	610	603	311	74(298)	15(45)	4,996	906	6,440
n.k.	n.k.	n.k.	n.k.	—	—	2,313	2,313	62	—	—	—	—	—

NEWCASTLE GLIDING CLUB

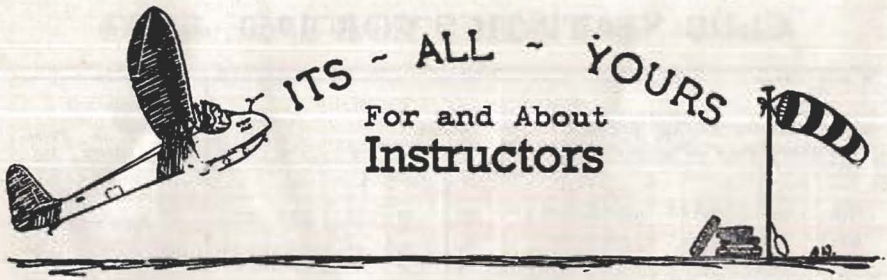
IN the article "Project Carlton", by Ian Paul, published in our February issue, pages 29-31, the photograph of the Newcastle Club's site was taken from 3,000 ft., not 300 ft. Also, the small ridge along the east side (p. 29, col. 2, 3rd paragraph), with a base at 900 ft., has its top at 1,200 ft., not 1,000 ft. We regret that a map of the site had to be held over for lack of space; it will be found in this issue on page 122. This shows the position of the three launching runs mentioned in the article on page 30.



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DURING the last year the accident rate to gliders has increased again. This is due to a shortage of trained instructors, combined with the too rapid progress of under-trained and inexperienced pilots, who consider the hall-mark of a pilot consists of merely getting their hands on to a high-performance glider.

In order to attempt to reduce these accidents, the B.G.A. is requiring higher instructional standards and subsidising the training of instructors. Here are details of the new Operational Regulations and subsidy scheme.

B.G.A. Instructor Categories

The standard of this category will remain the same, but in addition to the C.F.I., all professional instructors and all instructors in charge of *ab initio* courses must hold a current B.G.A. category.

C.F.I.s

All instructors becoming C.F.I.s must, in addition to their category, hold a C.F.I. endorsement. This endorsement will be granted without a test—unless the instructor has done no instructing for two years, or has had accidents—on evidence of a total flying experience as pilot-in-charge, including at least 6 different types of glider, of 150 hrs. Power-flying hours can be counted as one-tenth gliding hours, provided a minimum of 50 hrs. on gliders has been carried out. A reduction to 100 hrs. is accepted for instructors holding a Service or civilian aeroplane instructor's rating. They must hold a Silver C, and have done at least a year's practical instructing with a club (not Air Training Corps).

The C.F.I. endorsement will not affect existing C.F.I.s, but will apply to C.F.I.s elect of Full Member Clubs of the Association after 1st July, 1961, and of Associate Member Clubs of the Association after 31st December, 1961.

No instructor may be the C.F.I. of more than one club unless the clubs operate from the same site. New clubs which have difficulty in obtaining a qualified gliding instructor may, during their first year only, inform the B.G.A. that the C.F.I. of a near-by club will act also as their C.F.I. This is acceptable provided that the borrowed C.F.I. leaves a categorised instructor as authorised deputy at his own club in his absence.

Registration of Instructors

No uncategorised instructor shall give instruction on two-seater gliders to pilots of less than C certificate standard unless he has been registered as an instructor with the B.G.A., with details of his experience and evidence of a medical certificate of fitness.

* * *

In order to help overcome the acute shortage of trained gliding instructors, and in turn to endeavour to reduce accidents, the British Gliding Association Council decided at its meeting on 8th February, 1961, to approve certain qualified Clubs to run British Gliding Association Instructor Training Courses. The scheme would be administered through the B.G.A. Instructors' Panel, and the courses would have to be run to a special syllabus. Following are details of the scheme.

B.G.A. APPROVED INSTRUCTOR COURSES

B.G.A. Approved Instructor Courses may be run only by Member Clubs of the Association approved for this purpose.

Approval involves:—(a) The C.F.I. having sufficiently great experience to run such courses. If the C.F.I. wishes the Course to

be run by a deputy, this is permissible provided that the deptuy has a B.G.A. Instructor Category and is approved by the B.G.A. to run the Course. The instructor in charge of the Course must be available full time, including at least half the evenings, for the sole benefit of the Course, and he must have no other responsibilities during this time. Shared work between two named instructors who have, before the Course, worked out in detail the division of work, may be acceptable.

(*b*) The Club possessing suitable and adequate aircraft and launching facilities to operate such Courses without delays and frustrations. These should include the possibility of obtaining aero-tows.

(c) The Course covering the Course Syllabus laid down for the purpose by the B.G.A. This syllabus should be regarded as the minimum, Course instructors being free to add exercises which they think will benefit Course members.

(d) Not more than 4 candidates being accepted for each full time course instructor.

Candidates for courses will be accepted only if they fall into one or other of the following groups.

A GROUP.—Instructors who start the Course possessing all the qualifications for an instructor category (Ref. list). An exception will be made only for qualification 2, 12 flights being taught how to instruct.

B GROUP.—Pilots who do not possess the category qualifications, or who have not yet started to instruct, but who come on the Course sponsored by their own C.F.I., have 25 hrs. solo on gliders, a C certificate, and approval in their own club for passenger carrying. They must study beforehand and bring with them "Flying Training in Gliders", and a completed and correct Air Law test paper.

The Aim of the Course, which shall be for a minimum of 5 days, shall be to get A GROUP candidates to the stage at which they can obtain a B.G.A. Instructor Category at the end of the Course, and B GROUP candidates to the stage where they can return to their clubs with a good grounding in elementary instructing so that they can act as useful instructors while working up to category standard.

The candidate will be considered to have passed the Course as follows:—

A GROUP candidates on obtaining a B.G.A. Instructor Category.

— V. G. —

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B GROUP candidates on receiving a certificate from the Course stating that he has completed the Course syllabus and is in the opinion of the Course Instructor safe, knowledgeable and competent enough to act as an elementary instructor in two-seaters.

Re-payment of £20 will be made by the B.G.A. to the sending club of every successful candidate in either group. In the event of weather preventing flying, the operating club shall return to the candidates' club 10s. for each flight which the candidate did not have, counting down from twenty. The B.G.A. payment will be accordingly reduced. If no flying is possible at all, the B.G.A. payment will be reduced to £10. If the candidate completes but fails the Course, the B.G.A. will pay £5 only. If he is thrown out of the Course before it ends, the B.G.A. will pay nothing. The Course fees should not exceed £20, or if this is not possible, then they should be as near to this amount as can be managed. The fee for the course should be sent by the candidate to the club running the Course with his application.

ANN WELCH,
Chairman, Instructors' Panel.

* * *

In the last issue, the comments of several instructors on the subject of broken gliders were published. Here is part of a letter from "the other side":—

"I read with much awe and respect the wise words of the various C.F.I.s reproduced in 'It's All Yours' in the February 1961 SAILPLANE & GLIDING. I am not an instructor, but I think I can describe the impact of much instruction on the mind of an ordinary club flyer. The gist of my argument is that much (of the briefing) is

far too prolix.

"We have all seen nervous-looking pupils sitting in cockpits listening to long lectures and obviously wishing that the instructor would stop talking and let him get the launch over with. The impression made, at any rate on the sub-conscious mind of the pupil, is that he cannot hope to remember all these instructions, so he flies around with the confidence-sapping suspicion that he has probably forgotten an important one—which he very likely has!

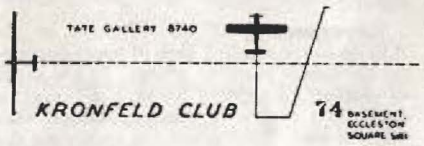
". . . When we D.I. a glider, we do not examine every possible thing that might be wrong. We wisely consider that it is better to check thoroughly a limited number of important items rather than to try to make an examination (which is certain eventually to become perfunctory) of everything. Similarly, I think that briefing would have more practical value (and so diminish accidents) if instructors would stick to about two points *with reasons*. The reasons help enormously to clarify the mind and to make the rules stick . . .

"Donald Tapp, Painswick, Glos."

He is absolutely right. Why is it that many instructors feel that they are not doing their job unless they *say* everything they can think of about the proposed flight?

The job of the instructor is to ensure, by asking questions, that the pupil understands what he is attempting to do. Anyway, if he does not understand, there is no need for talk.

ANN WELCH.



THE Club will be holding its Fourth annual Aviation Painting Competition and Exhibition next November, so we hope all gliding types will devote some part of their summer week-ends to art. There will again be a prize for the best painting by a new exhibitor.

The following are a few notes on the Kronfeld Club for the benefit of newcomers to gliding: It started in summer 1955, with the idea of being a meeting place for people interested in gliding and light aircraft flying. In November of that year our first Wednesday lecture was held. With one or two gaps, these have continued ever since and always start at 8 o'clock.

Anything from 30 to 70 enthusiasts may be found in the club on Wednesday evenings, although the club is open on most other weekday evenings. From time to time special instructional lectures are organised such as the ones running at present for *ab initio* soaring pilots.

The Club consists of a lecture room, bar and coffee bar. The subscription is £1, there being no entrance fee. Married couple's subscription is 30/- and Overseas and Country membership 10/-. Anyone requiring any further information should write to the Secretary or call in or telephone the Club at Tate Gallery 8740 on Wednesday evening. Prospective new members and visitors are always welcome.

Winners of the Photographic Competition, which was judged by Charles Brown, were:—Black-and-white Section, 1st Alex Aldott, 2nd Brennig James; Coloured Slides Section, 1st Betsy Woodward, 2nd David Scallon.

Wednesday Evening Lectures and Film Shows at 8 p.m.

29th March	"An Austin 7 on top of the Senate House, Cambridge", Peter Davey.
5th April	Aviation Talk by John Dykes.
12th April	"Pilcher the Pioneer of British Aviation", by Lord Braye.
19th April	(Provisional) Flight Testing by C. O. Vernon.
26th April	1961 Long Mynd Wave Safari by Ron Willbie.
3rd May	"The 1961 National Gliding Championships", by Ann Welch, Chairman of the Organising Committee.
10th May	"Championships Meteorology", C. E. Wallington, Chief Meteorologist at the 1961 National Championships.
17th May	National Gliding Championships, no lecture.

Launching Cable and its Management

by "Bob" Lintern

Ground Equipment Engineer, Lasham Gliding Society.

THE most frequent frustrating occurrence in gliding is the "cable break". Much can be done to cut costs and waste of time by sticking to a system of rigorous inspection.

Auto-Launching

It is usual to use solid spring cable of the "piano-wire" type of about 11 gauge, partly because it is cheaper and partly because it will stand up to runway abrasion far better than the multi-stranded type in common use on winches. In theory this cable, cost about £4, will give 500-700 trouble-free launches. In practice, breaks occur long before this and they are *always* due, in sound wire, to kinks. These in turn are the result of putting a loop under tension.

LOOP + TENSION = KINK + MORE TENSION = BREAK.—The biggest cause of loops is the allowing of insufficient time or room, after the completion of a launch, to get the whole cable on to the ground under tension.

Obviously in strong wind conditions a launch may be carried out to the confines of the field, the wind being strong enough to carry the 'chute along and thus maintain the necessary tension to avoid loops.

In light or *nil* wind conditions the launch must be terminated in time to allow room for the car to travel on at 5-15 m.p.h. during the whole of the free-fall time of the cable, thus maintaining the necessary tension.

The leaving of insufficient room may in turn be broken down as follows:—

(1) An attempt to improve a poor launch by carrying it on that little bit farther. (It never does, you know!)

(2) Closely allied to the above, and frequently the cause of it, is the basic error of using a cable which is too long for prevailing wind conditions. This results in a poor launch, the natural desire to improve it, when in fact the length of cable and light winds demand that it should be terminated even earlier.

A lesser cause is "changing ends"; it is always safer to remove the chain and 'chute and change them around than to try to turn the whole cable through 180 degrees.

The connecting link between car and cable is a chain some 18 ins. in length, rather than a couple of links, so that it acts as a brake when retrieving and thus helps to prevent the cable's natural tendency to form loops when not under tension; however, if the retrieve car is slowed too suddenly when approaching the launch point, the inertia of the chain carries it on and . . . a loop!

If a strict watch is kept on the cable at all times, loops are quickly spotted and easily removed; if one escapes and forms a kink, this should be dealt with by breaking the cable at this point (if *you* don't, the next *launch* will!), and tying a reef knot. We now have another major cause of cable breaks—worn knots! These, standing proud, wear much quicker than the rest of the cable.

All knots should be re-tied every morning when doing the "Daily", and a further visual inspection carried out every 50 launches throughout the day. When changing drivers, the new one should always be informed of the state of the cable.

If a break occurs, it, in turn, throws loops; so besides repairing the break, the cable should be carefully inspected before resuming launching. This may appear to be wasting time, but you will waste far more looking for broken ends on the next abortive launch. Besides, think of your reputation—two breaks in a row! Breaks caused by kinks may easily be recognised by a slight bend at the point of fracture, whereas fatigue breaks show no signs of deformation of the cable.

Winch Cables

All winch cable breaks are caused through wear or fatigue. Here again the two bogies are Loops and Kinks.

Kinks wear far more rapidly than straight cable because they come into effectively harder and longer contact with the ground than straight cable, and this is the chief factor affecting wear. Loops occur as loose coils on the drum, and wear by "beating themselves to death" against various parts of the winch.

KINKS occur in a cable which has been

subjected to severe overloading, usually in the following way:—

Erratic retrieve driving, necessitating undue brake pressure to prevent over-runs.

Snatch take-offs due to "taking-up slack" too fast and/or bad clutch and throttle control.

Launching at much too high a speed, particularly in turbulent conditions.

Loops are almost always the fault of the driver, chief causes being:—

Failure to keep a close watch on drum braking when "paying-out".

Failure to pick up drum speed quickly when glider releases. This latter is almost impossible if the glider releases with the cable under tension; this frequently occurs and is seldom the pilot's fault, basic causes being:—

Carrying the launch on too far.

Allowing the speed to become rapidly excessive.

Cables are repaired by tying a knot, in this case a "fisherman's bend", secured with locking-wire, or, more recently, by use of a light alloy ferrule and swaging machine.

These knots, and to a lesser extent swages, become a potential source of further breaks, as they wear rapidly by contact with the ground and by fretting against other coils on the drum. Much can be done to minimise wear by reducing the "winding in" speeds as soon as the free ('chute) end touches down. It is safe to say that doubling the speed of cable in contact with the ground *squares* the rate of wear.

Breaks can be avoided if the cable is thoroughly inspected every 100 launches (200 in the case of swaged joints) and *all* joins remade, all frayed and badly kinked cable chopped out.

Winch cable costs about £45 per drum and should give 700 to 1,000 trouble-free launches.

From the above it will readily be seen that good operator techniques coupled with rigid and thorough inspection not only cut costs substantially but also reduce frustration to a minimum.

THE HP-10

by R. E. Schreder

The HP-10 was designed to meet the following requirements:

1. Top quality performance.
2. Lowest possible price.
3. All metal construction.
4. Amateur assembly in 300 man-hours.
5. Fast and simple teardown.
6. Good visibility and comfort.
7. Gentle flight characteristics.
8. Maximum pilot protection.

Conventional sheet metal design is too costly and difficult for the average home builder. Recent developments of aluminium honeycomb panels offer great strength at considerable savings of weight. Heavy wing spars are necessary to carry all bending loads in conventional construction because even the heaviest sheet metal skins wrinkle when compressed by bending. Aluminium honeycomb panels can be designed to be rigid enough to retain their basic airfoil cross-section without ribs and still resist compressive loads up to 82,000 lbs. per sq. in. (7075 T 6 aluminium). With all of the bending material located in the skin, the resulting structure is relatively light.

Aerodynamically, the rectangular wing is essentially as good as a tapered wing if aspect ratios are equal. Better stall characteristics of the straight wing eliminate the necessity of twist or forward sweep, both of which add drag, especially at higher speeds. Most important of all, tooling for laying up straight metal honeycomb panels was only a small fraction of the astronomical cost of building eight tapered forms. Thus the decision was made to use an untapered wing.

A cross-section of the wing construction is shown herewith. The wing is made up of eight 12-foot aluminium honeycomb sandwich panels. Both inner and outer skins are 7075 T6 alclad sheets separated by 0.002 × ¼ in. hexcell aluminium honeycomb. Sheets are graduated in thickness to match the load being carried; overall thickness of each panel is a uniform thickness of 7/16 in. Longitudinal "Z" sections join inner and outer skins and provide an adequate flange for riveting to the sheet-metal spars.

Outer skins vary from 0.050 at the root to 0.016 at the tip. Inner skins reduce from 0.040 to 0.012. It is incredible that such thin skins can carry tensile yield loads in compression, but in personal tests a sample panel with 0.008 skins separated by ¼-in. thick honeycomb recorded 90,000 lbs. per sq. inch in bending compression before failure.

The four 12-ft. sandwich shells comprising each half of the wing come from the mould completely bonded with phenolic resin. Contours are mould-accurate and require no later filling. The two bottom surfaces are riveted together to make one 24-ft. bottom skin. The same is done with the two top panels. These two units are then riveted to the bent aluminium sheet spars. Three ribs, one at each end and one in the centre, close the torsion box. Rolled nose skins rivet to the front spar, flap and aileron attach to the rear spar, thus completing the wing. Flaps and ailerons require no stiffeners and ribs are used only to close the ends of each.

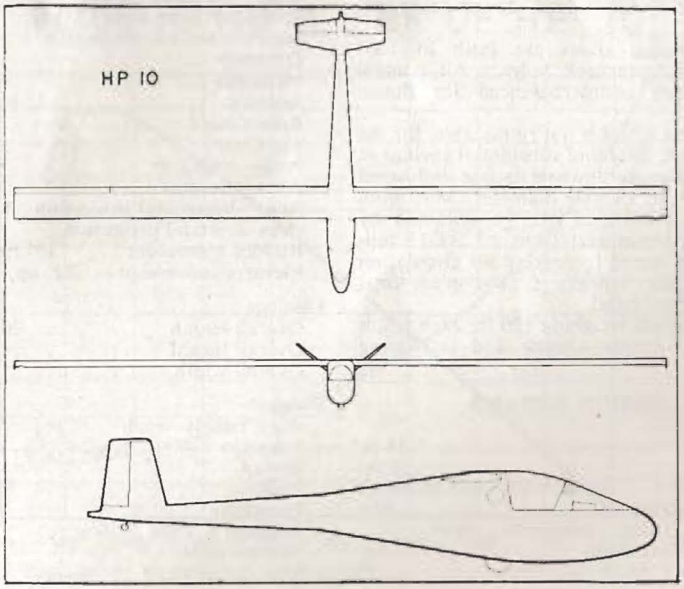
The fuselage is of conventional aluminium monocoque construction, simplified as much as possible. The last 7 ft. of the fuselage is completely round with only one bulkhead at each end. The two halves are rolled from 0.050 2024 T 3 alclad aluminium. Six of the 8 bulkheads are formed from aluminium sheet. 1 × 1 × 1/8 6061 T 6 angles reinforce the cockpit opening. The cockpit section is skinned with 0.040 2024 T 3 alclad sheet.

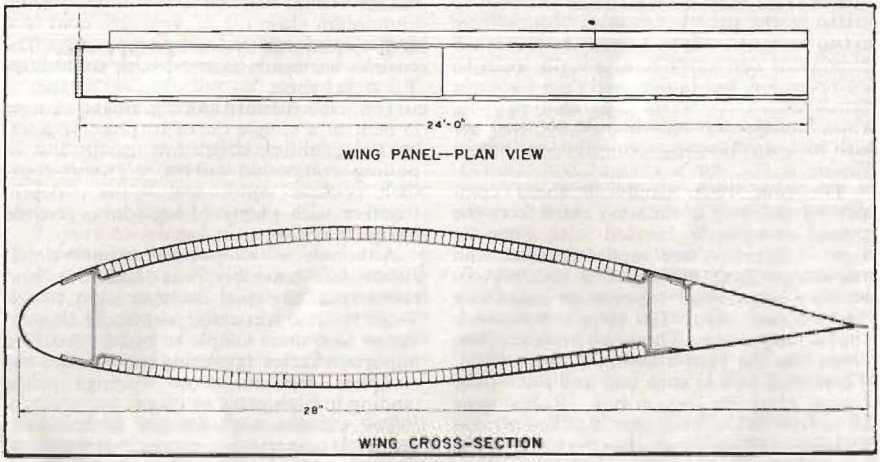
The fixed forward portion of the canopy is bent in a simple curve to preserve good optical qualities, which are usually lost in pulling compound curves. Twenty-four-inch cockpit width and 42-inch depth, together with plenty of leg room, provide adequate cockpit comfort.

Although a swept-back, conventional rudder-tail assembly was laid out and considered, the final decision went to the V-tail because it is aerodynamically cleaner, lighter and more simple to build. Another important factor favouring the V-tail is the complete freedom from damage when landing in high grass or crops.

Tail surfaces are of more or less conventional construction except that only two ribs are used in each stabiliser and elevator. Tail surfaces fold vertically by pulling one pin from each main spar.

Wing panels are joined by splice plates bolted to one panel and pinned to the other. Aileron push-pull tubes are routed on the aft side of the rear spar. Open wing interior can be fitted with plastic tubes to carry 160 lbs. of water ballast for optimum high-





speed performance in strong cumulus soaring conditions.

Flaps are stressed for 90° deflection as dive brakes. Narrow chord reduces operating loads. This type of dive brake was chosen to avoid cut-outs in the main wing panels, which destroy performance by breaking contours and leaking air. Larger area obtainable gives lower terminal velocity.

All external rivets are flush in 100° machine countersunk holes. All control surfaces are counterbalanced for flutter prevention.

The main wheel is not retractable, for the sake of simplicity and substantial savings in weight. Standard wheel is one industrial 400×4×12in. outside diameter. Maximum contest performance can be obtained by use of a streamlined 10-in.×3 BT-13 tail-wheel well faired to prevent air circulation and leakage. Brake is a conventional stainless steel band.

Wing panels weighing 120 lb. each result in a low empty weight and low wing loading.

DESIGN DETAILS

Wing

Span	48 ft.
Chord	28 in.
Aerofoil	NACA 65, - 618 modified
Aspect ratio	20.6
Taper ratio, geometric twist, dihedral, sweep	all *nil*
Incidence	2°
Area	110 sq. ft.
Aileron Area—Total	7 sq. ft.
Aileron span—each	7 ft.
Flap area—Total	16 sq. ft.
Flap span—each	16 ft.
Aileron travel	30° up 15° down

Tail

Span—2 x panel length	102 in.
Span—horizontal projection	80 in.
Height—vertical projection	33.5 in.
Dihedral	40°
Incidence	—1½°
Aerofoil	12% Schreder
Root Chord	28.5 in.
Tip Chord	18 in.
Area—stabilizer	8.9 sq. ft.
Area—elevator	6.5 sq. ft.
Area—horizontal projection	11.8 sq. ft.
Area—vertical projection	9.9 sq. ft.
Rudder movement	15° right & left
Elevator movement	20° up, 15° down

Fuselage

Overall length	20 ft. 11 in.
Overall height	42 in.
Overall width	24 in.

Weights

Wing panels—each	120 lbs.
Fuselage	150 lbs.
Empty	390 lbs.
Pilot	170 lbs.
Parachute	20 lbs.
Baggage & Pilot allowance	60 lbs.
Normal gross	580 lbs.
Max. gross	640 lbs.

Max. gross with water ballast 825 lbs.
Wing loading 5.27—5.82—7.50 lb./sq. ft.
Load factor at 640 lbs. or 825 lbs.
12. yield & ult.†

Performance

Max. speed smooth air .. 150 m.p.h.
Max. speed rough air .. 120 m.p.h.
Terminal vel. 90° flap, 640 lbs. 90 m.p.h.*
Stalling Speed 0° flap—580 lbs.
38.4 m.p.h.*
Stalling Speed 12° flap—580 lbs.
34.0 m.p.h.*
Stalling Speed 45° flap—580 lbs.
31.4 m.p.h.*
Best L/D .. .. 40 at 45 m.p.h.*
Min. Sink—580 lbs. 1.6 f.p.s. at 40 m.p.h.
† Subject to Load Test
* Subject to Flight Test

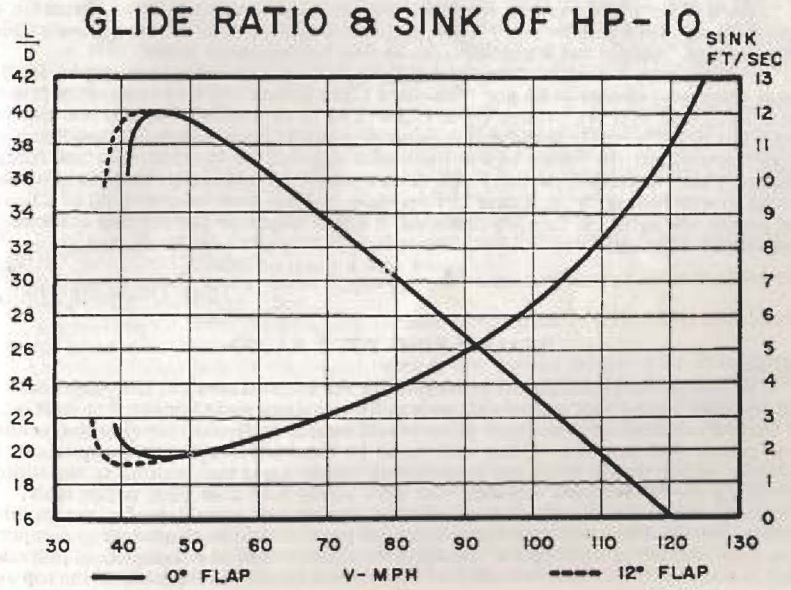
No attempt was made to design this ship to meet Standard Class specifications; however, the HP-10 qualifies in all respects except for having flaps. Since the flaps' primary function is to limit terminal velocity dives, the Gliding Commission of F.A.I. has been requested to approve this type of dive brake installation in the Standard Class rules.

Crossfell Electric Variometer

* Five inch long linear scale to 10 F.P.S.
* 'Scale X 3' Switch on Indicator.
* Accurately controlled response time — variable if required.
* Recently proved fully effective in soaring flight at 28,000 ft.
* Used in competition flying throughout the world.

U.K. Price £25

Ex Stock from
Crossfell Variometers,
Vernmore,
Great Malvern, Worcs.



Correspondence

FOKA, STANDARD CLASS AND HANDICAPPING

Dear Sir,

May I comment on Tony Goodhart's remarks on the Foka, together with Boris Cijan's and also say a word about the 1961 Handicapping System?

I also flew the Foka, but up till now have refrained from comment, because the flight only lasted 30 minutes. It was comfortable to lie back in, and was quite unlike the Spartak I flew in Poland two years previously. As Tony says, the view straight forward was very blurred, due to badly blown perspex, but I doubt if this is intrinsically unsafe to other aircraft. Is not the change of angle of vision between instruments and flight direction the main factor to be considered? In this glider, it was only a few degrees and can be compared with many "sit-up straight" types in U.K., where the change is more than 30-40°. No hideous stuck-out perspex greenhouse will ever alter the latter's basic layout.

From the point of view of a pilot on his first flight in the type, the handling was excellent. Personally I like a glider to circle "on rails" without too much attention from the pilot. In the Skylark III this point is reached for me at about 30° of bank, while in the Foka it was up to 45°. I had no difficulty in circling up through another 18-metre glider being flown by a visiting pilot.

May I make a plea with manufacturers to copy the wheel position, not only on standard but also on larger gliders? Memories of "bombing" cornfields from 3,000 ft. with wheels that stuck on, come painfully to mind.

With *no* pilot in the cockpit, it required about a 20-lb. download on the tail to balance it on its fixed wheel, which was tucked well in, right aft of the C.G., behind a well faired-in skid. With a pilot in the cockpit, the skid did all the braking on landing. Skid plates may wear out more quickly, but this is surely cheaper than gliders broken in hedges because the wheel-brake did not work.

A wheel stuck out forward, with no skid, may be an answer for training aircraft on aerodromes, but please, never on cross-country gliders. It looks all wrong and I am sure must be bad aerodynamically (*pace* Frank Irving).

Boris Cijan's remarks that the Foka was obviously an expensive construction were no doubt true. But I wonder why? Close inspection showed it to be rather poorly finished on the outside. Should not a smaller cross-section be cheaper to make?

Finally, may I congratulate the handicappers on their proposed system for 1961. I fancy those who choose to fly good Standard Class gliders will find themselves presented with a 3-5% lead over the present Open Class. This is as it should be, and will encourage good pilots to fly "small". If the B.G.A. wish to promote more Standard Class flying—and few can doubt that the future of the movement depends on it—then why not recognise Standard Class Records? If the F.A.I. won't play internationally, there is presumably nothing to stop having "U.K. Local". Two-seater records have become a bit of a farce, as most people will agree. If they are cancelled, it will at least stop pot-hunting at the expense of advanced training.

Yours with a question mark,

TONY DEANE-DRUMMOND.

TEAM-FLYING WITH RADIO

Dear Sir,

In SAILPLANE AND GLIDING subsequent to the Internationals in Germany there have been opinions voiced that team-flying with radio was apparently beneficial to high scoring and that future British competition pilots would be well advised to develop the technique. Some people feel that team-flying with radio in Germany and other contests can be a hindrance rather than a help, but probably all would agree that, carried to the ultimate, team-flying directed toward assisting one pilot could help that pilot appreciably. This re-emphasizes the whole question of whether the contest should be for determining a winning individual or a winning team. This vital point should be cleared up so competitors know what they are competing for. I suspect the decision will be to compete as individuals, which is what the majority of competitors have been assuming in the past. If the top award

is to an individual, then individuals will compete as individuals. If the top award is to a team, then the pilots will compete as team members. In the past the U.S. participants have been selected as individuals, each interested in beating his countrymen as well as beating the other contestants. If in the future two pilots from one country are to play a subservient role to the "head" pilot, to help him locate thermals at critical spots while risking their own flight durations, then the competition is between teams. The team members would be selected by different criteria than now—and in some countries including the U.S. it might be hard to locate the pilots to serve as the expendable "stepping stones".

I had always felt the contest was to produce an individual champion, and I hope this philosophy is agreed on in the future. This would help avoid the pitting of country against country, and would give each entrant as far a chance as possible. I have hoped that eventually there would be rules against using radio to provide information for one pilot which is not equally available and valuable for all other pilots. Omitting radio receivers in the sailplanes would accomplish this.

On any flight a pilot will try to watch other pilots, including his countrymen, to learn about upcurrents from them, but without radio and "stepping stone" pilots, this technique will not particularly favour one man.

It is good to have as few rules as possible at any contest. If a pilot takes an advantage which will help him and not serve the obvious intent of the competition (such as hiring a fleet of lightplanes to hunt and mark thermals, or utilising solar power or pilot power for boundary-layer control, etc.), then a regulation against the technique will be established before the next contest. I feel that team-flying by radio may have reached this point now—and that one should disallow it, rather than join it. If it is not prohibited, then the pilots using it should be judged as a separate team class, not listed as individuals.

2420 N. Lake Ave.,
Altadena, Calif.

PAUL B. MACCREADY, JR.,
President, Meteorology Research, Inc.

ONE-DESIGN CLASS

Dear Sir,

I have always had my objections concerning the Standard Class, but to think that the Standard Class will have to end up as a One-design Class horrifies me completely.

I am referring to suggestions made by Dr. Boris Cijan in "Outlook for Standard Class Sailplanes" published in the OSTIV section of the *Aero Revue* of December 1960 and also in SAILPLANE AND GLIDING (February 1961, p. 20).

Dr. Cijan refers in his article to a proposal made by R. E. Schreder that, during the World Contests, all competing sailplanes should be evaluated under the same points system, and that there should be only one World Champion who would have the highest number of points, quite regardless of the class of aircraft he flew. Dr. Cijan suggests that this proposal is sound, but draws the conclusion that if accepted by the C.V.S.M. it would be a further step forward in the direction of preparing for a One-design Class.

I feel sure, however, that Schreder's intention with this suggestion was merely to save the Open Class from extinction.

It behoves us all, as Dr. Cijan suggests, to do some serious and clear thinking about the proposal of a One-design Class.

Let us then do some thinking and express some ideas before many fine ideals go under for good:—

1.—OSTIV, and members of the board thereof, are the last people who should suggest that progress has now reached the stage where a One-design Class can be considered. Their job is the exact opposite, namely, to gather and correlate and publish scientific and technical data with the view of advancing the sport ever further, or at the very least to work in that direction.

2.—We had best not start a One-design Competition if we are to prevent bitterness between manufacturing countries. Nor do we wish to see the manufacturer rushing about trying to corner the market by building to the formula of some International body. He should rather be striving to build a better and more sensible high-performance sailplane with which to satisfy the birthright of every sailplane pilot.

What horrible mistakes we would all be making in trying to build a good

high-performance sailplane without the knowledge so freely gathered at the Open Class events!

3.—A sailplane is inherently such that it is restricted enough already. Why did the idea ever arise that it should be restricted further, as it has been with the introduction of the Standard Class?

Engines have no limits, so anything with an engine should be restricted. Or a yacht which never leaves the wide ocean, or any aeroplane that gets built in one piece. But a sailplane has no engine. It is handled by one pilot. The low-speed requirements needed for thermalling or landing in small rough fields limits the high-speed requirements. It must be rigged and derigged and the pieces manhandled on to a trailer and transported reasonably on public highways.

Anyone who, within these narrow limits, manages to make his engineless craft perform better in all respects than those of his competitors, is entitled to the utmost encouragement and freedom. He can never get too far away for too long.

4.—Is only the pilot so terribly important at a World Championship that by any means we must know who the best pilot is? We know already from flying the Open Class that some of the best pilots in the world are people like MacCready or Goodhart or Witek or Makula or Heinz Huth and a few others of such calibre. Or you know that you are pretty good yourself because you were always close behind. You also know that some pilots are better than you are and always will be, no matter how hard you try, so your enthusiasm is not aroused unless you are allowed to use your brains to build a better ship with which to clean them up. Why should you otherwise get all excited to compete, only to waste your time and money on a foregone conclusion? Let the known best pilots in the upper brackets battle it out amongst themselves. Best out of three should settle it too, otherwise any of them would be top dog at least once. You only have to keep on long enough.

This sort of thing will only give rise to bad feeling about such matters as—the boys flying on their home ground, task selection, order of take-off and kind of machine flown or number of tasks completed.

Let us open our eyes to the fact that the Open Class *is* the great sporting event it is because of men plus men's ideas. On such a field we can all compete equally, if not by brilliancy of pilotage then by pilot skill plus the brilliancy of our design. Let nothing interfere to halt or change this, lest our highest ideals, which here embrace both sport and our urge to create beauty of design and performance, should fade in the too exactly circumscribed materialism of our machine age.

E. DOMMISSE.

Pretoria, Transvaal.

A PLEA FOR DISTANCE TASKS ONLY

Sirs,

The articles by Ann Welch on Butzweiler and task-setting in general are quite interesting. They make me wonder, however, if the time has not come for further simplification, rather than additional formulas, graphs and computer fodder.

I can well remember the earlier national contests in the U.S.A. where each competitor carried a barograph and each evening the poor organisers stayed up till all hours computing points for altitude, points for duration, and of course, points for distance. Finally the great light dawned! Distance was the product of altitude gained and hours flown. (This was very nearly the truth as most of us plugged along at about 25 m.p.h. plus the rate of the following wind.) So—the scoring was much simplified and distance only became the criterion.

For the past five years or so speed has been the big thing—the comparison of the right-hand side of each sailplane's polar curve, as Philip Wills puts it—but after all, if we were willing to discard altitude points and duration points in the olden days for their product distance, why can we not now discard speed also, since this is just another producer of distance. Throw the formulas out of the window!

While I am not absolutely certain, as Ann Welch says, that the job of the task selectors is to "determine the task most satisfying to the competitors", I am certain that the tasks which are most dissatisfactory are those which require landing while the soaring conditions are still excellent. In addition, tasks which require sitting at the airport from,

say, 11 a.m. until 2 p.m. with good soaring weather booming around you, so as to utilize only the very strongest part of the day for some paltry run, does not seem to me to do justice either to the weather or to our sport.

I believe we need a return to distance points as the only factor in standings. At the same time, we need the type of open-end tasks such as were used in our last Nationals in Texas, or the endless variations of them. That is to say, out-and-return with a continuation as far as possible along the return line; 100 or 200 km. triangles with a continuation along the final leg past the contest site, if possible, etc.

It seems to me that we have gone overboard to such an extent on the subject of speed alone that soon we may have racing machines of utterly no use for local or week-end soaring enjoyment. The F.A.I. has, of course, encouraged this in an effort to upgrade the design and construction of speed-record-breaking sailplanes. I believe, however, that it is now time to call a halt to this overemphasis and return to the more balanced type of competition, where altitude gained and duration have their part in the final point standings of a competitor.

One look at Mrs. Welch's TASK SELECTOR chart shows that the "NOES" predominate in the top half and the "YESSES" predominate in the lower half, which is concerned with distance as the basis of scoring. A Distance task is the same for everyone, regardless of wind or thermal strength, and will give maximum separation of points—which is what a task should do. Even in light winds/good thermals where the only "No" appears, this would change to YES with an open end out-and-return or triangle.

It is extremely easy to look back on a contest and say what should have been done—we call that "Sunday Morning Quarterback," which has reference to the game played Saturday. The day at Butz may well have been very different, if the competitors had been required to go 75 miles S.E. before striking out for Fehmarn . . . likewise for Oerlinghausen.

One nice thing about an open-end goal-and-return or triangle also is that an underestimation of the day's possibilities by the Task Setters doesn't matter so much, as you just keep right on going.

BILL COVERDALE.

Waynesville, Ohio.

How to get "SAILPLANE AND GLIDING"

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CLUB AND ASSOCIATION NEWS



EACH issue over the last year has produced news from new sources; this month we welcome the Service Club in Cyprus, the Civilian East Midlands (Leicester) Club who are operating from Rearsby and the R.A.F. Association Club who operate alongside Northampton Club at Podington.

The June issue is being published early in time for the National Championships and the final date for copy (typed double spaced on foolscap) and photos to reach me is first post **Thursday, 6th April.** Please note my change of address to 14, Little Brownings, Sydenham Rise, London, S.E.23.

YVONNE BONHAM,
Club and Association News Editor.

BLACKPOOL and FYLDE

FULL advantage was taken of the few flyable week-ends even though it meant operating under conditions of rather high wind velocity—it did, at least, provide launches for our "Sedbergh" in the region of 2,000 ft.

By the time these notes are in print, many of our members should have tasted the ambrosia of Olympia flying. Needless to say, we are feeling very excited and also extremely grateful to our President, Herbert J. Liver, who has helped us so substantially to purchase this welcome addition to our "fleet".

Our Annual Dinner and Dance was held on the 17th February at the Carlton Hotel, Blackpool, and we are grateful to Stephanie Hanson and her sub-committee for their untiring efforts to make it a success.

J.S.A.

BRISTOL

ON 4th February, Tim Bradbury did 5 hrs. on the ridge to complete his Silver C.

On 11th February Wally Wallington came along to give a talk on Waves and some seventy club members attended what proved to be a most interesting evening.

Our Chairman for the past seven years, John Cochrane, will have left us by the time this report appears to become Manager at that other place beginning with "L". He has done a great deal for the Club during the past few years and we are sorry to lose him. We wish him every success in his new post.

The Mk. I Olympia has been modified to Mk. 2 standard with wheel, by Bob Parsons, and will appear newly sprayed in blue and white. The Committee has decided to purchase a Swallow kit and this aircraft will be built over a period of time by some of the more competent members and will probably fly early in 1962.

The Club should be well represented at the Nationals.

Contrary to the information given in the last issue, aerotowing *is* available at Nympsfield by virtue of our Tiger and anyone who cares to bring an aeroplane can have a tow at reasonable rates.

A.L.S.

CAMBRIDGE

For almost two months Marshall's Aerodrome was too wet to permit any gliding whatever. During this time a number of auto-tow launches were carried out on two other aerodromes in the neighbourhood. When flying at Marshall's was resumed, it was often restricted to somewhat unusual hours, and mud-bespattered aviators could be seen cycling back to town in the morning after a refreshing leap into the sky between 6 and 9 a.m.

Another exceptional feature of this winter was the early start of thermal soaring. On 15th January Peter James soared the Skylark II for 33 minutes from an auto-tow launch under a narrow cloud street.

At the beginning of January, a group of members, led by Anthony Edwards, took the Club Swallow and the Syndicate Swallow "Penguin" on a roving camp, and many hours of hill soaring were logged at the Long Mynd, the Clwyds and the Malvern Hills.

Ted Warner has been working hard to complete the annual inspections for the Certificates of Airworthiness and many working hours have been put in on the Beast, our new two-drum winch, and on the new trailers for the Swallow and the T-21.

It looks as though Bryce Smith and Jimmy James will have finished the trailer for the new Skylark IIIF long before the Aircraft itself will be ready for delivery.

G.S.N.

COVENTRY

So far in 1961 there has been little to report, except for two first solos by Messrs. Murphy and F. Garner, and the institution of the Ludgate-Turner Challenge Trophy; for competition between Swindon Gliding Club and ourselves.

It is to be held by the club, whose member(s) made the most recent flight(s) to the other's flying field from his or her own base. It is hoped that this trophy will help to pile up the cross-country miles for both clubs.

It was planned to enter the club Olympia in the Task flying rally at Swanton Morley. Unfortunately we were among the unlucky ones whose entries had to be refused. There are plans to enter club aircraft in the Nationals. A fortnight's camp is being organised at Edgehill from 29th July to 12th August, the period of the Coventry holiday fortnight.

C.D.D.-J.

CROWN AGENTS

A Sherry Party was given by the Club at its headquarters, 4 Millbank, S.W.1, on 24th January, and was attended by more than 30 members and guests including two of the Patrons, Sir Stephen Luke and Sir Alfred Savage.

Recent visitors from overseas include John Bristow from Kenya, who is spending a great part of his leave in the vicinity of Lasham, where it is hoped to arrange to fill a training course in July with members of the club.

J.E.G.H.

DONCASTER

Much is planned for 1961. As well as the Tutor under construction, we have bought another, ex-R.A.F., which will bring our fleet up to four.

Another diesel winch is under construction, which will have the same power as the first one—98 thumping diesel horses. It is based on a single-decker bus and will have two drums, and, we hope be self-propelled.

A retrieving winch is being built by Bill Budachs as a sort of Private Venture and the diesel tractor looks like being our best buy so far. You will gather that petrol is definitely Non-U at Doncaster.

The Annual Ball was held at the Mansion House on 5th January, and was a great success. Full credit to our Chairman, Jack Tarr and Les Muncaster for this very smooth production.

M.C.U.

DUMFRIES

No flying has taken place. However, the hangar is now finished and the gliders stored inside.

The clubroom is coming along well and, when the stove was stoked service style with the pipe red hot, provided a haven of refuge during our spate of Gales, Scotch Mist, etc.

A.N.O.N.

EAST MIDLANDS (Leicester)

The Club was founded in February 1960 and, thanks to the generosity of Auster Aircraft Limited, we have been permitted to operate from their airfield at Rearsby.

We purchased a T-21B from Sweden which was delivered by aerotow, though the

last part of its journey was accomplished by Vic Carr, our C.F.I., soaring it from Coventry on a 3½ hr. flight accompanied by Dorian Bailey—a fact which the latter has not been allowed to forget!

Flying began on the 16th July last and has continued steadily, 1,469 launches being done to date, including one to 3,000 ft. Ten B certificates have been obtained on the T-21 by Tony Carrington, Dennis Weston, Roger Sheppard, Mike Horton, Mike Smith, Barry Tracey, Geoff Foden, John Whiteley, Sam Sly and Geoff Holmes.

On the social side a very successful party was held at Ashby-de-la-Zouch just before Christmas.

It is invidious to mention by name any of the many members who have worked so hard to found the Club so successfully, but mention must be made of our Honorary Secretary, Keith Moseley, whose idea it was to form the Club and who has been untiring in his efforts ever since.

We are looking forward to purchasing another aircraft in the near future. A Club syndicate has acquired a Grunau Baby. Judging by the number of soaring flights last summer, the site would seem to have excellent prospects.

Visitors from other clubs, whether by air or otherwise, are most welcome at week-ends, when we operate, to try our winch. The drum is 5 ft. 2 ins. O.D. Is this a record?

C.R.S.

ESSEX

GLIDING at North Weald Aerodrome over Easter, at last! These words will bring undoubted relief to our many enthusiastic, but patient, members, and even more so to the Club Committee who have had many a sleepless night over the past six months wondering if all was in vain!

We regret that our Flying Membership list is full, at present, but we are hoping this can be rectified at a later date. Fuller details are obtainable through the Secretary.

M.G.R.

HALIFAX

FOR the Halifax Gliding Club 1960 was a very bad year. Bad weather, prangs and a shortage of instructors kept our flying time down to an all time low.

However, some encouragement has been received. Messrs. Bedford, Marshall, Clark, Senior, Ramsden and White have gone solo and we have seen four gliders airborne

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simultaneously, proving hill lift in a N.W. wind.

The field has undergone drastic changes. A 20 ft. deep stone quarry has been filled in, a "Trig" pillar has been removed and the local Electricity Board has removed half a mile of overhead line from our Western approach. Added to this, two Syndicate Olympias have been purchased.

Much work has been done in the Club House. Meals and accommodation are now laid on and we are running at least one beginners' course this summer.

D.J.W.

KENT

THERE were a large number of members and many old friends of the Club at the most successful party held at Greenway, West Malling, on 4th February.

Yet another engagement is announced—congratulations to Owen Maddock and Pat Strugnell.

The Club is to be represented at the Easter Rallies by Denis Monckton and Glyn Richards flying the Olympia at the Long Mynd, and by Roy Hubble and Philippa Buckley with the syndicate Skylark at Swanton Morley.

P.B.

LONDON

NEW shapes have appeared in Dunstable skies in recent weeks. The T-21C is being flight-tested with a view to joining our Training fleet; the club has bought an Eagle and has already put in a good number of hours with familiarisation flights for instructors and checks for pilots of high-performance machines.

Another "new shape" has been the Elliott 460, testing out fuselage modifications in December.

The private-owner fleet is expected to grow rapidly this year, and our little field is going to look quite crowded with thirty-odd assorted training and high-performance gliders wanting launches. So new winches and tugs, as well as gliders, are going to be of top importance in coming months.

The recent Westerlies have given our pilots and gliders a welcome airing after weeks of damp ill winds. Barely had Christmas festivities abated when on Tuesday, 27th 15 hrs. were flown, Kemp earning his C.

New Year's Eve brought 18½ hrs.; Tom Zealley completed his Silver C with 5 hrs. on 8th January.

Recent solos are Whitbread (11th December), P. Jones on New Year's Day and Seth on the 7th January. Quicker and less frustrating training to the solo stage is expected from a newly-introduced batch scheme, in which more intensive instruction is given to restricted groups of pupils.

M.B.

MIDLAND

THE best day's flying for a long time was 27th December when from 28 launches, 22 hrs. 20 mins. were flown. The week-end 11th-12th February too, provided some good flying on the hill. No great heights were reached, in spite of evidence of waves in the shape of lenticulars, but the fleet was utilised to good effect and Norman Groucutt got his five hours.

The M.T. workshop is now insulated against cold and the ceiling lowered in the process. Other fettling that has gone on in the winter months has been the completion of the T-21 trailer, also painted and weather-proofed. The Skylark trailer is now fit to pass the ten-year test, and also the Olympia trailer, in the process of being re-covered.

To save much carrying from Church Stretton, we have now installed a 420 gallon petrol tank, and pump at the Club. It has passed its pressure testing, being filled in the near future.

Our Auster Tug is due to be delivered at the end of February and is awaited with impatience. To keep our course people amused on rainy days, we have now installed a Bar Billiards table and a dart board in the lounge.

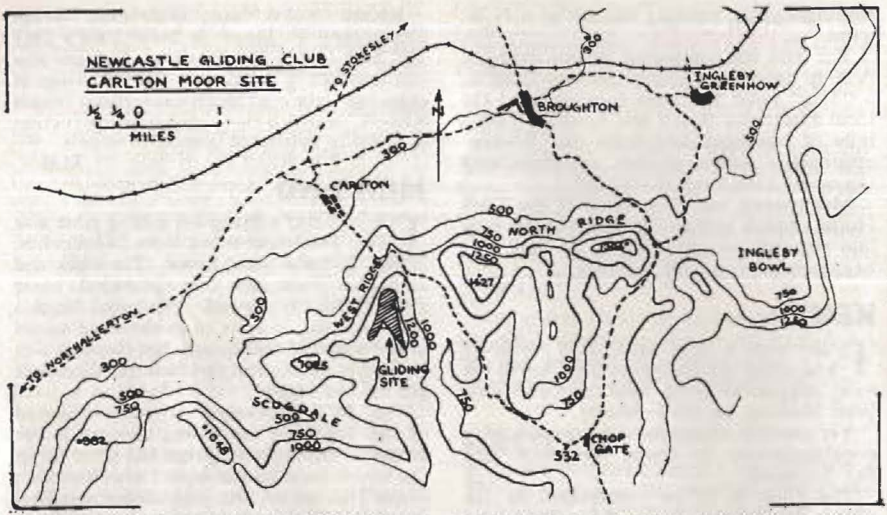
Easter Rally competitors include two Skylarks from Derby and Lancs., who are interested in taking back the Beer Tray, an inter-club trophy, which has graced first one and then the other Clubhouse for the last twenty odd years. This is decided by the highest aggregate of the two aircraft, of each Club, points being decided by the Rally markings, when put up at this event.

C.G.

NEWCASTLE

DURING this last period, flying weather seemed to be more in evidence mid-week rather than week-ends. However, lack of week-end flying meant more week on the site and the purchase of a second tractor means that we can keep the road in first class condition, it having suffered somewhat during the autumn.

Our Annual Members' Camp will be



held during the last two weeks in July and we welcome any members from other Clubs who would like to sample Carlton. Further details can be obtained from the Secretary.

All the private owner aircraft, including the two Skylarks, and the Swallow have hibernated for the winter, with the exception of Ken Saddington's Bergfalke which remains at Carlton with the object of completing the Test programme when soaring conditions prevail.

Other news of Private aircraft is that Eric Vissenga's Sky has been sold to a group at Lasham and Graham Garlick's Kite is undergoing repair after damage received when the trailer overturned during an 80 m.p.h. wind at Carlton.

B.H.

NORFOLK (Tibenham)

WORK has proceeded on the syndicate Olympia and our ground engineer, Joe Podolski, has fitted a canopy to the T-21B. This has proved a worthwhile investment for aerotowing and conversions to the Swallow.

Latest members to convert to this aircraft are John Lawton, Truman Keith, Tom Connor and Mike Utting.

Recent solos include Valerie Soames, her husband John, Keith Flatman, John Adams. Alan Prime and Ron Watson.

We now have four pilots qualified to fly the Club Tiger Moth and more and more members are gaining valuable aerotow experience.

The Bingo Party held in the Club House was enjoyed by all who attended and at last we have found another activity, other than drinking, which makes a profit.

Rather than hold courses for members of the public this season, we are concentrating on attracting private and Club groups to Tibenham to take advantage of our North-Easterlies.

We have good dormitory and Club House accommodation and already two groups have asked to come along.

If anyone is considering summer away camps, we can promise them a good time. Norfolk is an ideal place for first cross-countries—there is an abundance of disused airfields!

Secretary, John Wilkins, or C.F.I. Peter Crabtree, will be happy to provide all details on request.

M.R.C. R.J.M.

NORTHAMPTON

AGAIN our week-end flying has been curtailed by the prolonged wet weather, but on the few occasions when it has been possible to get airborne the unofficial competition to achieve maximum height from our modified winch continues. The original Swallow's 2,300 ft. on release has so far only been equalled, but now the T-21 comes into the running having been coaxed up to

2,100 ft. at the time of release.

Social events over Christmas were most successful. Our annual Dinner-Dance was held at Overstone Solarium on Friday, 10th February and 234 attended.

Mr. A. Turner of the Central Council of Physical Recreation was again principal guest, and we were also very happy to welcome a party from the U.S.A.A.F. base at Chelveston.

Harvey Britten will be collecting his Tugmaster shortly.

D.W.W.

OXFORD

WHAT promised to be a record 1960 deteriorated to our third best, the two hundred launches made between September and the end of the year just raising our total to over 4,000. Last year's hours and mileage, however, have been handsomely exceeded with totals of 617 hrs. and 750 cross-country miles.

The average flight duration in the club's solo aircraft was increased to 10.3 minutes, whilst the private aircraft achieved 27.5 minutes.

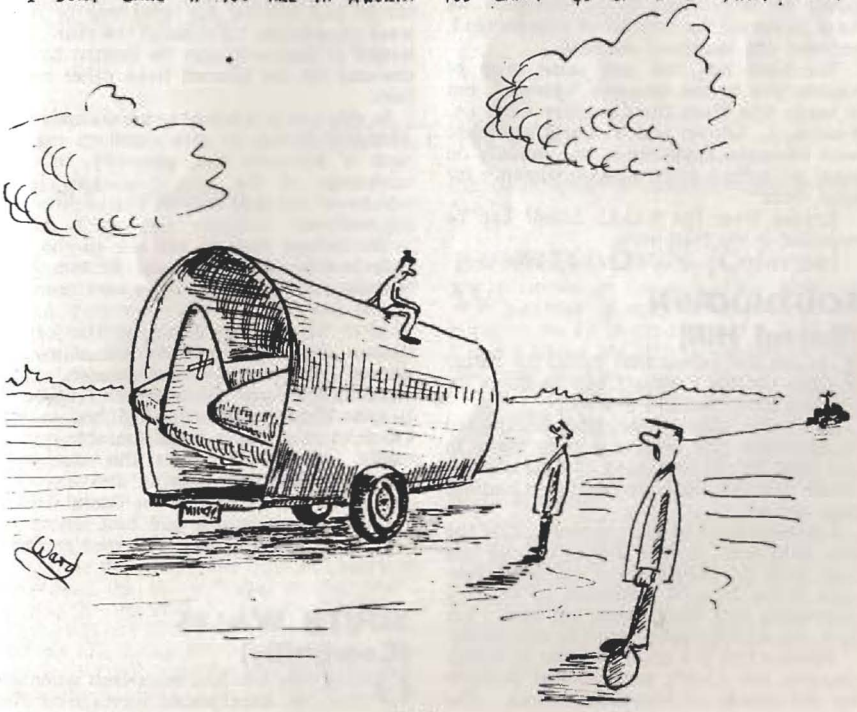
Although we have again increased the amount of flying, our members can expect to do, the major portion of the cross-country mileage lies to the credit of the private machines. However the trailer for our Skylark IIB is nearing completion.

We report with regret that the four runways with which we were endowed by the last issue of SAILPLANE & GLIDING have disappeared. Perhaps some enterprising "spiv" has flogged them to an unscrupulous roadway contractor, but visitors to Weston on the Green will find that, as hitherto, we can only offer an unbroken expanse of excellent grass.

L.A.S.

PERKINS

OUR Dinner and Dance was well attended again this year, and we were pleased to see Bryce Smith from the Cambridge Club,



and Nobby Clarke from R.A.F. Duxford.

Both our trailers have been overhauled, which is a sign that there is great determination to make the most of the soaring weather, and several members have been drawing local triangles on their maps. The 11/12th February we were pleased to see the T-21 soaring on extended circuits.

We are arranging two soaring "long week-ends", from Friday until Monday inclusive, at the end of April, and again at the end of May.

C.C.D.

SCOTTISH G. U.

THE clubhouse has taken shape and Course members will now be housed in the new clubrooms, each bedroom having H. & C. running water (in the best hotel traditions). Other features include a main lounge with an excellent view of the airfield and nearby hill slopes, well equipped bar and kitchen, showers, etc.

Bookings for our Summer Courses are as heavy as in previous years; this year we have increased the number of courses to14, to meet the increased demand.

We have not had our usual crop of visitors due to the seasonal "clamps", but a hardy trio from the Coventry Club (A. Findon, L. Glover and V. Carr), complete with Olympia, appeared in late January on what we believe to be a reconnaissance for later visits.

Entries from the S.G.U. Stable can be expected in the Nationals.

W.H.S.

SOUTHDOWN (Bostal Hill)

LET me just repeat that name, for Saturday the 4th February saw us flying for the first time from this new site.

The move was not altogether unexpected as provision had originally been made in our lease for the ploughing of Firle at some future date, although the exact year had not been settled.

Let me hasten to add, however, that the new field does, in fact, adjoin the old one and, from the experience of our first week-ends flying from it, promises to be very interesting with some losses but also, I am sure, some added gains yet to be discovered.

Perhaps this is a good moment to briefly describe the Club's geographical position for the benefit of intending visitors. The club operates every week-end throughout the year from a site on the top of the South Downs between Lewes and Alfriston.

It has a north-easterly facing ridge and is approached from the main Lewes-Eastbourne road (A274). The village of Selmeston lies on this main road about eight miles from Lewes and the first turning towards the Downs on the Eastbourne side of Selmeston leads directly to the Clubhouse (a cottage near the foot of the hill) and then up the fairly steep approach road to the car park and hangar on the top of the Downs.

Our President, S./Ldr. Furlong, presided at the A.G.M. held, as in past years, at the White Hart in Lewes. On the whole this proved to be a rather quiet meeting with few controversial issues.

Briefly summarised, flying figures were showing a steady improvement both in launches and hours.

Now that we have a second Olympia in our fleet the committee has decided to invite members to hire it together with its trailer and tow-car for week-end or mid-week expeditions throughout the year. The length of hire will only be limited by the demand for the aircraft from other members.

In this way it is hoped to encourage more advanced flying; to give members experience of aerotows and, generally, to take advantage of the best conditions from whichever site they may be found throughout the year.

We believe that we are one of the few clubs in this country offering members these "syndicate" advantages for a very nominal hiring fee.

Mike Squires has taken on the job of Course Secretary and will be happy to answer questions on our courses commencing 4th April, 8th and 28th August.

John Simeons gained his 5 hrs. in the Olympia in a recent ridge soarable north-easter. By all accounts this week-end produced some good flying and included some bungey launches from Bostal Hill.

Our congratulations and best wishes to Ray Marshall and Gwen who were recently married.

P.W.

SOUTH WALES (Caerphilly)

ON the only two fine week-ends when we flew, we experienced waves over the

site. Also some soaring has been done with the Tutor on a hill near here.

Meanwhile heads are buzzing and purses being emptied for the purchase of a two-seater.

I.H.S.

TAUNTON VALE (Devon & Somerset)

ON Sunday, 12th February, most of our faithful "bad weather" members were rewarded by a whole day's good flying. Cloud base varied from 700 ft. to 1,500 ft.

For 1961 flying, a syndicate Kite II should be operational at the beginning of March, and the Club has now full ownership of the Swallow. These together with a syndicate Skylark and five other aircraft will, we hope, keep members airborne throughout the year.

A more spacious Club Room is a possibility in the near future, the Ladies Committee consider this an urgent problem and are quietly persuading the Management Committee to achieve this end as soon as Air Ministry will allow.

M.R.A.

WEST WALES

TRAINING on Popsie, our T-21B, now takes place on Saturday afternoons and all day Sundays. This is due to the arrival of Steve Chinnock from R.N.A.S. Brawdy, as assistant instructor.

Membership and funds are slowly rising and two short soaring flights on Boxing Day prompted the necessary support for us to order a Swallow which we shall receive in May.

We have acquired an 8-wheel caravan as a Flight Office and Clubroom and plans are afoot to paint this enormous device a visible red and white chequer and to provide it with a glass roof.

Our chief worry is a tow car. In fact without the help of an automatic 3 Litre Rover belonging to a member, our flying programme would have seriously lagged.

This exotic piece of machinery gives a launch to 1,600 ft. without trouble and is to be thoroughly recommended. We hope, however, to have in the near future a 5¾ Litre Cadillac powered Allard which ought to solve our problems.

A.S.

SERVICE NEWS

ARMY (Lasham)

THE Club has retained the Douglas Trophy for the second year running. Brigadier Tony Deane-Drummond has become the first to win the newly instituted Frank Foster Trophy.

Ted Stark also collected two club awards, the Lasham Jill Walker Trophy for the best cumulative performance by a club pilot and the Mynd's Harwick Trophy for the longest triangular flight of the year from the Mynd.

John Evans has taken over as our Senior Instructor from Ted Sheppard. John Strugnell who was with us most of last season as an instructor, left towards the end of autumn. We are not at present intending to replace him.

On the flying side, the outstanding event has been the Wave Safari to the Mynd during the first week of January. The Eagle, Skylark II and Skylark III were taken. They did 68 hrs. flying from 69 launches. The waves did not produce any great heights. Peter Hannaman's (a bit over 4,000 ft.) was the best, whilst Frank Horridge got his five hours in.

C.G.D.

BANNERDOWN (Colerne)

WE started in January, 1960 with two battered gliders which have since taken to the air in the shape of a T-31 Mk. 3 and a Cadet Mk. 1. Rebuilding of these machines occupied the Club until August, and flying started at the end of that month.

Progress was rapid. In October the Club acquired an Eon Baby and Tutor. The Olympia arrived in December followed by a new T-21B in January, strengthening the fleet still further.

Seven A and B certificates have been gained by Club members and the site has proved good for thermals and ridge soaring in several wind directions. Even in November the old T-31 was held aloft by Jim Dean for twenty minutes, whilst the other machines carried out flights of up to an hour and 5,000 ft.

J.T.P.

CYPRUS

SERVICE Gliding in the Middle East ceased to exist at the time of the Suez affair. Although there have been vague rumours of the removal of equipment to Cyprus and subsequent operation at Nicosia, no trace of the gliders has ever been found and no knowledge exists of their present whereabouts.

The Cyprus Emergency would have totally stopped gliding operations in any case and armed retaliation, in addition to rocks, goats and Carob trees, would have made an away landing a most memorable affair (in the best Stark tradition possibly?).

However, we are emerging from the Dark Ages and gliding operations have once again started. This time an attempt has been made to parallel the R.A.F.G. & S.A. organisation and about 18 months ago a Gliding Association was formed, being known by the resounding title of Middle East Joint Services Gliding Association.

Funds have been obtained, the majority by the unfailing kindness of the Nuffield Trust, and orders placed for aircraft. The first club within the framework of the M.E.J.S.G.A. has been formed at R.A.F. Akrotiri and a second one is struggling into existence at Dhekelia.

The Akrotiri Club has now flown some 350 launches in a spoilered Tutor, bought from the Cambridge Gliding Club and using a Landrover/Nylon Cable auto-tow from the runway.

In spite of the fact that R.A.F. Akrotiri is on a small peninsula and subjected to continual sea breezes, some modest soaring has been done and we feel that magnificent flying is within our reach, when we can move away from the sea.

We are now anxiously awaiting the arrival of our T-31, T-21 and Swallow, when we hope to go into a full scale training programme. In the meantime, our C.F.I., Chief Technician Bill Owens and the Officer in charge of the Club, Flight Lieutenant Roy Salmon, offer a warm welcome to any gliding types in Cyrpus, whether resident or in transit.

R.S.

EAST ANGLIAN (Duxford)

THE soaring season started at Duxford on the 12th February, with a flight of 17 minutes by Jim Morris in the EON Baby.

Jim Wingett, one of our "B" Cats, has left us for civvy street and we wish him success in his future work.

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Our Station Commander, Group Captain Winskill, has joined the club as a flying member, and has obtained his A and B certificates in the Tutor.

Don Cole and Bill Borman have also soloed and a few more are nearing the solo stage.

Many members of the club have had a taste of winter soaring in wave up at Carlisle . . . a new experience to most of them.

A most resplendent club bar was opened just before Christmas and we are holding regular Friday evening socials which include lectures on different aspects of gliding.

A.H.W. D.V.D.

EAST MIDLANDS (Swinderby)

A SHORT period of flyable weather presented itself over Christmas and through January. One week-end saw the establishment of a record winch launch, when the T-21 got to 3,000 ft. on one occasion and very close to that height on several other launches.

At present the Tutor is our only single seat aircraft. The EON Baby is at present at Elliotts undergoing repairs and we are hoping for a replacement for the Olympia which was written off in a gale near Carlisle.

Regrettably we have to say goodbye to Pete Davidson, who as Officer i/c Gliding has done a lot of work for the club and we wish him every success in the future. The club welcomes in his place Sqn. Ldr. L. A. Boyer and we hope he enjoys his stay with us.

L.E.N.T.

EAST YORKSHIRE (Driffield)

WORK continues on the Grunau under the expert hands of Ray Poxon, whilst our Olympia has gone to join the R.A.F. Wave project at Crosby-on-Eden. The mobile despatchers hut is once again on wheels and everything seems to be on top line for the soaring season.

It is with regret that we report the posting of our C.F.I., Squadron Leader Bob "Birdie" Bowring, who has done so much in establishing and building up the Club. He is going to Hornchurch and will, no doubt, be joining the Home Counties Gliding Club.

R.T.B.

FENLAND (Marham)

AFTER the usual Winter overhauls, all our equipment is on top line. Routine training has continued.

Gordon Rondel has made a panel to fit the new Crossfell in the Olympia, Ian Strachan has calibrated it in Ft./Min.—to fit in with the multitude of performance calculators he has produced. The latest is one which does for five types, including the Sedbergh.

John Thomson has been invaluable in dealing with two of our Major inspections, and is now with the Wave Project at Carlisle. Other Wave hopefuls have included Pete Kevan, Ivor Orrey and John Dack.

The Olympia is entered in the Swanton Easter Rally, and we also hope to fly in the Competitions.

I.W.S.

HOME COUNTIES (Hornchurch)

OUR whole fleet is now serviceable and free from Majors for the rest of the year. We have been allocated Olympia No. 290 and Flt./Lt. Ron Taylor has been invited to fly it at Bicester in March, when the R.A.F. team is being selected for the Nationals.

We seem to have aroused interest among the nearby A.T.C. Squadrons and several cadets have already visited us with the intention of joining the club.

Due to an error in the last issue, Messrs. Wright and Lodge received rather rapid promotion to Silver C instead of C.

G.H.M.

MOONRAKERS

THE club was delighted to hear that John Willie has been awarded a bronze medal by the Royal Aero Club for the "continuous and unselfish work he has performed on the gliding instruction side".

Eric Reeves, Jock Reilly, Ed. Edwards, and Roger Staines went off to the Long Mynd at Christmas and all experienced their first wave lift. Roger achieved his Silver C height, and Eddie completed his Silver C.

Since the New Year, Brian Hext, Tony Morris, Iain Kite, and Doug. Lang have all gone solo. Several A.T.C.-trained pilots have recently joined the club.

The "Flying Doc."—Sqn. Ldr. Brown—has been flying the Chipmunk on Wednesday afternoons, enabling several of our members to gain aerotow experience.

Jock McPherson, Jock Reilly and Eric Reeves have been busy getting the Grunau ready for the soaring season. Jeff Chandler has completed building a wooden shack in our hangar. This acts as a high temperature enclosure so that our glues can set.

The early morning flying bug has hit the club and as dawn breaks Dave Ellis and his followers can be seen on the airfield ready to start operations.

If any of our ex-members would like to receive our "Newsletter" just let us know and we will put them on our mailing list.

D.W.L.

R.A.F.A.

WITH the soaring season approaching, some of the founder members will be experienced enough to gain the first C certificates for the Club and our first solo pilot, Bunny Freestone, is about to be converted on the Tutor.

Aircraft are being re-sprayed, a second Double Drum Winch is being made and the Club will also have aero-towing experience with Harvey Britten's Tugmaster, which is now housed at Podington.

A very nice Clubroom has been made with excellent Bar. A Skittle Table was recently generously donated by our Northampton Branch, whose members are giving the gliding club full support and we are hoping that more Branches will take an interest.

In the summer, overnight accommodation will be provided in the Club House and some of the members, and instructors, are giving up a week of their holidays to help out.

A cordial invitation is extended to any member of the Association, or any ex-R.A.F. people, to look in at Podington (approx. 10 miles N.W. of Bedford, and 3 miles S.W. of Rushden) and see for himself—or herself—what goes on.

Further information can be obtained from the Secretary, Eastern Area, Royal Air Forces Association, 15 Saxby Street, Leicester.

WHITE ROSE (Finningley)

MAY sees the completion of the first year of operation of the White Rose Gliding Club. We can look back with a sense of pride at having achieved so much in so little time. From an initial start of a T-31, we have progressed to a fleet of four aircraft; a T-31, T-21B, Kranich and an Olympia. A Cadet awaits collection and a Grunau is on the way.

We started the year using a Ford V8 for auto-towing. The car worked admirably and launches of 1,000-1,500 ft. were generally obtained, but the runway considerably reduced the life of towing cables and tail skids. The average life of a Finningley cable was 50 launches. However, we now have a winch, which is giving valuable service.

Two teams have been entered for the Nationals and Service Championships. Trevor Ware hopes to be flying a Skylark IIIF, and George Coatesworth is again teamed with the Olympia 401. Trevor Ware is flying the club Olympia in a "warm up" competition being held at Bicester over Easter.

The following certificates have been gained; Stan Clinkscales and Owen Truelove got caught in some lift so now have their C certificates; Peter Southgate, Ian Lampard, Jim Smith, Ian Harris, "Smithy" Zmitrowicz now have B certificates.

We should like to take this opportunity of thanking the Four Counties and Doncaster clubs for the help they have given us in our first year.

O.J.T.

OVERSEAS NEWS

AUSTRALIA

DECEMBER and January proved to be good months for soaring in Australia. There have been many outstanding flights, a first-class contest and several records broken.

The first interesting event of the summer was the completion of a Gold C and goal diamond by Ronald Brock of Waikerie. The interesting point is that Ronald is only 15 years old. He began training at the age of nine, went solo at 11, completed his Silver C at 14 and rounded it off with a 300 km. triangle in the Waikerie Gliding Club's Olympia.

The only disadvantage that I can see is that the poor lad has a lifetime of soaring ahead of him with very little more to gain. Of course, there is always the World

Championship.

Between 28th December and 8th January, the Gliding Federation of Australia held its National Soaring Contest at Gawler aerodrome, near Adelaide in South Australia. The weather was good except for a couple of days and the 56 pilots and 20 aircraft managed to cover a lot of territory.

The winner was Bob Rowe of Waikerie, flying a Briegleb BG-12. He gained 995 points out of a possible 1,000.

In second place was the former champion, Jack Iggulden, of Melbourne, flying the veteran Slingsby Gull 4, with 969 points. Third place went to Bert Perrson of Alice Springs, flying an Olympia II, with 966 points.

The contest produced 573 hrs. of soaring and 14,573 miles of cross-country flying. The best distance flown was 268 miles by Rupert Brown, flying a Skylark II.

Bob Rowe set a new record for speed around a 200 km. triangle with a speed of 48.9 m.p.h. in the BG-12. Among the many outstanding flights was one of 202 miles by John Hudson in a Grunau 4—an aircraft similar in appearance and performance to a Prefect.

While all this was going on in South Australia, other pilots were making good flights elsewhere. In Queensland, Max Howland made a goal flight of 201 miles in a Schneider Kingfisher—a mighty little midget with a span of 11 metres.

At Narromine, in New South Wales, members of the Southern Cross Gliding Club held a rally in which a lot of outstanding soaring was done. The longest flight was 310 miles in the R-3 by John Blackwell—seven miles beyond the former National distance record but a mile short of diamond distance.

Several other Gold C distance flights were made, including a 200 mile goal flight to Bourke by Jack Herford in the Joey—wingspan 10 metres.

During January, Cliff Gurr, of Adelaide, set a new National record for goal and return when he flew the 18 metre Altair from Gawler to Renmark and return, a total of 230 miles.

The Altair is an Australian design by Ron Adair which has made a number of interesting flights, although it is still under development. Flight tests have proved its glide ratio to be better than 30, although there is still a lot of cleaning up to do on it.

On the same day that Gurr set the record, Col Churches of the Adelaide Soaring Club made a goal flight of 200 miles from Gawler to Mildura in the Grunau 4, taking 6 hrs. 15 mins.

In the last report I made, I mentioned that Australia at last has a lady Silver C pilot. Miss Mary Weaving of Alice Springs won that honour during November. I have now to report a second lady Silver C. Miss Jean Dines of the Southern Cross Gliding Club (Sydney) completed the requirements early in January.

Finally, I can report that Mervyn Waghorn of the Sydney Soaring Club spent a holiday near Christchurch, New Zealand, where he climbed to 19,000 ft. without oxygen in a Slingsby Swallow to gain diamond height. Several years ago he climbed to within 100 ft. of diamond height in a Cu Nim. He has also been within 8 miles of diamond distance.

His flight in New Zealand began in slope lift, changed to thermals and ended in waves. It was one of those days when the wave was not visibly evident, hence the lack of oxygen. Wag predicts that this ability to get started at a low altitude will soon bring all the World altitude records to New Zealand.

A.H.A.

Kevin Gillespie also writes from Waikerie:—

We were most interested in John Stanley's account of Gliding Halfway Round the World, including his short stay here.

His comments on our launching into thermals, prompt me to add that this has been standard practice here for more than ten years and has been adopted in other Australian gliding clubs.

It is good economics and launching into the "down" when it is 110 degrees in the waterbag only results in the shortest short circuit ever, and much frustration.

John also mentions Ken Hartley. Ken at 13, is now solo and has completed height and distance legs for his Silver C. Many others have soloed at 14 and 15 years, including John Rowe, son of Australian entrant in the World Gliding Competitions. John soloed at 14 and completed his Silver C at 15.

K.G.

BULAWAYO

LAST year was the most successful year the club has ever had. Easter we had four hard days flying with the Midlands Gliding Club—Gwelo as our guests. We

never lost one week-end's flying through bad weather the whole year, but on a return visit to the Midlands Gliding Club, Gordon Hird and Cyril Mills took off on aero-tow with the Bergfalke for Gwelo at 7.30 a.m. a distance of 100 miles. At 8 a.m. cloud had forced them to below 200 ft., the two pilots being very upset to see the altimeter reading 300 ft. below zero. Eventually they made it and a very successful camp was held for three days. This was Rhodes and Founder's holiday on the 10th-12th July and everyone thoroughly enjoyed it. Flying was from the old Moffat R.A.F. Station and many thermals were found over the roof of the adjoining Bata Shoe Factory.

Flushed with success over this venture the next highlight was the aero-tows to Gwanda. The Bergfalke and T-31 were towed at mid-day and both crews were seen drinking neat whisky on their arrival. They had flown over the bare granite boulders of the Matopos Hills in the full heat of the African sun and had spent more time with the tow rope over the top of the aircraft than elsewhere. There were no possible landing areas and Gwanda airfield is a dust bowl scraped out of the bush. After having two days enjoyable passenger carrying, Tony Churcher and Brian Cowan brought off a most remarkable free-flight back to Bulawayo. The distance they travelled was only eighty miles but they had to follow the road as nowhere except the last twenty miles was there anywhere to land. Had they put down in the bush it would have taken days to find them. Few, if any flights have been made over such formidable country.

Harry Mason our C.F.I. and long the backbone of Bulawayo Club was transferred to Salisbury and his loss was immediately felt. In September we had our Annual General Meeting and Mike Browning became Club Chairman. Cups were awarded to Geoff Hammond, Gordon Paterson and Gordon Hird. The latter now becoming the new C.F.I.

Joe Birtle an experienced instructor disappeared in the Grunau on Sunday, 9th October, climbed to 12,500 ft. above the ground and having been declared missing, was next seen at 6 p.m. after nearly six hours' flying. The T-31 in the same thermal at one time found the lift extended over three miles and the down over a corresponding distance. Joe gained two Silver C legs and Gold C height. The following week he flew to Plumtree, lost himself, but still gained his Silver C.

Sydney Legg on his first soaring flight stayed up an hour when nobody else could, but unfortunately hit a tree and broke the Wolf's wing tip after drifting too far down-wind. He is now known as Down-wind Legg.

On its return after repair, Mike Browning did four hours on Saturday in it and five hours on Sunday. The most hours any pilot has done here in one week-end. To complete his Silver C he set off on a cross-country and achieved a further distinction of the shortest cross-country ever accomplished in the Club, landing in a Kaffir mealie patch five miles away and was his leg pulled, as he has done longer flights in the T-31 while instructing.

Recently Brian Bradley has obtained his C. A dyed-in-the-wool tug pilot who said he would never fly gliders, he is now one of the keenest.

This year we hope to register our first Gold C. The conditions are here, but only the thought of landing in the bush has so far deterred us. Anyway, we will see.

G.H.

CANADA

CLUBS have been formed at Virden, Manitoba; Saskatoon, Saskatchewan; and the Lakehead.

The Virden club has bought a Cinema two-seater from Regina. Their address is c/o Murray Wood, Box 513, Virden.

The Saskatoon Soaring Club, 1506 Jackson Ave., Saskatoon, have been flying from the Colonsay farm of the Flying Eleys, six of whom living there are club members. Two others glide elsewhere. Both winch and aerotow are in use.

Several members having been with the Regina club, there is a good nucleus of experienced pilots. Norm Eley, chief flying instructor, has been under the spell of gliding since the early 30's, when he built and flew a primary.

The Lakehead Gliding Club have cleared a two-runway field out of the rock-strewn wilderness west of Fort William and Port Arthur, Ontario, and are saving up for a trainer and winch. President is Donald Wood, 232 Robinson Drive, Port Arthur.

On the debit side, the Aero Club St.-Maurice, Trois-Rivieres, P.Q., seems to be out of the gliding game. They have sold their Pratt-Read and 1-19 to Glen Lockhard of Manotick, Ontario, a member of the Gatineau Gliding Club, Ottawa.

The mercury having dipped below zero

here in Ottawa, after a very long and mild fall, gliding is packed up for the season. The two clubs on the West Coast of the country continue through the winter, off and on, but the rest of us retire to our workshops for the cold months. By April, we hope to see many gliders refinished and some even built from scratch.

Many gliders change hands at this time of year—too many to enumerate in this report. Five or six have been sold in the Ottawa district alone. Their new owners will be champing at the bit when thermal time comes around again.

D.K.

HOLLAND

DUE to the marriage of your Dutch contributor, no news from Holland appeared in the last issue. Furthermore, the weather during the last few months has been as annoying here as in England. Therefore all the flying news there is, concerns people who went South on "Wave Safaris". First in the news were John van Melsen and Kees Guldemond, who went to Innsbruck, Austria with their privately owned Ka 6's. John completed his Gold C with 4,125 m. gain of height; Kees reached 7,500 m. a.s.l. with 6,600 m. gain, being new national records.

Two members of the Terlet-staff, Jos Krols and Hans Groeneveld spent part of their December holiday with a Ka 6 at Issoire, France. Both of them reached Gold C height in several successful flights, Jos completing his Gold C.

At the same time a group from the Gilze Rijen gliding club did some successful flying with a Skylark II at the same site. Hetty Amade broke her own Dutch woman's height and gain of height records with a gain of height of 4,100 m.; Chris Buter just reached Diamond height and Wim Stryland Gold C height.

The only notable flying in Holland was the fact that the first of our new Ka-7's were flown in.

We now have a "Suggestion Committee", which will try to improve the efficiency of the gliding movement in Holland by discussing and publishing ideas.

A new gliding club has been formed on Biak, one of the islands belonging to Netherlands New Guinea. The club is formed out of members of the R.N.A.F. who took the prewar built Kranich I "Eagle" with them when they were posted there. The first news of this little group of enthusiasts was about very promising Cu-nims, asking to be explored.

J.v.E.

SOUTH AFRICA

THE whole gliding community in South Africa took great pleasure in welcoming Denis and Anne Burns to the Kimberley—1961 Camp and they graciously reciprocated our welcome by establishing, between them, five World Records.

Following the Burns' excellent example, South African pilots gained 6 diamonds, 6 Gold C legs and 12 Silver C legs and established two new South African Men's National Records for the Out-and-Return and the 200 km. triangle.

While all this was going on, two-seater and single-seater training was carried out and a goodly number of the coastal pupils had their first experience of inland conditions.

About the same time next year, the South African National Gliding Championships will be held and we shall be delighted to welcome and fly against pilots from the United Kingdom.

Now that Anne and Dennis have shown what Britishers can do in the mid-day sun, it should not be too difficult to persuade one of the shipping lines to donate deck space for a glider and trailer so that a United Kingdom team may fly its own glider in our championships. Tow cars could be organised.

At the end of October, Boet Dommisse completed an out-and-return of 240 miles to Steynsrust, in the Orange Free State, beating the South African Record of 226 miles held by Heli Lasch for years.

Then, on 3rd November, he fell down 20 miles from Johannesburg on what would have been a World's Record Goal and Return to Bultfontein of more than 360 miles. He did the trip in 7 hrs. averaging 50 m.p.h.

Two days later he tried to go to Allanridge, starting at 9.57 and was back at 3 p.m. having covered 260 miles in less than 5 hrs.; storms had cut him off from his objective.

At the end of October, Tim Mouatt-Biggs went to 26,000 ft. in a cu-nim for his second diamond in the Air 100. Also in the Air 100, Bobby Clifford, aiming at Welkom, 286 miles out and return, had to turn back at Kroonstad about 30 miles short, doing 250 miles in 6 hrs.

On 5th November Brian Stevens, in the Air 100 went round the 200 km. triangle,

Welverdiend, Coalbrook, Johannesburg at 64 km.h. About the same time the junior pilots were doing Silver C distances in blue thermic up to 15,000 ft. a.s.l.

All this seemed very hopeful and then there was three weeks of rain.

Bomb Finney did a diamond out and return to Orkney in a Skylark I and Gordon Albu a flight to Potchefstroom and back of 124 miles in the IIIB.

G.A.

U.S.A.

THE 1961 U.S. National Soaring Championships will be held from 1st-10th August at the Wichita, Kansas, Municipal Airport. This is very near the geographical centre of the country. Most of the competition soaring will be over the Great Plains between Wichita and the Rocky Mountains, some 500 miles to the west. Entry requirements will be the same as in 1960, full Silver C and the distance leg of the Gold C. Even so, between 40 and 50 entries are expected. As in the 1960 contest, cloud soaring will not be permitted and in order to enforce this rule, gyro instruments will not be allowed in competing sailplanes.

At the time of this writing (mid-February), it appears unlikely that the U.S. will submit a bid to host the 1962 World Championships. Although assurances were obtained that adequate facilities and help would be made available, the massive financial support necessary has not been obtained. However, efforts to obtain the necessary financial support are continuing up until bid deadline time. Should the effort fall short, plans are to continue with the idea of submitting a bid for the championships for the earliest possible year.

S.S.A. now has 40 chapters, an affiliation type of membership for clubs and organisations of seven or more members. All flying members of Chapters must hold some grade of S.S.A. membership, at least seven of which must be voting members of S.S.A. The 40 Chapters have a total of 700 members, very close to one-third of the entire S.S.A. membership. Main tangible benefits of Chapter status are eligibility to insure club-owned sailplanes under the S.S.A. master insurance policies, reduced sanction fees for contests and, for those Chapters with all voting members and Student Members of S.S.A. (no Associates), an annual partial S.S.A. dues rebate to the Chapter of $2.00 per full Member on their roster. It is expected that many of the remaining 50-odd clubs in the U.S. will eventually become S.S.A. Chapters and thus tie the movement closer together.

The Soaring Society of America is currently conducting a membership contest in an effort to significantly increase its number of members. At year end, the figure stood at 3,220. Contest categories include those for S.S.A. Chapter clubs, non-Chapter clubs (for the most new members gained), and individuals may compete in a slogan-writing and number-of-members-obtained contests. Prizes feature such items as a portable oxygen system, a PZL variometer, a painting, one year free sailplane insurance, two parachutes, a Friebe Barograph, and a towline.

Strong winds on 5th February permitted altitudes of 19,400 ft. behind 5,700 ft. Santiago Peak near Elsinore, California. Airport elevation is 1,250 ft. and releases could be made as low as 800 ft. higher on the big ridge nearby, permitting possible Diamond C altitude gains. Unfortunately, the only person suitably equipped who made such a gain was Sterling Starr, already a Diamond C pilot.

L.M.L.

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