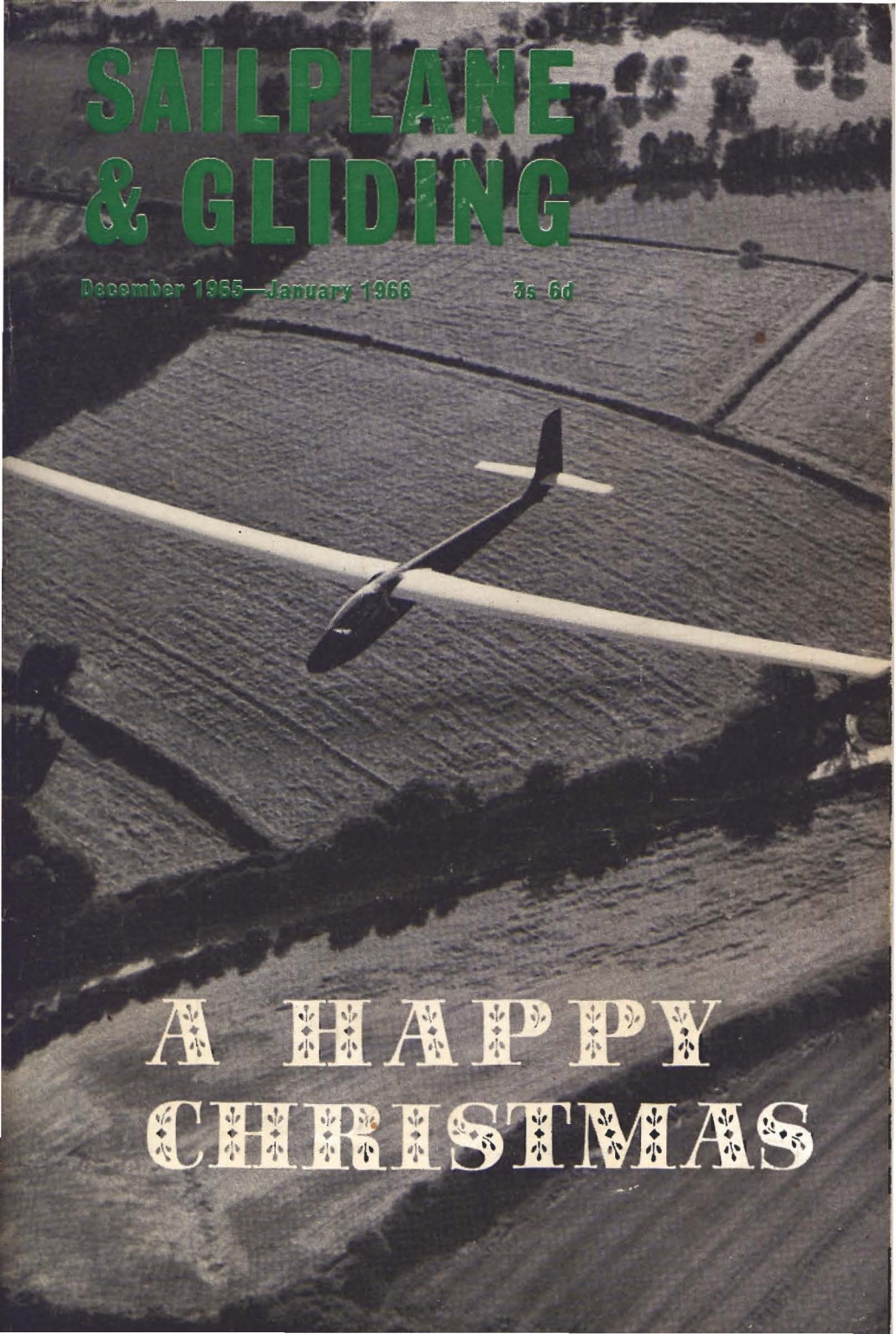
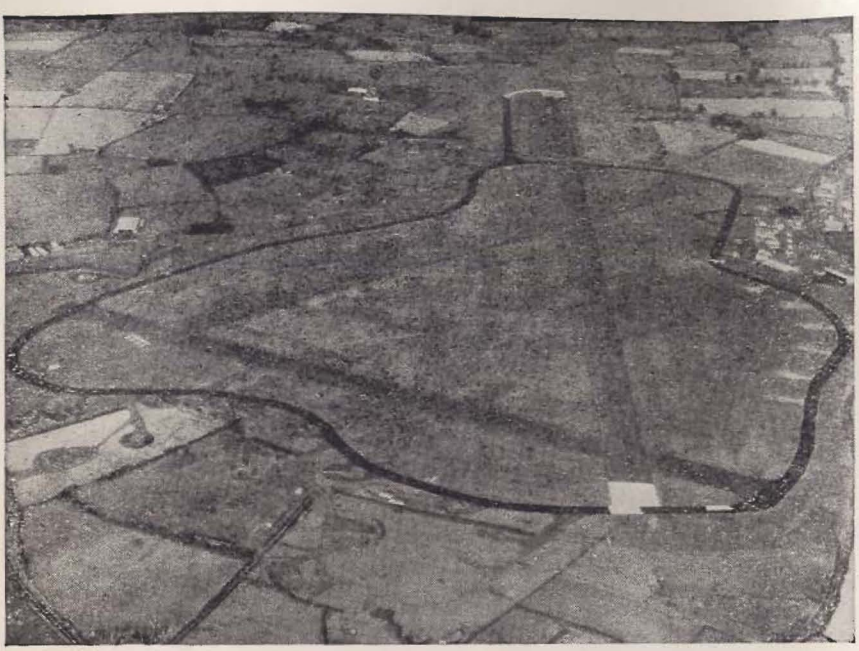
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Cover Photograph: David Carrow coming in to land in the Dart 17R. *Photo by Charles Brown.*

Published by the British Gliding Association, 75 Victoria Street, London, S.W.1 Sullivan 7548/9

Printed by The Amberley Press, Farnham, Surrey.

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GNOMENCLATURE

SOMEHOW there seems to have been so much to do this year that one felt we would never make it, and get through to Christmas. But, lo and behold, here we are in December, and the vivid and vital events of 1965 are receding and ossifying into history. Perhaps I should give that word a capital H, because 1965 will for ever be remembered as a vintage year in the History of British Gliding.

All the superlatives have already been applied to the World Championships and have collapsed exhausted in the ditch — like a good few of the organisers. But now we are getting our breaths again and looking around to focus the transformation scene.

Way up in the frozen North we can hear the busy hammers of the Gnomes of Kirbymoorside ceaselessly forging their Darts.

In deep caverns under Artillery Mansions, the Gnomes of Carrow are hammering out the future shape of the B.G.A.

Nick Goodhart keeps on trying to hammer common sense into the Gnomes of A.T.C. Wally Kahn keeps on patiently drilling for oil in the Department of Education and Science. Lots of us keep on smoking because we love W. D. & H. O. Wills.

Out of the minuscule office of SAILPLANE & GLIDING stream an endless file of Rika's Gnomes bearing more and more mailbags full of larger and larger issues of S. & G.

No matter where you look, ceaseless activity prevails. We are on the up and up, but paradoxically determined to keep our feet on the ground. 1966 promises to be a boom year.

So to all our readers at Gnomenabroad,
A Very Merry Christmas and a Happy and Prosperous New Year.

P. A. W.

TEN YEARS OF "SAILPLANE & GLIDING"

By ANTHONY EDWARDS, *Aberdeen Gliding Club*

LAST Saturday a happy reunion took place: my back numbers of SAILPLANE & GLIDING arrived after having been stored away for a year during my absence in America. And how I missed them! But they were due for a rest, because there can hardly be a more thumbed set in the country.

"S. & G." was formed by the amalgamation of SAILPLANE AND GLIDER and GLIDING in October, 1955, at a time when my gliding career encompassed nine T-21 flights, and George Whitfield was writing "turns are rather flat" in my log book. That October issue ten years ago recorded what I then believed to be the unchanging face of gliding — Philip Wills had won the Nationals, there was a photograph of an Olympia on the cover, *The Soaring Pilot* was reviewed, and there was an illustrated advertisement for Cosim variometers. Was it not ever thus? But more discerning readers would have noticed that there were a Skylark 3, an Olympia 4 and an Eagle in the Nationals (together with a Gull 4, a Kite 2 and a Prefect), that the founding of the Kronfeld Club was reported, and that Slingsby Sailplanes were offering advice on how to

repair the new-fangled glassfibre.

Thus, over the years, has "S. & G." recorded our progress. So often the earlier issues consisted predominantly of rather prosaic reports of leading cross-countries (now referred to as "milk runs"), though there was a liberal scattering of humorous entries, usually involving something to do with retrieves. We take it all so seriously now. But one thing has not changed — articles entitled "Cloud-flying made easy", or words to that effect, used to appear at regular intervals.

It is impressive how accurately "S. & G." has recorded and transmitted the mood of the gliding movement over the years, for reading past issues instantly recalls the atmosphere prevailing at the time — those long lists of C certificates seem to belong to another world already. Nowadays we have a good deal more B.G.A. business, but then "S. & G." is the Association's official organ; and "It's all yours" is a regular feature, though I sometimes wonder if this is not a little repetitive, to which Ann Welch may justly reply "but that is partly the point".

Club News has grown out of all proportion, and I find a very duff day is needed to make me read more than a small fraction of it. A possible solution to this overcrowding is a rota system in which each club reports only twice a year, instead of six times. This should help overzealous writers to forget just who did go solo last April..

There has been a tendency for articles emanating from the B.G.A. and its senior officers to be more self-congratulatory (about the movement as a whole) than modesty, and, I think, prudence, would allow. This is no place to review general policy (comments on which are invited by the Study Group, whose timely creation was recorded in the last issue of "S. & G."), but overall growth has greatly affected the character of our magazine. Where are those reports of mad expeditions, those sagas of weeks under canvas? Replaced, alas, by yet another missive (or do I mean missile?) from Artillery Mansions, or yet another description of yet another calculator, which no-one ever reads, as I know to my cost.

This raises the difficult question of how technical an article should be. My own experience is that an idea expressed in even the mildest mathematics, however well-received by the *cognoscenti*, does not get into general circulation. This is a pity, for progress is inevitably more complex than hitherto, and the conventional wisdom seemingly more ponderous.

Looking at ten years' copies arrayed on the floor, I am amazed at the consistently high quality of the cover photographs — some of the colour ones are magnificent. Indeed, they are the reason why I do not keep my copies in binders.

Let us hope that the high standard of writing (set by our prolific Chairman, and supported on at least one occasion by an admonitory note from the Editor) is maintained, and that however big the movement grows, "S. & G." will not lose that magic which has endeared it to so many readers at home and abroad. Under Doc. Slater there is, fortunately, little chance of that.

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COMPETITION SAILPLANES FOR WORLD CHAMPIONSHIPS

By Dipl.-Ing. B. J. CIJAN

Reproduced from O·S·T·I·V· Section, Swiss Aero Revue

IN spite of the standardized FAI/CVSM* contest requirements included in the CODE SPORTIF, the sailplane designer still has difficult problems to deal with. The main problem is the design of the sailplane to be the best possible for unknown weather conditions. Many of the unknown factors the pilot himself must deal with, and he has to use both technical and tactical techniques to come out on top. Before the contest starts he has to choose the aircraft and during the contest he has to take full advantage of his judgment of weather and best use of his radio aids, to mention only two items.

The Poles brought four Fokas to South Cerney, the Frenchmen four Edelweiss. Wroblewski and Henry solved all these problems in a masterly fashion with 15-metre aircraft. Of the 86 aircraft at the contest, 67% were Standard Class, and even 31% of the aircraft in the Open Class were also Standard Class machines.

In spite of the many limitations imposed on the Standard Class, the development is moving in two directions. Firstly, those developed in the "spirit" of the Standard Class, that is, an all-round club machine multi-duty aircraft, such as successful contenders for the OSTIV Trophy. The other direction in which developments are moving is toward the "Standard Racing Machine", to the same F.A.I. requirement but hardly in the proper spirit intended by the requirement, but nevertheless fulfilling it. The expected result of not taking account of the spirit of the requirement is, of course, that such crates never get a prize.

During OSTIV Jury discussions there have always been differences of opinion on this matter. The simplest and the only possible action required if you wish to fit advanced ideas to the spirit of the requirement is simply administrative. Make new rules, set new limitations, all for the sake of the "spirit" of the thing. The decision on such arrangements is in the hands of people who are really the representatives of the contestants, often representatives of the designers and delegated by the National Aero Clubs. At the C.V.S.M. their job is to consider very carefully what the technical people are thinking about and what they need. Now here are some questions:

1. Is there any sense at all in developing club machines of the F.A.I. Standard Class for the World Championships in an effort to win the OSTIV Trophy?
2. Is there any use in revising or adding any limitations to the present specifications for the Standard Class machine?
3. There are two possibilities for the solution of the future Standard Class problem. Either leave things as they are or throw out the present specification and do away with technical differences between the Classes. This will open up the Standard Class so that the designers can express themselves to the full.

If the designers feel that new 15-m. designs are more likely to be successful if they have lift-increasing devices, retractable undercarriages or special pilot position, why should they be prevented from getting on with it? These people do not want simple little club machines for World Championships. Why should

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administrative brakes be applied to a forward step just because of the "spirit" of the thing? We actually achieve the opposite: *"actio reactioni par est"*. Up to now such "out of spirit" aircraft, which have been tossed out of the 15-metre home, have found asylum in the Open Class.

So far the C.V.S.M. has properly considered everything: it has followed all progress and consulted specialists in motorless flight. On the other hand, at the last C.V.S.M. meeting in the spring of 1965 in Paris the members were hardly enthusiastic about the changes to the Standard Class specification suggested by OSTIV.

Let us try to give answers to the three points mentioned above:

ANSWER TO QUESTON 1.—There is now no point at all in any further presentation of the OSTIV Trophy for a Standard Class machine during World Championships on the basis of the old indefinite refrain of cheapness, simplicity and performance. In former years, the winning Standard Class machine was raised on a podium and the honour was celebrated with a splendid speech by the President of OSTIV. At South Cerney the rôles were rather reversed. The Foka 4 and Edelweiss stood invisibly on a podium near their pilots. The winning Dart 15 was not there at all and no OSTIV speechmaker could say anything. This clear declassification of the OSTIV Trophy in every way showed quite distinctly that the carrot had done its duty. No one doubts at all that OSTIV has done a terrific job in furthering the Standard Class and will do more, but this "spirit" business is done for. We have applied it to Ka-6, Austria, Vasama and now to the Dart 15, but it will take us no further, because the "spirit" itself cannot be developed and improved. The process of development of the Standard club machine can certainly be better done outside World Championships.

ANSWER TO QUESTION 2.—This will be answered below.

ANSWER TO QUESTION 3.—If we throw out the present FAI/OSTIV Specification, it will solve simultaneously a number of technical, sporting and administrative problems.

(a) Both Classes will be dealt with in the same way from the technical standpoint.
(b) The only limitation for World Championship machines would be the span. There would be no Standard or Open Class but rather a Class up to 15 m. span and another of over 15 m. span.
(c) The result would be that during the World Championships all problems involving the "spirit" of the requirements in connection with the OSTIV Trophy would no longer exist.
(d) Classic club machines of the Standard Class would still be permitted to take part in World Championships and would certainly do so. The de-

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signers of these aircraft, however, would be able to produce improved aircraft in the new "up-to-15 m." Class by various means, but this "spirit" factor and other limitations fall by the wayside. When some years ago the Foka brought up the matter of "spirit", it was classified as a pure racing machine. We find now that it can be considered a normal club machine for properly trained pilots and at the same time a remarkably good contest machine.

(e) The 15-m. span contest machines will have a home and will find it unnecessary either to enter into the free Open Class or attract criticism regarding the lack of "spirit".

In case one still wishes to discuss an answer to QUESTION 2, it could be said that all OSTIV proposals for altering the conception of new machines result in no advance whatever. They are little compromises which cannot last.

On the basis of Suggestion 3, the problem of "spirit" is finally exorcised, for the modern 15-metre machine can no longer carry such a burden on its back. The pilots want a racehorse for the World Championships and not a club hack. The 15-metre machines have brought great technical advances with them, and it is certainly not by chance that at South Cerney in the Open Class half of the first twelve pilots used Standard Class machines.

Now a further thought in this connection: the evaluation of the daily discipline during the World Championships. A standardized evaluation for one and the same daily problem for both Classes is certainly simpler from the technical and competition standpoints. It also clarifies things and one can easily compare the performance of both Classes. Such a single evaluation makes it possible to name, in addition to the winners of each Class, an absolute winner, which up to now has not been possible. If such a scheme would further stimulate our sport, why should we not get on with it?

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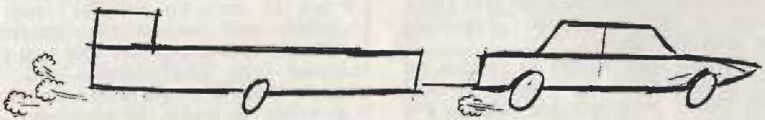
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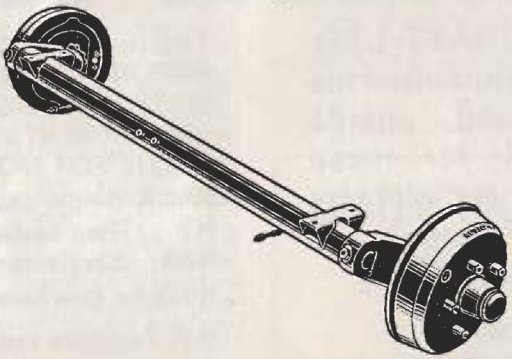
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FLYING THE DART 17 R AND THE AUSTRIA 17 SHK

By TONY DEANE-DRUMMOND

I HAD the very good fortune to fly the Dart 17R owned by David Carrow and partners and the very next day to take the Austria 17 SHK, owned by Denis and Ann Burns and partners, on a 1½ hour trip round the clouds within 20 miles of Lasham.

The Dart was very well equipped and instrumented while the Austria's instruments were not yet up to competition standard. A direct comparison from a handling point of view was possible but centering the Austria in a strong thermal was not so easy because of the type of variometer. The first metre/sec. was expanded about ten times the subsequent metres/sec. on the same scale. This sounds like a good compromise but I did not like it.

Both gliders have a very similar specification. The wing loading of the Austria is very slightly higher at 5.2 lb./sq. foot. The span and cross section area of the fuselage are the same. Both have retracting undercarriages. The Austria's fuselage is very much shorter, but the V tail looks overlarge on the ground and is 50% bigger than the old standard version. The Dart has tiny tail surfaces in comparison, at the end of a long fuselage. This particular machine had ailerons extended nearly to the wing tip and the rudder area had been increased by 25% over the previous versions. The Austria's general finish was noticeably better than the Dart, although the latter's was a higher standard than most of the others at Lasham. The Austria used ball bearings in the aileron hinges and the small gap between the aileron and the wing was sealed with white plastic tape. The Dart's ailerons followed normal Slingsby practice and were sealed with sponge plastic, leaving a ¼ inch gap between wing and aileron. The Austria's wing tips were shaped in an attempt to move the vortex further out. Both gliders used a reduced incidence of wing to fuselage so as to reduce the drag of the fuselage at higher speeds. This was a direct advantage derived from using a retracting wheel.

Take-off in the Dart was preceded by a 10-minute briefing on what to do if the wheel failed to come up, stuck half way or failed to come down. A hydraulic system is used, with micro switches working red and green lights to show the position of the wheel. A further micro-switch, on the dive brake lever, sets off a hooter if the wheel is not down for landing. It all sounds quite fool-proof and time will show if the extra complication and expense of a hydraulic actuating gear is really necessary.

Flying the Dart was great fun. All controls harmonise nicely together, the trimmer works quite positively and it immediately induces a feeling of confidence in the pilot. The aircraft could be set into a turn and trimmed to fly hands and feet off the controls. The rate of roll was excellent and seemed to be under 4 secs, on the usual 45° to 45° at 48 knots I.A.S. A straight stall was carried out with no tendency to drop a wing, but a stall with a wing down immediately resulted in an incipient spin. There was plenty of warning before this happened, and it is the sort of thing that an experienced pilot will never do, but it might catch out a pilot who had not much background of soaring. The ventilation system did not work very well and also appeared to be the source of a lot of noise. It is not until a pilot flies a really quiet glider like the 419 or 465, that this feature becomes so desirable. My general impression of the Dart was that this version with extended ailerons and rudder had quite delightful handling and generally felt like a much smaller glider than it really was. The retracting wheel worked well, red and green lights glowed and a definite improvement in the "slippery" feeling of the glider was obvious with the wheel retracted.

The Austria was nothing like so nice to fly and it felt a big ship. Ailerons were rather heavy in comparison with the rudder and elevator (from the pilot's point of view) and the trimmer appeared to be ineffective by comparison with the

Dart. The wheel comes up easily with rather less pressure than is required for the hydraulic system on the Dart. No warning lights are fitted.

Bank has to be held off in a turn to prevent the angle increasing, although the aircraft was stable longitudinally. No particular difficulty was found during two climbs to 8,000 feet and 10,000 feet flying on a turn and slip, and an experienced pilot will quickly get used to its rather bizarre handling and soon learns to make use of its excellent performance. The ventilation system worked quite well but was also rather noisy. The stalling characteristics were quite normal with slightly less tendency to spin incipiently than the Dart.

I was not involved in the direct performance comparisons carried out between the two aircraft, but the Austria is better at all speeds. The difference at the low end is only marginal but at 70 knots it is quite noticeable. A small part of this may be due to better finish, but I fancy that the major credit must be given to Dr. Eppler and his aerofoil. Excellent handling will give the Dart an advantage in thermals but it may lose a little in glides to the next cloud.

Rigging and de-rigging the Dart is delightfully easy, whereas I fancy the Austria may prove to be a bit of a pig. At present the Burns syndicate do not own a trailer for it, but as the system is identical to the Austria S, I have no doubt that this part of the operation will be avoided if possible.

All in all the Dart has a lot of advantages. Its performance outclasses all other British gliders, but appears to be a bit less than the Austria at speed. In nearly every other way it is ahead.

* * *

GEAR-UP WARNING

MOST gear-up warning systems cost a great deal of money and are far from foolproof, fools being what they are. Paul Schweizer, who flew a 2-32 with a retractable gear at Adrian this year, has a warning system that probably didn't cost more than a quarter — and a perfect record for gear down landings. Paul uses nothing more than a white linen handkerchief which begins its service tied to the release knob. Thus, when Paul pulls the release knob he is reminded to retract the gear. At this point the handkerchief is switched over to the spoiler knob where it reminds the pilot to lower the wheel prior to landing. You can also use this warning system to wipe your brow and blow your nose, which is more than can be said for flashing lights, ringing bells and sweet whispered somethings.

SOARING, *October*, 1965

B.G.A. NEWS

Annual General Meeting

The British Gliding Association's Annual General Meeting will be held on the 12th March, 1966.

Council has agreed that it should take place this time in the North of England and Harrogate has been chosen as the place of venue. More details will be published later.

Nationals 1966

The dates for the Nationals 1966 have been fixed from 21st-30th May and they will be held again at Lasham Aerodrome.

Competitions Committee

Council has appointed Mrs. Ann Welch as Chairman of a Committee, the Competitions Committee, to look into the future structure of National Championships, Regional Competitions and any alteration to the Pilots' Rating Scheme thus made necessary. Council will consider the Committee's recommendations as soon as they are available, but alterations, if any, will at the earliest be in 1967.

Bronze C

Council has decided that there should be a new badge, the Bronze C, between C and Silver C. This new badge would be the minimum qualification for cross-country flights. Requirements and standards are in the process of being worked out. Further information will be published as soon as it is available.

DON'T FOLD UP YOUR WINGS

By VIKTOR GONCHARENKO

An account of the Soviet Out-and-Return Record, translated by CHRISTOPHER WILLS from "Krilya Rodiny."

EIGHT years ago, after an unfortunate attempt to break the distance record, I wrote on my writing pad: "A record is a peak which all sportsmen dream about, but it cannot be achieved just like that."

During the past year I watched a high-jumping contest in the Dynamo Stadium at Kiev, when Valery Brumel just failed to break the world record; as he walked away, he looked obstinate, as if to say, I shall come back to you and try again. And here I understood that records only give way before obstinacy. It is necessary so to crave for the peak that it cannot possibly hold out against you. Without this, it is not even possible to ascend the foothills. Thus, I left the stadium, having learned a good lesson.

On the first possible day, I went out to the aerodrome, got into my glider and, as usual, flew along the course to Rovno. I had, as a passenger, the young lady glider pilot, Valya Klimenko. She had not yet flown beyond the boundaries of the aerodrome, and therefore looked at the world below with wide eyes. Things did not go badly for us at first. Lift easily carried the Blanik to around 2,000 metres and we, making great progress, gradually approached the sacred spot on our map where a black dot indicated the aerodrome of the Rovno Aviation Sport Club. Observers were waiting for us there. After 5 hours of flying, we were above them. I made only one or two joyful turns and set off back. Yes, back. Things were only half finished. I had declared an out-and-return record. Now it was necessary to get home.

Strong winds began to hinder our journey, and in the direction of Rovno there appeared thin feathers of high cloud, the sure signs of a warm front, enemy of glider pilots. They quickly grew threatening. For two hours I struggled with the warm front, but it engulfed us like a wave and we had to land beside the small forested village of Kobyil. And so yet another attempt had ended in failure.

"Don't be distressed, Viktor Vladimirovitch," said Valya, "there will be a chance to try again." But it was not to be. Ten times I flew to Rovno, but each time failure dogged me. The clouds grew into storms. Then there was rain. Then, very weak thermals. The year went by, and still no record. Already, in 1961, two Moscow glider pilots, Yura



Viktor Goncharenko



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Leifer and Eino Khysy, one in a two-seater and the other in a single-seater, flew an out-and-return record of 438 kms. It seemed that glider pilots from many towns were trying for the national records.

Ah well, I said to myself, let us wait for the new season.

There it was, the new season with its unexpectedly cold, capricious spring. At this time a new A-15 single-seater sailplane made its appearance on our aerodrome, impressing all glider pilots with its high performance. Practising in it, I decided to attempt the Rovno flight as soon as the weather permitted. Maps, barograph, radio and the glider itself, all were made ready. The forecasters divined their charts and decided that 14th May would be generally unstable. Already, at 10 o'clock, cumulus clouds were going past with lift under them. Two other pilots decided to fly with me in two-seater Blaniks, Master of Sport Evgeny Rudenski and First Rank Pilot Yura Perler. Starting at 11 o'clock, we set course for Rovno. But we had not succeeded in going more than 100 kms. when the sky ahead darkened, filled with rainstorms, and we returned home.

Is it not better, I asked myself, to wave one's hand at all this and fly for pleasure, forgetting about the record? Then I remembered Brumel, how he paced out his run-up, and how he looked after his three failures. *No, never give up!*

On 21st May the weather was not for record flights. A strong contrary wind was blowing and the sportsmen doubted whether it would be possible to get to Rovno. I risked it. During the first hour, I flew 40 kms. The wind drove dust along the roads below and ruffled the waters of the many forest-bound lakes. During the second hour I managed in all 80 kms., and I came to a region where there were almost no thermals. My A-15 descended over some crumbling little village to 250m. Choosing a field, I turned my glider towards it. Suddenly, when I was over a fir wood, I saw a stork. He was circling over a field. I proceeded there. The glider shuddered and the needle of the variometer, wavering between lift and sink, timidly began to indicate climb. It is a thermal! I banked steeply and began

to circle with the stork. In ten minutes my A-15 had climbed to 2,000 metres.

Now it was possible to go on. All went well and, at 3.15 p.m., I was above the familiar aerodrome of the Rovno glider pilots. Two Blaniks came up to me and greeted me with rocking wings. Sports Commissars said over the radio that they had "noticed" me and wished me a happy return.

The return journey almost always needs skill. But this time it was easier for me. The wind, which had formerly been seriously against me, was now a great help, and it increased my speed over the ground. After 7 hours 15 minutes I crossed the finish line, and after two more minutes, happy and a little tired, I got out of the glider. Friends shook my hands. That impartial witness, the barograph trace, with all my ups and downs, was "fixed", and official observers again worked out my course — 480 kms. out-and-return, 42 kms. better than the record of Yura Leifer.

I remembered at this moment all my other attempts and all the failures during the three years, all of them indelibly in my memory, and I felt that, even with this flight, nothing was completed. Conversely, it was only a preparation for another peak for which everyone strives — a world record.

Yura Perler came up to me. "I only wish that I had come with you in the Blanik; I might have succeeded in going the sacred distance . . ."

"It is nothing Yura; don't fold up your wings," I encouraged. "You are only just beginning. You have all before you, and if it is not I nor you, then some of our friends will gain the peak of world records. It is not easy, of course devilishly not easy, but not impossible. One has to be a fiendishly obstinate person. One has to wish very much . . ." And I remembered the look of Brumel after his unsuccessful jumps.

The peak remained unconquered, but the sportsman went away unbeaten. Is it not part of the joy and happiness of a favourite sport that makes humans proudly and persistently strive for goals? And if not you, then others will conquer the sacred peaks. It is all the same. It is good that the sacred peaks submit themselves to human conquest.



ANNUAL GENERAL MEETING

EXTRACTS from the honorary secretary's report to the A.G.M. on 13th October:—

This has been the first year that the Club has operated entirely in our renovated premises, and it is with pleasure that the Committee have to report that financially the year has been successful.

The premises are now open each evening, Monday to Friday, between 6 p.m. and 11 p.m., and although we have had difficulties with staffing the bar, we have secured the services of Mrs. Peta Izzard, and we hope that this will be a satisfactory answer. She is well known in gliding circles and her presence should give the bar the wanted personality and character.

The activities of the Club have widened, and we have continued to maintain the closest possible relationship with other clubs and bodies interested in light aviation and gliding, and this is a policy that will continue to be pursued.

The Committee are very concerned that the Club receives the maximum utilisation that is consistent with providing congenial surroundings and

pleasant service to the members, and it is hoped that the facilities now offered will mean that more members will use the Club other than on a Wednesday, and introduce it to their friends who have any sort of aviation interest. Subscriptions for 1966 are to remain at £2 and £1 for country and overseas membership.

The financial success this year is in no small part due to the two Art Exhibitions so ably organized by Yvonne Bonham and Margaret Kahn.

We are pleased to report that our association with the Royal Aero Club continued throughout the year, and some 50 associate members became members of the Kronfeld Club.

We have to report that Mrs. Yvonne Bonham, after a number of years as the Club's Honorary Treasurer, has submitted her resignation, due to her increasing commitments. Yvonne worked tirelessly on the Club's behalf and we would like to record our appreciation of her services. We are relieved to know that she will continue to be responsible for the organisation of the Annual Art Exhibition, and is willing to continue to serve on the General Committee. Diana Thomas-Ellam has agreed to take over as Hon. Treasurer.

Organisation of lectures continues in the capable hands of May Marven, and I think it is generally agreed that the Club's high standard has been well maintained.

David Scallon has been responsible for the Club's Newsletter, and Ron Willbie, as always, has remained Chairman of the Wine Committee.

It is always difficult to predict the future, but one thing is entirely clear as far as the Kronfeld Club is concerned, and this is that it must continue to be a principal centre of gliding and light aviation and, in this connection, it must continue to rely upon the enthusiasm and help of its officers and various individual members.

The full Committee for the year 1965/66 is as follows:— Hugo Trotter, D.F.C., Hon. Chairman; Cliff Tippett, Hon. Secretary; Diana Thomas-Ellam, Hon. Treasurer; Wine Committee, Ron Willbie and E. Pollard; Publicity and Advertising, David Scallon; Social and Lectures, May Marven; Membership Secretary, Mary Overton; Exhibitions, etc., Yvonne Bonham; Committee Secretary, Jill Walker.

On 3rd November Sir Dermot Boyle, G.C.B., K.C.V.O., opened the 8th Annual Aviation Art Exhibition at the Club. This continues until the end of the month; a full report will appear in the next issue, but meanwhile we give below the results of the competition, judged by G. Davison-Coulson, R. Nockolds and David Shepherd.

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

Dec. 1. Helicopters, by Lt. Cmdr. J. S. Sproule.
„ 8. The Aeroplanes I Have Built, by Hugh Kendall.
„ 15. Adventures Around the Dead Sea, by Romilly and Joanna Waite.
„ 22. Grand Christmas Party. Admission 7s. 6d.
„ 30. Aviation Film Show.
Jan. 5. An Air Attaché in Russia: Air Vice Marshal M. D. Lyne.
„ 12. Debate.
„ 19. (See posters.)
„ 26. Severn Wildfowl Trust Film.

* * *

ART EXHIBITION PRIZE WINNERS

Overall Winner
Norman Hoad (Challenge Trophy).

Oil Paintings
Gliders. 1st, N. Hoad; 2nd, Margaret Kahn; 3rd, R. Willbie.
Commended. V. H. Veevers.
Powered aircraft. 1st, N. Hoad; 2nd, Margaret Kahn; 3rd, J. Palmer.
Commended. J. Nash.

Water Colours, Goucha, Poster, Plastic
1st, J. Palmer; 2nd, Sheila Innes; 3rd, V. H. Veevers.

Line, Pencil, Crayon, Pastel, Mosaic
1st, N. Hoad; 2nd, Carolyn Watson; 3rd, M. Barraclough.

Best First Entry
Louisa Bryant.

Professionals
1st, R. Nockolds; 2nd, M. Turner; 3rd, R. Robinson.

"I HAVE HER"
or
"How not to pass an Instructor's Course"

By BILL FAY, Coventry Gliding Club

I SUPPOSE the butterflies first became apparent when the C.F.I. told a few of us who had been Club Instructors for a while that we should take an Instructor's Course with the ultimate object of getting a Category. One or two of them managed to get fixed up with a course on the home site, but business conditions precluded me from any such luck and I appeared to be doomed inexorably to nine terrifying days at — lower your voice and speak in bated breath — LASHAM!

All of us were agreed that this was the end; soon the errors of our ways would be discovered and gliding would shortly be over and just a happy memory, for far from any ideas of Categories, the National Coach was bound to discover our flying deficiencies, and a short sharp note to our C.F.I. would end it all. There was still one hope left as I drove southwards on Friday evening — the weather, the jolly old English weather, would never disappoint us; it was bound to bucket it down all the week and we would emerge triumphant after a daily round of lectures and being packed off to the pictures.

How faint the hope that springs eternal! Saturday morning dawned bright and cheerful with lots of gliders being feverishly D.I'ed and rigged. The National Coach herded us into the Briefing Room, and after all of us on the Course had mutually introduced ourselves he gave us a welcome to the nine days of danger. Unfortunately, he said, somebody had "bent" the Capstan so we would have to rely on the good offices of the School for the loan of whatever gliders were available for the week. Accordingly the rest of the day was spent in getting to know each other and discussing the first basic essentials of instruction.

Sunday morning was glorious, with cumulus popping everywhere just as we arrived, and the order of the day was — "Extract the Eagle from the hangar and get it inspected". It befell a poor victim from up the North who held a commercial pilot's licence to be told to demonstrate the D.I. and we were promptly led into the mysteries of altimeter faults, QFE's and all the rest of it. "Any criticisms?" said John Everitt. "Yes," said one, "what's a QFE?" With our budding instructor suitably admonished for talking too highbrow to us pseudo ab-initios, 96 was towed out to the launch point. Gradually each of us had a first launch to demonstrate our flying abilities, or the lack of them, before the instruction proper commenced, and in this respect the National Coach has a very disconcerting habit of not saying anything when you expect him to, and saying something when you don't expect him to! On landing, the dreaded words did not appear, so I thought to myself: "I must either be a very good pilot or, more probable, too hopeless for words!" The Eagle, or "Mahogany Bomber" as she is often called, proved, despite a lot of old wives' tales, to be a most pleasant aircraft to fly, and I am certain that most of us who had not flown one before were pleasantly surprised.

By Monday we were all starting to congratulate the B.G.A. on its choice of week, as the ridge of high pressure was gaining a firm hold and faces were beginning to look disgustingly healthy for the end of an English September. With the departure also the night before of the assorted Lasham medley of week-end pilots back to their several occupations, we felt a little more room to breathe, and by Monday evening, after one or two of us had managed to fill in with a most enjoyable soaring ride in the Swallow, we were beginning to feel decidedly contented. Too quickly the warm sunny days unfolded themselves, with regular instructional flights

in the Eagle interspersed with lectures by Ann and Lorne Welch, Frank Irving, Paul Minton, and a friendly informal chat with Wally Kahn, all serving to emphasize that instructing involved far greater responsibilities than just sitting in the back and keeping one's fingers crossed. The talk by Lorne Welch on away landings was particularly memorable, as the table-tennis table became a chalked network of railway lines, overhead cables, rivers and small fields, with every known hazard appearing in some part or other. I am convinced that the finished product could have been marketed most successfully as a new type of indoor game, "Away Landings", with penalties for over-shooting into hedges and the like! After a while we managed to dispel earlier suspicions that the National Coach was trying to catch us out on every flight, although speaking personally I must say at first I never could fathom whether, when we were on final crosswind leg and John Everitt was peering here, there and everywhere, he was playing the part of a pupil who was not looking where he was going, or if he really were John Everitt being very concerned that we were keeping a good lookout.

All in all an excellent week, and I am certain my colleagues will agree with me, of great benefit to all, also for most of the time decidedly acceptable weather-wise although, as John kept drumming into us, we did not go to enjoy ourselves!

Memories to be held in store for the long winter nights ahead? The potential instructor who had to be away like a flash every night to engage in lighter pursuits and soon became known affectionately as "Crumpet"; the type from Nympsfield who held very decided views on the kinetic energy of gliders travelling up and down wind and who could not understand why other pilots did not increase speed in turns relative solely to whether they were going into or out of wind; the silent look of horror on the faces of the Boy Scouts when we occasionally nabbed "Daisy", the T-21, for a few launches; and finally, having deliberately placed the Eagle on aero-tow out of position to demonstrate correction, "Just bank gently behind the tug and check the movement as we get there," "that's it — we are now in the correct position," to hear the laconic voice of the National Coach saying "Are we?" and finding that we were just as far out of position the other side!

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"GUINEA-PIG"

By DAVID CARROW

THE Slingsby Dart 17R story started at the end of October, 1964, when on a bleak misty day at Sutton Bank, Humphry Dimock and I were fortunate enough to be offered flights in Nick Goodhart's brand new 15/17 metre prototype, with detachable tips, which had just started its tests the previous weekend.

Humphry had come to Kirbymoorside determined to press for a glider with a retracting undercarriage at any cost — prepared, if need be, to finance the development himself — bless his stout heart! I, on the other hand, was there purely by good fortune, *en route* from Newcastle to East Anglia and suddenly with a day to spare because of a cancelled appointment; a slender thread of chance and a kind invitation out of the blue combining to make the opportunity.

My partners and I had for some time been considering a replacement for our ageing Skylark, "Pigs Rampant", the second 3B ever made and now 8 years old. Humphry wanted the ultimate; we wanted a new syndicate glider and had not been satisfied previously that either the Skylark 4 or the original Dart 15 represented a sufficient move forward.

Humphry's ideas, and mine, and those of the firm all suddenly coincided and added up to a specification. Could we each please have a full 17 metre glider, not with detachable tips, with the metal spar booms just being developed, with a retracting undercarriage, the wing-fuselage incidence reduced, full span tailplane anti-balance tabs and, for our aircraft, extra span on the ailerons and 3 in. more chord on the rudder (extra rudder to balance the additional aileron and also for landing crosswind on a wheel set right forward with no skid).

I wrote a rather small cheque out by way of deposit and rushed off to telephone my partners who, to my great delight, agreed that the whole proposition sounded quite promising.

Some months later I was dictating a letter accepting that we would be the guinea-pig for the hydraulic undercarriage retraction system and suddenly realised the new aircraft had a name! We took delivery this July.

Nicholas Goodhart has written up the evolution of the Dart 17 (*Flight*, 27th May, 1965) and our "Guinea-Pig", a Dart 17M/R Mk. 2B, to give it the full works title, carries his story a further step forward. First of all the performance at higher speeds is greatly enhanced both by the retractable wheel and the reduced incidence — one cannot yet say by exactly how much, and the glider has gone to Cranfield for a Polar this Autumn. But I already have a private "U" polar based on comparison glides with George Burton's early Dart 15 (which Cranfield have tested) and with other gliders and let it suffice here that in genuine 5 kts. achieved lift I shall be cruising at 90 kts. between thermals — faster than a Foka, right up in the Austria class. Max. L/D? Oh all right, of the order of 37, plus or minus 5% till Cranfield give their answer.

Secondly the handling is quite staggeringly good; the full span anti-balance tabs have appreciably improved the rather sensitive elevator control and the ailerons and rudder are delightfully co-ordinated. In smoothish air the aircraft can be thermalled "hands-off" in gentle turns with no appreciable holding off bank and she is particularly stable in cloud. The rate of roll 45° to 45° at 48 kts. is around 4 seconds, effectively the same as the Dart 15 and with only marginally heavier stick loads. The aircraft feels smaller than 17 metres and, as Tony Deane-Drummond has said, is great fun to fly.

Thirdly, the glider will "scrape" in rough or broken thermals or in weak lift as well as a Skylark 3 — and this is perhaps praise enough. Better in fact, for unlike a Skylark she never seems to "wallow"; one feels the wings are biting the utmost out of each surge of lift. Stalling at the maximum all-up weight of 780 lb. is about 33 kts. and one circles, even in roughish air, at 40 kts.

Cockpit comfort and ease of rigging have been praised by Nick in his article, and one can only endorse all that he says.

In a commentary such as this one

must, of course, give both sides of the picture. Perhaps the only fundamental criticism is that, as in the Dart 15 and many Continental gliders, a wing will sometimes drop at the stall. There is ample stall warning and recovery from an incipient spin is immediate; nevertheless one cannot pretend the aircraft is as utterly docile as earlier Skylarks and a pilot inexperienced on the type, suddenly pulling excessive "g" in a turn without noticing it because of his reclining position, can be caught out. Turning to details, I personally rather dislike in principle the hydraulic undercarriage actuation and would prefer to see a mechanical system eventually developed. The cockpit ventilation is somewhat inadequate, and the wing surface of our aircraft, though good by British standards, is not yet in the class of the superb continental finishes we saw at South Cerney.

These details can in due course all be improved and indeed one of the most exciting things in the Dart 17R is its tremendous development potential. We have at last the start of a new generation, our "Great Leap Forward", a basically right concept and, quite simply, as big a landmark in British gliding as the Olympia 2 and the Skylark 3.

* * *

MANUFACTURERS' NOTES

The Dart was originally conceived as a 15-metre span aircraft for use in the Standard Class. The prototype first flew in November, 1963. This aircraft was test-flown through the winter of 1963/64 and was put into production in the spring of 1965. The performance of this aircraft in low-speed turning flight was thought to be inadequate, although the reasons for this were not immediately obvious.

As an interim modification to try to improve the performance of the aircraft, a wooden-sparred 17-metre span aircraft was produced.

The next stage in the development was the introduction of a metal spar and a modification to the wing-root fairing. The metal spar gave a saving in weight of 45 lb. on the 15-metre version, and modification to the wing-root fairing gave a substantial reduction in drag in low-speed flight. This version has proved extremely successful, and it was this aircraft that was flown in the recent World Gliding Championships.

An additional version was introduced in June of this year with variable span between 15 metres and 17 metres. The 15-metre span has an application on extremely strong thermal days, since it can be flown with either a higher red line speed or an 80 lb. increase in cockpit load.

In July of this year the first retractable undercarriage version was flown, and this type also included reduced wing incidence to cure the former nose-down attitude in high-speed flight, which was the result of the generous take-off incidence designed into the aircraft for winch launching.

Other minor modifications introduced into the 17-metre version were the increase in the rudder chord of three inches and longer-span ailerons. The following mod. numbers apply to the aircraft:

No.

14 Span increased to 17m. from 15m. (wood spar).
15 Wing-root thickness reduced from 20% to 18%.
22 Wing spar now metal instead of wood (on 15m.).
26 15/17m. version.
28 Wing spar now metal instead of wood (on 17m.).
29 Undercarriage now retractable and wing incidence decreased 5°.
31 Rudder chord increased by 3 inches (on 17m.).

W. N. SLATER, *Managing Director, Slingsby Sailplanes Ltd.*

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SOVIET LESSONS FROM THE WORLD CHAMPIONSHIPS

Translated from "Krilya Rodiny" by CHRISTOPHER WILLS

THE Soviet Union was represented by M. Verietenikov and V. Chuvikov in the open class, and I. Yarushevichus and O. Suslov in the standard class.

The effort of our glider pilots was a failure. I. Yarushevichus and O. Suslov came last and V. Chuvikov and M. Verietenikov only managed to take 22nd and 32nd places respectively. What was the cause of this failure?

The basic and chief reason was the inadequate training of our glider pilots in flying under complex weather conditions — particularly the sort they were likely to encounter in England: low cloudbase, weak thermals, and bad visibility which makes flying on course difficult.

For the training flights, a country of good climatic conditions and relief was chosen. The pilots, even then, only flew when the thermals were strong and the cloudbase was high. Before departing for England, they trained at the town of Donetsk. The trainer, however, fearing the arrival of complex weather, went with the team to Dnepropetrovsk. Last year, for some reason, the members of the team did not take part in a National Meeting. So they found themselves alone and flew how and when they thought fit.

In the Championships, the Poles, the French, the Germans and others flew well, thanks to excellent co-operation with their teams on the ground. For example, every member of the Polish team, including the drivers, assisted the pilots. They went out on the roads early and gave their pilots full information about the weather, helped them to find thermals and also with their navigation. Our teams included many people who knew little about gliding. They did not leave before the starts of the respective flights and therefore our pilots were not able to benefit like those mentioned.

It has long been known that in bad weather it is better to fly as a group in order to make the finding of thermals easier. However, already during one of the first flights, this was not adhered to. Iozas Yarushevichus found himself in a bad position and he was losing height. Along the course there was smoke, and visibility was limited. He did not know where to find any more lift. Not far away, Verietenikov and Chuvikov were circling. Yarushevichus asked them to wait a little so that he could fly under them to gain height. They did not wait for him, and so their comrade, not finding any lift, had to land and broke his glider.

The director of the team, E. Stepanov, and the trainer, L. Petrianov, would often call up the glider pilots during their flights, asking about conditions, giving unnecessary information. Post-mortems of the flights, with the whole team present, were enough to make everyone nervous.



Mikhail Verietenikov (left) and Vladimir Chuvikov at South Cerney. Chris Wills in background.

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We do not understand why the chief glider trainer, P. Antonov, did not train the team for the Championships. Last year, at the international meeting in Czechoslovakia, he must have learned sufficiently well how to train glider pilots for a competition. Nor do we understand why the Chief Trainer did not come to the World Championships.

The Directors of DOSAAF prescribe that pilots, when down to 300 metres (1,000 ft.), should abandon soaring and look for a landing field. This is necessary for beginners, but one would have thought that experienced pilots could do without this limit. As Verietenikov states, this regulation was enough to make our pilots' knees tremble every time they were down to 300 m. and to make them abandon all thoughts of continuing the struggle in order to seek a landing place.

Some people say that the reason for our failure was due to unsuitability of the A-15 and KAI-14 for English conditions. Yes, our machines have a high wing-loading for weak thermals. But the Hungarians also flew A-15's and they were better placed than Chuvikov and Verietenikov. To be just, it is only fair to note that Hungary has entered many contests, and they have a more sensitive variometer.

It is to be hoped that the directors of aviation training and sport, DOSAAF, the Federation of Aviation Sport of Russia and its Gliding Committee will draw serious conclusions from the lessons received at the World Championships, and will really help the development of gliding in our country.

[The article is unsigned.—ED.]



Iozas Yaruschevichus in the KAI-14 with low canopy. Elizabeth Douglas looking on.

FIRST PLACES FOR THE NEW CHAMPIONS

By C. E. WALLINGTON

MY article, "Throw Away The Slide Rule", seems to have stirred up much correspondence and discussion. The basic principles have been applied to some rallies and are being considered for national championships in several countries.

The main points of discussion have been on how to apply the system and how to judge its fairness as compared with the present points system.

The question of fairness does not have a single answer; there is no unique yardstick to measure the unspecified mixture of ill-defined qualities that appear to merit reward in a contest, and hypothetical cases can be tailored to fit almost any argument. However, in a competition with at least five generally accepted fair contest days, the present points system and the new system should yield broadly similar results. Both systems are virtually based on similar principles; the points system has in effect shifted its roots from old to new concepts of competition flying, whereas the placings system is a more direct expression of modern concepts.

In the 1965 World Championships the two systems yielded the same champions, and, broadly speaking, somewhat similar positions for the other pilots. In fact, about 20% of positions are the same and approximately a further 30% are within one place in both Open and Standard Classes. The biggest difference is one of eight places, but this was in a closely packed group occupying places 11 to 18 in the Open Class. There was a mere 125-point range in the points accrued by the pilots in this group, so it is not surprising that slight differences in the marking system produce noticeable changes in positions.

Ron Watson has made a comparison between results from the points and placings systems for this year's London Regionals (see October issue, page 447) and Tony Pentelow has done the same for the Western Regionals. The Western Regional comparison is shown below.

Comparison of Positions for Western Regionals, 1965

A	*B*	*A*	*B*
1	1	11	12
2	2	12	13
3	4	13	10
4	3	14	15
5	5	15	14
6	6	16	16
7	7	17	17
8	8	18	20
9	9	19	18
10	11	20	19

A=Position with points scoring system
B=Position with place working system

The similarity here is obvious, but in contests where the comparisons are not so easy to judge at a glance there are several statistical tests that can be applied. Application of such tests to the 1965 World Championships and the Western Regionals do not reveal any significant differences in the results of the two systems.

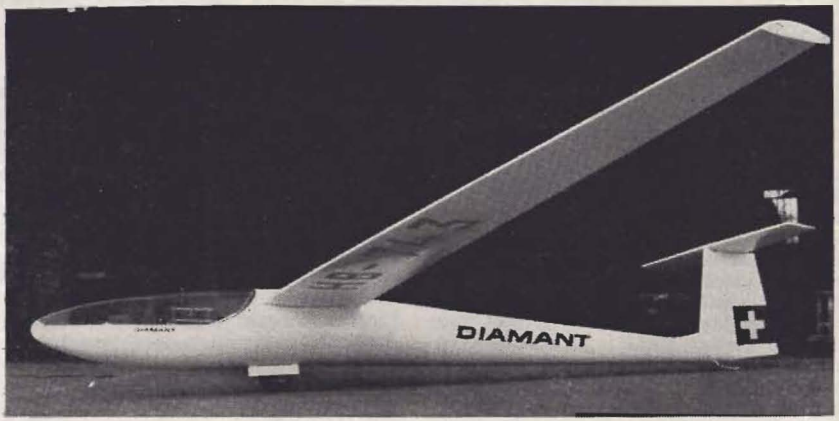
Applying the new system

Application of the placing system to the Regional competitions has been on the basis of local interpretation of the principles. Variations in the interpretations have provided experience which will be useful when formal rules are drawn up. But there are a few particular aspects of the system that need clarification or discussion.

Minimum scoring distance

There is no need to specify a distance corresponding to 2X in the points system

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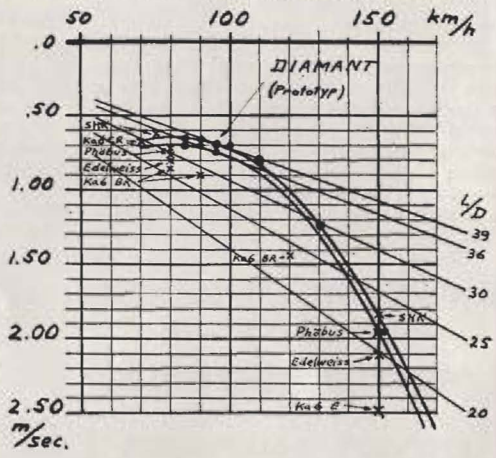


How does the DIAMANT perform?

Organised by members of the Zurich Academic Flying Club, several performance tests were conducted with the DIAMANT. The results obtained so far are shown on the diagram. They are in no way final, since only a limited number of measurements was possible. For this reason, instead of one curve, the diagram shows an area within which the performance of the particular prototype is likely to be.

Single performance points of other gliders are shown as well. these having been obtained by comparison flight tests. They should therefore be understood in relation to the DIAMANT.

More tests are being conducted. It is important to note that the information given is such as measured on the DIAMANT prototype, which has a rather poor finish and lacks some of the refinements of the production models.



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or a minimum percentage of gliders past X. Only the minimum distance, X, need be declared. All pilots who achieve scoring distances of X or more are awarded places in order of merit, and all pilots who do not achieve X (including those who do not leave the starting point) tie for last place, i.e. one place below the last of the scoring pilots.

Minimum contest days

In the placing system only one pilot need achieve X to make the day a "contest day". Therefore, a minimum number of contest days is not an adequate criterion for a championships. Experience suggests that the criterion for the placing system should be that the place marks accrued by the glider at the lowest eventual position should be more than twice as great as the number of gliders in the championship. This usually means at least three good contest days.

Tied places

Ron Watson discusses the difficulty of marking tied places in his article in the last issue on page 446. In allowing tied places in the placing system, some anomaly must arise; there is no simple way of avoiding it.

In the example quoted by Ron Watson, wherein the second and third of the first four pilots tied, the award of places 1, 2, 2, 3 appears to have some justification, but reduces the difference between the first and the fourth, and on many a contest day the difference in marks between the first and last pilot would be considerably and unjustifiably reduced by such a procedure.

On the free distance day in the World Championships, for example, there would have been 12 groups of tied places, with three gliders in one group and 2 in each of the remaining 11; if all these groups had counted as one place each, the difference in place marks between the day's winner and the worst placed pilot would have been only 26 instead of the 39 obtained by letting tied groups occupy their full number of places.

Since this pattern of results was typical of many a contest day in championships in general, the principle that the difference in marks between two pilots should be directly proportional to the number of pilots between them would be violated more by the 1, 2, 2, 3 type of marking than by a 1, 2, 2, 4 sequence. It is a matter of opinion whether the marks of the tied pilots in the London Regional example should be 2, 2½ or 3, but the argument for 2½ seems to be the most justifiable. Arguments for the tied pair being closer to the 1st pilot have exact antithesis to mark them nearer to the 4th pilot, and the midway mark of 2½ appears to be appropriate. Adoption of this would simply mean that the place mark awarded to any group of tied gliders would be the average of the places occupied by the group.

However, this does not adequately deal with a situation in which weather or geographical factors cause the bulk of landings to be confined to within a very narrow range. In such a situation the contest day should be devalued. One way of doing this is to assume that a tie of more than, say, three gliders indicates cause for devaluation, and to award place marks such that a group of gliders in a tie do not occupy more than three places in the order of merit. A fairly

simple rule can be framed for putting this into effect, but the purpose here is to raise points to be considered rather than to present finalised rules.

Adjustment of distances

Adjustment of distances and times to comply with rules for course flying and handicaps should be made before the place marks are awarded. The adjustments for tied positions should be made from the leading distance backwards, i.e. any gliders within the specified distance for ties (say 2 km.) from the leading distance should be moved up to tie with this leading distance, then gliders at distances less than 2 km. from the next best distance should be moved up to tie with the next best distance and so on.

These are some of the points that arise when using the placing system. They do not present any difficult problems, but it is advisable for competition organisers to consider them and decide on their own local interpretations within the latitude of opinion allowed until more formal rules are set.

A word of warning should be given about attempting to weight place marks according to subjective ideas on the merit of flights or on particular weather conditions. One of the principal purposes of developing this placing system was to remove unnecessary complications from the marking system. To incorporate weighting factors other than the units already in the basic system would merely lead to another unncessarily complicated system.

---

30 YEARS AGO

FOR some leading British Gliding Clubs 1935 was an important year. The Government subsidy of £5,000 a year to gliding, announced the previous year, had been withheld until a quarrel in the gliding movement had been settled. One side had been running the B.G.A.; the other side, consisting of the leading clubs, refused to make up the quarrel until the B.G.A. constitution was altered so that it would in future be run by representatives of the clubs. So this was done.

The London Club secured a big contribution towards its present hangar and clubhouse, and work on the foundations began in May. The Midland Club, which had held its opening flying meeting on the outskirts of Birmingham just before the year began, acquired its present site on the Long Mynd, and building of its main hangar was started. The Derbyshire Club established itself on the Camphill site and later amalgamated with the Manchester Branch of the Royal Aeronautical Society, Gliding Section, to form the Derbyshire and Lancashire Club. Cambridge University Club had its first launch early in the year. On 27th January Dublin Gliding Club had its first flying meeting and someone soared a Primary for 15 minutes.

Flying Events

FEB. 25TH.—Multitude record in Russia: 5 gliders launched behind one tug.

MAY 6TH.—Carden-Baynes auxiliary sailplane (with stowable engine) first appeared in public at R.Ae.S. Garden Party; had test hops by Eric Collins. (Called Scud 3 if without engine.)

JUNE 11TH.—R. G. Robertson completed third British Silver C with 52 miles in Golden Wren from Camphill to Hessay, York (within sight of Sutton Bank).

EARLY JULY.—Thomas Guetersmann, launched from a mountain at Guntzenlaufen in South Bavaria, soon found himself enveloped in fog. Suddenly a black shape loomed up before him; he landed on top of it without damage and found he was on the roof of his own house. (*Newspaper report.*)

JULY 16TH.—John Neilan put up British duration record with 13 hr. 7 min. in Professor at Sutton Bank.

JULY 21ST.—Sebert Humphries completed fourth British Silver C with 32 miles in Crested Wren from Dunstable to North Weald.

JULY 21ST.—At German Nationals, Ludwig Hofmann flew world's distance record with 296 miles in a Rhönsperber (a type which, with Hirth's Minimoa, was appearing for the first time). First to exceed 400 km.

JULY 30TH.—Eric Collins, first British Silver C, fatally injured at Sir Alan Cobham's Display at Ramsey, Hunts.; he was doing a "bunt" in a Grunau Baby when one wing broke.

JULY 30TH.—At the German Nationals a world's distance record of 313 miles from Wasserkuppe to Brno, Czechoslovakia, was set up jointly by Oeltschner, Bräutigam, Steinhoff and Heidemann. Oeltschner lost his life while being aerotowed back.

LATE JULY.—First Austrian Nationals on Gaisberg mountain overlooking Salzburg. (Revisited by Editor, who had been on a course there in June.) First appearance of Hütter 28.

AUG. 24TH-SEPT. 1ST.—British Nationals held at Sutton Bank for the second and last time. First appearance of Kirby Kite, Hjordis and Harald Penrose's home-made Pegasus (34 ft. span). Outstanding day was Aug. 27th: John Neilan flew 54½ miles in Kirby Kite to Garton (Withernsea); Christopher Nicholson, 45 miles in Rhönbussard to R.A.F. Catfoss; Philip Wills, 32 miles in Hjordis crosswind to Gribthorpe, aiming for Dunstable. Total flying for the day, 41 hrs.; 12 machines seen soaring simultaneously (unofficial British record).

AUGUST 29TH-31ST.—World's first man-powered flights in Haessler-Villinger machine at Frankfurt-am-Main aerodrome. Pilot Dünnebeil made 7 flights; longest was 235m. (257 yards) in 24 seconds.

SEPTEMBER 3RD.—100th Silver C in the world awarded to Frau Lotte Tourné, of Berlin.

SEPTEMBER 22ND.—Opening of Polish National Contests: out-and-return 20 miles; goal flight 130 miles (not reached); duration, won with 20 hr. 13 min.; altitude, 8,800 ft. official best, 11,000 ft. unofficial, 7,000 ft. feminine best by Mary Younga (now Mrs. Mikulski and living at Dunstable).

NOVEMBER 28TH-29TH.—London Club's first aero-towing course, held at Heath Row with Joan Price instructing.

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CAN A GLIDER BE ARRESTED?

SOME readers may have heard of a legal case in England this year in which a German manufacturer sought in vain to obtain possession of a glider which had been brought to England for the World Championships by its South American owner, and for which payment had not yet been received. We are glad to report that the glider has now been paid for, and that the purchaser was iu no way to blame for the delay, as he had paid the money into a bank in his own country, but the bank was for some time unable to forward the amount to Europe because of lack of foreign exchange.

However, the affair is of interest concerning the legal status of gliders. The case was well reported in *Shipping* for July, 1965 (p. 42), and in *The Aeroplane and Commercial Aviation News* for 30th Sept., 1965 (p. 21).

Mr. Justice Hewson said the matter was covered by Sect. 1 (1) and (4) Administration of Justice Act 1956. The relevant part ran: "Sect. 1 (1) — The Admiralty jurisdiction of the High Court shall be as follows: jurisdiction to hear and determine any of the following questions or claims (a) any claim to the possession or ownership of a ship . . . (j) any claim in the nature of salvage (including any claim . . . relating to the salvage of an aircraft) . . . (k) any claim in the nature of towage in respect of a ship or an aircraft . . . (l) any claim in the nature of pilotage in respect of a ship or aircraft . . . together with any other jurisdiction which either was vested in the High Court of Admiralty immediately before the commencement of the Supreme Court of Judicature Act 1873, or as conferred by an Act which came into operation on or after that date.

"It needs little imagination to realize that prior to 1873 this Court had no jurisdiction over aircraft of any kind," said his Lordship. Gliders did not exist in those days and his Lordship classed gliders as aircraft. "It may well be that there was an odd balloon blowing about, but this Court has no jurisdiction for those so far as I am aware." The word "aircraft" appeared only in the three headings (j), (k) and (l) already set out in relation to claims for salvage, towage and pilotage. There was no other jurisdiction over aircraft.

The judge added that he was strengthened in that opinion by the definition in the Act of a "ship" as including any "description of vessel used in navigation", and the Act also said: "'towage' and 'pilotage' in relation to aircraft mean towage and pilotage while the aircraft is waterborne".

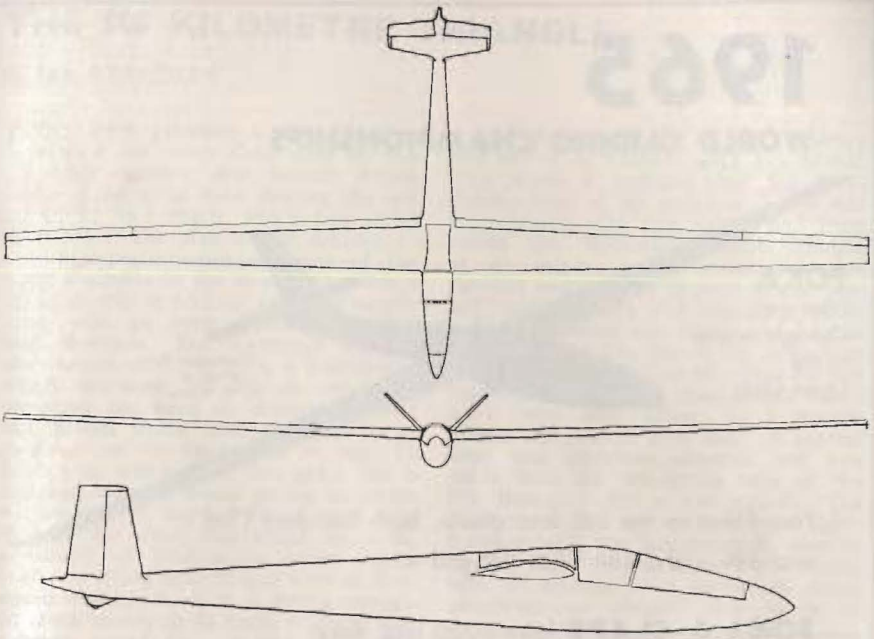
In those circumstances, much as his Lordship would wish to be able to allow a Warrant of Arrest to issue against the glider, he felt constrained by the statute.

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Wing Loading:
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1106 lb. gross, 8 lb./sq. ft.
Aspect Ratio, 21.6
Dihedral, 2°
Twist, 0°
Taper Ratio, 2/1
Flaps, −5° to +90°
Cockpit Width, 24 inches
Cockpit Height, 32.5 inches
Weight, Empty, 487 lb.
Weight, Maximum Gross,
No water ballast, 850 lb.
With water ballast, 1106 lb.
Design speed, 180 m.p.h.
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THE 100 KILOMETRE TRIANGLE

By IAN STRACHAN

I had been planning a fast 100 km. triangle for some time, with an eye to either gaining the annual Frank Foster Trophy, or even beating the old record of 46.3 m.p.h. which had stood since 1957. The plan was as follows:

A high-performance sailplane of the types available in the U.K. will average 40 knots (46 m p.h.) in nil wind conditions with an even distribution of 6 knot thermals. The maximum allowed start height of 3,280 ft. is a free bonus which increases the overall speed by obviating the need to thermal for the last fifteen miles, and also by being used up on the final glide at, say, 70 knots; in which case the speed for a 100 km. triangle would go up to about 43 knots (49½ m.p.h.) for 6 knot lift. Weaker lift than this could be used, especially if tending to street along track, by flying straight and level at slow speed through it. If it is strong enough to climb slowly at 40 knots or more (the average speed for six-knot lift) then overall speed will be increased. By judicious use of this latter technique, an overall speed of more than 50 m.p.h. should be possible on a 6 knot thermal day in under 10 knots of wind. The selected route should be as close as possible to 100 km., should be the correct shape (i.e., shortest leg 28 per cent or more of total), and should be precisely declared before take-off. The final leg should be into wind (SAILPLANE & GLIDING 1965, pages 118 and 225) unless a good cloud street is present close to the start. The flight should only take 1 hour 15 mins. or so if a record time is contemplated, so a start at about one o'clock (B.S.T.) is desirable. The start must be made so that a strong thermal is found shortly afterwards. One cannot afford to get bogged down by weak (i.e., under 4 knots) lift or by faulty map-reading, because every 5 minutes lost will reduce the overall speed by 3 m.p.h. Radio is very nearly essential, with a second set near the official observer so that the pilot can warn him just before crossing the start and finish lines.

May 20th produced a light westerly and no cu at Lasham until 11 o'clock. This made it unlikely that the over-development of the previous day would be repeated. On that day I had been round the Welford/Thruxton triangle at 43 m.p.h., so I re-declared this familiar route. The Skylark 3 and myself were airborne just after 12 o'clock, a 7 knot thermal was found and I came back to cross the line in the hope that I could fly back to this lift. This did not happen, the town of Basingstoke didn't work very well either, so I wasted several minutes in zero sink. A second start was therefore essential and was made with the invaluable help of the Pye Bantam radio at one o'clock. The flight thereafter was reasonably straightforward with the six thermals used in circling flight varying from 4 to 7 knots, with an average of 5 knots. As much advantage as possible was taken of

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weaker lift en route by cruising at slow speed under convenient clouds. The barograph trace shows that about 10 minutes of level cruise was achieved throughout the whole flight in this way. Cloud was not used because thermals were left as the climb decreased, generally at 4,000 ft. (above Lasham). Trouble was experienced at both turning points because clouds were not well placed but I had to risk pressing on or all would have been lost. A two-second burst of cine film was taken at each turning point. The final glide could have been started a bit earlier as I was able to cruise in at 80 knots for the last mile. The time was 1.27.17 for 113 km., and the speed 48.0 m.p.h.

A faster speed was quite possible with better tactics or a faster machine. A Dart 15 would probably have done 50 m.p.h. My triangle was too big, and the final leg was not into wind. Several minutes were lost in accepting 4 knot lift, but this seemed essential at the time. At one time I was three miles off track, which is quite a lot in such a small triangle. The next U.K. record must be of the order of 49½ m.p.h. because it must exceed the old one by 2 km/h. (F.A.I. rules). This speed is quite possible on a good day with little wind, especially in the latest generation of hot ships.

This task is an excellent one for practising competition and speed techniques, and can be done twice in a day if required. It has the advantage that retrieves (if necessary) are very short. Let us hope that more club pilots will attempt it and that we will see 50 m.p.h. topped shortly.

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CAN VULTURES SMELL THERMALS?

By A. E. SLATER

VULTURES spend nearly all their flying time soaring in thermals. Thermals carry up smells from ground level. Vultures feed on dead carcases. So one would expect Nature to equip them with a sense of smell.

Yet ornithologists, by and large, insist that very few birds are known to have a sense of smell, and that vultures, for instance, spot their food by keen eyesight alone, as they are unable to smell it.

Among research workers there is disagreement. That great two-volume work of 1,008 pages, "Biology and Comparative Physiology of Birds" (ed. by A. J. Marshall, Academic Press, 1961) gives the subject less than a page of text, one diagram, and a page of references (Vol. 2, pp. 46-48). The author of this section, Adolf Portmann, of Basle University, Switzerland, says: "It seems clear that in kiwis the sense of smell is well developed". He also mentions researches which appear to show that ducks, many song birds and one kind of vulture can smell, but two experimenters, one in 1927 and the other in 1943, indepen-

dently reached the conclusion that no birds had a sense of smell at all. Portmann himself believes that birds can smell because of the anatomy of their noses and the fact that the olfactory lobes of their brains (which in other animals analyze the messages from the smell organs) vary in proportionate size in the brains of different species of birds.

Now we have an article in *Nature* (Vol. 207, p. 34, 1965) by Don Tucker, of Florida State University, describing how he applied electrodes to the olfactory nerves of many different species of birds, so as to record the messages carried by these nerves to the brain when various smells were introduced into the birds' noses. (These "messages" take the form of impulses travelling along the nerves; all impulses are of equal strength, and the only "language" of the messages consists of changes in the number of impulses per second.)

Among the birds tested by Mr. Tucker, 14 species gave "responses" to smells by the olfactory nerves; among these were four soaring birds: the ring-billed gull, black vulture, turkey vulture and common crow. Other birds included the house sparrow, chicken, homing pigeon, etc. Unfortunately his report is largely taken up with discussing other people's ideas and experiments, instead of giving full details of his own results. He does not say whether he tried out other birds besides the 14 species which gave "positive responses". He says that "various odorants" were used, but mentions only one — amyl acetate, and he gives no indication whether different smells caused different "messages" to travel along the nerves. (It may be that each individual nerve fibre can recognize only one kind of smell.) In particular, there is no evidence that he tried out the smell of rotting carcases on the vultures.

Anyway, it now seems almost certain that vultures can smell.

They can also be smelt. Some years ago, an aeroplane collided with a vulture with the result that its disintegrated remains filled the cockpit. The stink was such that the pilot nearly passed out.

TURNING IN A WIND GRADIENT

By D. H. TAPP

THE problem to be considered is to estimate the airspeed necessary to enable a pilot to level the wings of a glider when, after an ill-judged approach, he finds that he has to do a steep turn near the ground in a strong wind gradient.

The assumptions (listed below (a) to (f)) are difficult to estimate numerically but it is hoped that they are correct to within a factor of 50%.

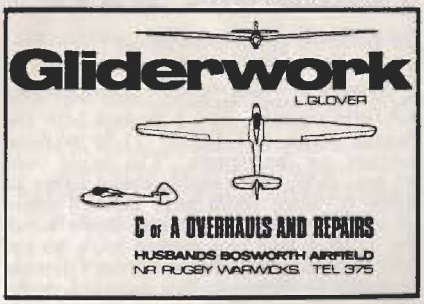
ASSUMPTIONS

(a) The glider is in a 45° bank turn with the lower wing tip 10 ft. from the ground and the upper wing tip approximately 40 ft. high.

(b) In a strong wind gradient it might then span a difference of airspeed of 25 knots (i.e. +10 knots for the upper wing tip and −15 knots for the lower wing tip — relative to the speed at the cockpit).

(c) Admittedly these are extreme conditions, but extreme conditions do sometimes occur, say, two or three times a year (which is about the rate at which gliders get written off in the circumstances we are considering!).

(d) Also the maximum wind gradient would be experienced when the glider is lined up into wind, by which time the pilot should have made some progress in his attempts to level the wings. However,



for simplicity we will ignore this. The difference would not be very great up to 20° of wind and perhaps the pilot was a bit slow anyway.

(e) To counteract the overbanking effect of the greater lift of the upper wing, the pilot uses full aileron, which increases the effective angle of attack of the lower wing tip by an (estimated) 50% at approach speeds and reduces that of the upper wing tip by an estimated 40%. (Remember that the pilot is trying to level the wings.)

(f) Lift at normal flying (including approach) speeds is approximately proportional to the angle of attack and to the square of the airspeed.

To find the airspeed required (x knots, say, at the cockpit) to hold the bank steady we equate the ratio of the lift on the wing tips due to the difference of airspeeds to that due to the effective angles of attacks of the up and down ailerons. This gives

$$\frac{(x+10)^2}{(x-15)^2} = \frac{1+\frac{50}{100}}{1-\frac{40}{100}}$$

This works out at approximately 58 knots (taking the higher value of x).

This speed, however, was only that needed to keep the bank constant.

To roll the aircraft out sufficiently rapidly to meet the urgency of the situation would obviously need much more, but the lesson is not to make low turns faster but not to make them at all.

I hope that anyone with access to aerodynamical information who can supply more accurate data than I have used will do so. However, my main object is to suggest to pilots that the danger of low turns in a strong wind gradient, though realised, has perhaps been underestimated.

I must thank Ray Stafford-Allen for the original idea of this investigation as well as for certain technical information supplied.

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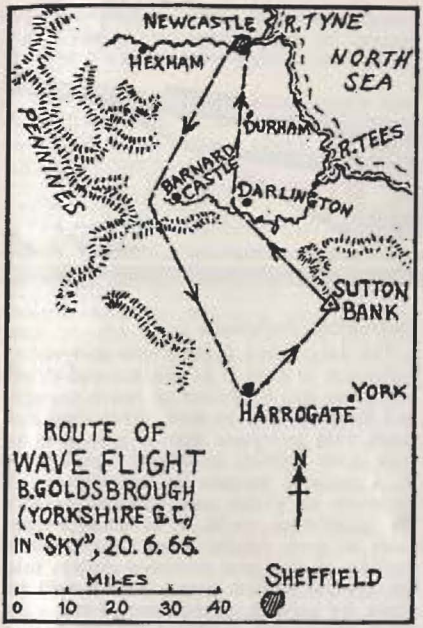
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YORKSHIRE WAVE

By BARRIE GOLDSBROUGH

SUNDAY, 20th June, dawned with little promise, and I floated into the Sutton Bank hill lift at 11.30 without oxygen or barograph. The wind was 15 kts., S.W., with stable cloud cover at 5,000 ft. Soon small gaps showed edges of wave cloud both up and down wind. By 12.00 a gap had moved back to the hill. In weak lift I followed the Olympia to 4,000 ft. When it flew forward, without further gain, I realised we were still in the rotor. As on previous occasions, a drift back, a slow climb in rotor cloud, and then forward and up through the lenticular leading edge, did the trick.

Once above cloud at 5,600 ft., lift increased to 3 up. It stopped at 11,000 ft. and I looked down on a confused sea of wave cloud, stretching in every direction. Control said they could see sunlit gaps nearer the Pennines and there was talk of Portmoak, as I headed north-west. Leading edges were badly defined, but short waves meant only a loss of 3,000 ft. between them.



Four miles west of Darlington I reached the western edge of the system, which ran parallel to the hills. There was then a five-mile clear gap between it and the cloud covering the hills, which swept down and finished on the lee slopes. Over the hills to the west was a separate system of higher, larger and more clearly defined lenticulars. The Tyne marked the northern end of the "local" system, probably due to the Hexham valley, so at 12,000 ft. over Newcastle I took a photograph and turned back

The waves below were still short and confused with broken leading edges, but there was little difficulty in hopping from one to another as I pressed on south, making about 25 kts. against the 30-knot wind. A strong one, 5 miles east of Barnard Castle, tempted me up to 16,000 ft. (17,500 a.s.l.), where I regretfully left it still showing 5 kts. up. Turning over Harrowgate, I took a last photograph and headed for home to make a triangle of 145 miles.

I arrived back over the club at 6,000 ft. after seven hours, five of them spent oscillating between 9,000 and 12,000 ft. The waves lasted until dark, so I have since regretted not pressing on to turn at Sheffield. I estimate the old Sky would have made it back to the club comfortably before dark. When the "day of days" arrives, it is all too easy to underestimate its potential. However, here's to the next time.

RELICS FOR DISPOSAL

A picturesque figure in British gliding in the early 1930's was E. T. W. Addyman, who ran a "Harrogate Aircraft Club". He continued to build gliders of his own design, even after losing one hand in a crash at Ingleby Greenhow (he was attempting to soar a Primary in a gale). He died nearly three years ago, and his son, Oscar J. Addyman (Bluehaze, Glasshouse Lane, Countess Weir, Devon) now writes to *Flight* offering to dispose of his father's relics which are still at the former Club headquarters at White House, Starbeck, Harrogate, as the planning authority requires the land. The relics include a Standard Training Glider of 38 ft. span; a light-wind soaring sailplane called "Zephyr" (illustrated in THE SAILPLANE & GLIDER for 8th Sept., 1933, flying from Skiddaw), and the remains of a German sailplane in which Carli Magersuppe splashed into the sea off Scarborough about 1930.

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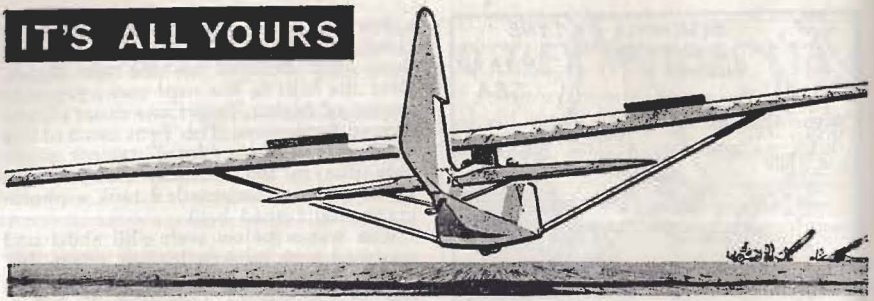
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C.F.I.'s CONFERENCE

THERE will be a full report of the C.F.I.'s Conference in the next issue, when it is hoped to be able to give excerpts from some of the main lectures. These include: "The avoidance of inadvertent stalling and spinning," by John Everitt; "Teaching Thermal Soaring", by John Williamson; "Flight Limitations, or how not to overstress your glider", by Frank Irving; "Running training soaring contests", by John Fielden; and "A review of this year's accidents", by Paul Minton.

The lectures will have taken place on Saturday and Sunday, 13th and 14th November, with flying in T-49, Blanik and Eagle on the Friday and Monday, 12th and 15th. A variety of exercises are to be offered to Instructors on these aircraft, including field landing technique, the approach to the stall, handling characteristics analysis, and general refresher flying. If required, the C.F.I.'s Conference will become an annual (autumn) event; there is every intention of holding the 1966 meeting in the North of England.

Circulars

Everyone knows what happens to information circulars. Their brief life is varied, but ends inevitably in loss — either literally lost, or buried in some unread file. The Instructors' Panel is hoping to increase the life of those information circulars which are of use to Instructors and Club operations, by issuing them in batches stapled into a cover. The document is being called INSTRUCTOR and will be somewhat garish in appearance, so that it can be found quickly among the junk in the clubhouse.

Instructing Technique

The interesting thing about instructing technique is that it is not cut-and-dried, but never has it needed so much thought and development as now. This does not mean that everyone should give rein to their own private methods; conformity to a general pattern is essential, with variation in detail and manner to suit the individual pupil. The change that faces us now results from (1) the introduction of fast and complex gliders into the general British scene, which will be flown by owners, sometimes of not very great experience, and (2) the increasing use in clubs of the newer breed of train-

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ing two-seaters, such as the Capstan and Blanik. The good thing, of course, is that suitable two-seaters ARE available.

What we have to do is to ensure that our teaching is suitable to the newer two-seaters, and that, above all, it is comprehensive enough to ensure safe operation of fast single-seaters by relatively inexperienced pilots.

For example, teaching the approach to the stall in the older, slower two-seater was relatively simple. The attitude for normal flight could be demonstrated, and an attitude which would lead to the stall — the aircraft was either properly flying or it was not. The newer aircraft need a more extensive demonstration and appreciably more training flying in this phase of flight. For example, the very clean glider changes its attitude only a small amount for a considerable change in speed, and if the stall is approached slowly enough (which is often how a pupil stalls inadvertently), the attitude of the glider may change so little that it is not noticeable to the uncritical pilot. In this respect, much more time must be spent in the air, flying slowly, and getting the pupil to recognize such things as the onset of buffet, until he knows the symptoms of the approaching stall well enough for them to impinge instinctively when his attention is elsewhere. Attention must be drawn to the high pre-stall sink rate of these aircraft, and thorough teaching is required to ensure sensible use of powerful airbrakes at lower, and decelerating speeds. All this cannot be dismissed in a few winch launches; it needs the height and time which can be regularly obtained only from aero-tows, or soaring a big hill. But above all it needs an understanding of the characteristics and performance of high-speed gliders, and an instructing technique to suit. Even if the instructor has only old and slow two-seaters in his club, it is essential that his own experience as a pilot includes flying of high-speed gliders. Even if he cannot actually demonstrate characteristics, he will be able to make his pupil aware of them, and give the necessary time and concentration on this important aspect of flying.

Remember that 20 years ago it was very difficult indeed for a pupil pilot to hit anything at much over 50 knots; now it is only too easy to do it at 80.

ANN WELCH

INSTRUCTIONAL LECTURES FOR GLIDER PILOTS

FOLLOWING on the success of last year's series of lectures, when an average of 50 people attended the twelve lectures, the Kronfeld Club is organising another series which will be held on Mondays at 8 p.m. beginning 3rd January. The fees for attending the lectures are 4s. per lecture, with attractive special rate for four or more lectures booked in advance and for Kronfeld members. All the lecturers will be acknowledged experts in their own field and, if demand is sufficient, notes will be published.

Registration forms and further details may be obtained from Mrs. Bonham, 14 Little Brownings, London, S.E.23 (Tel. FORest Hill 9390), or the Kronfeld Club.

Programme : Mondays at 8 p.m.

Jan.	3.	Theory and Technique of Soaring, Part 1 by John Everitt.
„	17.	As above, part 2.
„	24.	Gliding Weather, Elementary Meteorology, by Ann Welch.
„	31.	Away Landings, by Lorne Welch.
Feb.	7.	Navigation, by John Neilan.
„	21.	On becoming a Private Owner, by David Carrow.
„	28.	Accident Avoidance, by Paul Minton.
Mar.	7.	Instrumentation in gliders.
„	21.	Competition flying.
„	28.	More advanced Meteorology, part 1.
Apr.	18.	As above, part 2.
„	25.	Review of the world's newest production sailplanes.



The author testing the Airmed Airlite headset in his glider

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BICESTER AUGUST COMPETITION

Condensed from the official report written by Ian Strachan

THIS event, the 1965 Junior Inter-Service and R.A.F. Inter-Command Competition, was held at the R.A.F. Gliding and Soaring Association's Centre at Bicester from 25th to 30th August. Thirty-one gliders participated and were divided into two Leagues, the Olympias and one Swallow forming League 2.

The broad policy of the meeting was that those pilots who flew in the Inter-Service meeting at Easter should help with the organization and running of the August one. Thus: Officer i/c., Air Cmdr. N. W. Kearon; Deputy and i/c Operations Room, Sqn. Ldr. D. Spottiswood; Administration, Ron Dunn; Observing and task-setting, J. Williamson; Scoring and task-setting, Ian Strachan; Chief Marshal, Andy Gough; Tug Manager, Geoff Young.

The Royal Naval G.S.A. put in two entries and the Army G.A. four.

The Contest Rules were as for the World Championships, with some minor exceptions as follows: All first launches, irrespective of task, were by "designated start" at a time determined by the organizers. The scoring unit used was the nautical mile (each latitude line on the half-million map is exactly 10 nautical miles from the next). Thus "X" distances were in nautical miles, normally 15 for League 1 and 10 for League 2. In the "Distance along a line" task, there was a "free" area of 2 n.m. on either side of the line. A modified "maximum daily points" formula was used, which allowed a 100-point Contest Day if only 10 per cent reached 2X. Certain mandatory boundaries and special airways restrictions were set each day, depending on the task. A "Wallington" system of marking was used in conjunction with the normal system, to see how results compared.

WEDNESDAY, 25TH AUG.—Wind 300°, 30 kt. to 280°, 25 kt.; cumulus 4-7/8 with occasional clamps. Task: race to Debden for both Leagues. In League 1, five pilots reached the goal, Doug Bridson being fastest with 40 kt. and Charles Morgan making 39.5 kt. No one reached the goal in League 2; Mitchell went furthest to Henlow.

THURSDAY, 26TH AUG.—Wind W., 20 kt.; 4/8 cumulus; strato-cu came in later over the top. Race to Feltwell for both Leagues. League 2 were launched first; only Johnny Allerton reached the goal, and took the overall lead. In League 1, Pete Hanneman averaged 31 knots and only Ted Stark and John Evans also reached the goal, Evans taking the overall lead.

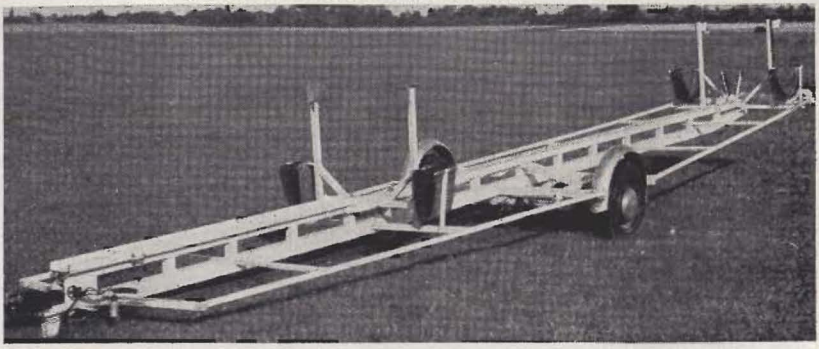
FRIDAY, 27TH AUG.—Wind 300°, 10-15 kt., becoming light. Cu 1/8 started late at 12 o'clock. League 1 task: 96 n.m. triangle via Greenham Common and South Cerney. Pete Lane won at 29.6 kt.: Hanneman and George Coatesworth were equal 2nd with 28.8 kt. All but six completed the course. Overall positions: John Evans 1st, Hanneman 2nd, Bridson 3rd. League 2 had out-and-return Greenham Common; Andy Whittaker won at 25 kt.; Jim Wild, "Mitch" Mitchell and Gyp Hart averaged about 22 kt. Only three did not complete the course. Overall, Allerton led, but was 3rd on the Wallington system; Whittaker was 1st by "Wally" and 3rd on points; Mitchell was 2nd on both systems.

Warm sector weather next day; downwind task cancelled in afternoon.

SUNDAY, 29TH AUG.—Wind 280°, 20-25 kt., 4-7/8 cu. Task for League 1: 63.3 n.m. race to Spitalgate (changed from original task of distance along a line to Spitalgate and back through Bicester). No one reached the goal, owing to cross wind and variable thermal conditions; Coatesworth went furthest to Corby, with Bob Lightfoot and Morgan

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not far behind. Morgan leading overall on both systems. League 2 had 69.5 n.m. race to Feltwell. No one reached the goal but Mitchell landed 2 miles S. of the airfield and became first overall on both systems.

MONDAY, 30TH AUG.—Wind 280°, 10-15 kt.; cu. 7/8, spreading out to 8/8 strato-cu. League 1 task: 61.5 n.m. triangle via Grove airfield (Wantage) and Little Rissington. Large areas of spread-out brought most people down on the first leg, and only Bridson and Lightfoot got beyond 2X. So Charles Morgan became Junior Inter-Service Champion, with Bridson 2nd and Chris Gildea 3rd. (Evans, Hanneman and Coatesworth were classed as "Seniors", having flown before for Senior Inter-Service teams.) League 2 had Grove out-and-return but not enough scored to make it a contest.

Final Results, League 1

Pilot	*Glider*	*Pts.*	*W*
1. F/L Morgan	S3	2312	1
2. Maj. Evans	419	2216	3=
3. F/L Bridson	S2	2025	2
4. F/L Hanneman	419	1752	3=
5. F/L Coatesworth	419	1689	7
6. J/T Gildea	463	1687	5=
7. Cpl. Medland	Ka-6	1641	10
8. Cpl. Taylor	Ka-6	1596	5=
9. F/L Lane	Ka-6	1566	8
10. C/T Newall	S4	1562	11
11. F/L Lightfoot	S4	1490	9
12. F/O Camp	S4	1390	13
13. Lt. Stark	D17	1311	12

Followed by J/T Morris (463), L/Cdr. Dale, R.N. (463), L/Col. Christy and Maj. Scarfe (S3), Maj. Phillips and Capt. Colvert (463).

Column "W" = position on C. E. Wallington's scoring system.

S = Skylark, D = Dart.

Final Results, League 2

Pilot	*Pts.*	*W*
1. Cpl. Mitchell	2134	1
2. J/T Allerton	1680	6
3. J/T Wild	1648	2=
4. W/O McMillan	1588	2=
5. F/L Hart	1569	4=

Followed by S/L Whitaker, Ch/Tech. Wilkins, Lt. Livesay (R.N.), Cpl. Hogg, Cpl. Reynolds, F/S McIntyre, M/A Curwen, Cpl. Kemp.

F/L Hart flew a Swallow; the rest Olympia 2's.

WHAT CAN POSSIBLY GO WRONG WITH A SIMPLE RETRIEVE



By Dick Bradley

MID-MORNING on Saturday, 24th July, 1965, a keen young pilot jumped into his 463 and said: "I'm off after my 300 K's heading east. Have someone use my car to retrieve me. I've left the keys in it." As a military man I could not but admire such concise, direct instructions. How different from the normal complicated rigmarole of arranging for a particular person to do the retrieve, and someone to accompany him; details of probable destinations; amount of petrol in the tank; checking if sufficient cash is available to purchase more; peculiarities of handling the car; details of communication procedure; action to be taken should contact not be made; checking trailer lights; and other such unimportant trivia.

With a cheery "all out" our pilot set sail.

Two hundred and thirty kilometres, seven hours, and a few holes in the ailerons later, he ground to a halt beside a main road, and from an adjacent telephone box, having borrowed some money (in his haste he had forgotten to bring any), he called the club.



Now, as it so happened, there was no-one in the clubroom. However, all was not lost. Luckily there was an exchange on the airfield, and the operator took the message which gave the position of the glider. Others might have left a telephone number and a time to ring back, but this was really an unnecessary refinement.

Meanwhile back at the airfield . . .

An hour or so later the duty pilot thought, "I wonder whatever happened to DB and the 463". A quick call to the exchange and all was known. Who was going to do the retrieve? After the initial rush of volunteers (it is amazing just how many experienced drivers are left on a gliding site late in the evening, waiting to do a retrieve which is clearly going to take all night and most of the next morning), a weary instructor was detailed together with a crew of the two youngest and least argumentative new members.

Into the gathering gloom they set off, remembering, luckily before they had gone too far, to return and attach the trailer.

It was just before midnight in the middle of nowhere, travelling at 40 m.p.h., that the car electrics failed in pouring rain, and all was darkness. However, a garage was contacted, and a breakdown crew of two and a vehicle despatched. Two hours later the combination, with a jury of 26 ft. of flex festooned around it, was ready to proceed on fog lights and trailer rear lights. At this stage, in the way that garages have, some small honorarium was requested for the service performed. The amount was a very reasonable £9 18s., but alas, our instructor had only £5 to his name. A light-hearted discussion ensued, after which the instructor was allowed to proceed less £5 and his driving licence as a guarantee against full settlement later.



Meanwhile, back at the glider . . .

Our pilot, having sat in pouring rain

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for seven hours, realised in a flash that the retrieve crew was obviously not going to set out until the next day, and made tracks for a guest house. Realising that he would be back at the glider long before the retrieve crew arrived, he did not bother to leave a note.

Ten minutes later the retrieve crew arrived. The glider was de-rigged and loaded into its trailer. Unfortunately, due to a typhoon which was in progress and the general inky blackness, a large hole appeared in the fuselage during this operation. Then the long vigil began. Luckily this was a period of complete rest, since the absence of food and drink meant there was no tiresome business of preparing and eating it. Also, all available cash having been spent, it was not necessary to send anyone off to buy any.

Meanwhile, back at the guest house . . .

After a pleasant breakfast our pilot decided that the thing to do was obviously to ring the Club and put them in the picture. Again, alas, no reply, but our pilot's name, together with the address of the guest house, was noted by the operator. The pilot did not give the telephone number of the guest house (he remembered after the call), but this did not really matter since it was merely necessary to look it up in the directory. Unfortunately, in the directory it was only listed under the proprietor's name, which no-one knew . . .

Meanwhile, back at the airfield . . .

The morning being well advanced, members began to assemble in the clubroom. The phone rang and the by-now



wearied instructor and his retrieve crew, having begged the use of a telephone, enquired politely if intelligence had been received from their friend the pilot, since they had now been sitting for eleven hours in adverse weather conditions waiting for him to appear. Unfortunately, no one present could offer any information but they took down the telephone number, promising to ring back if anything was heard. However, the telephone operator, having listened to the call, must have had a ponder, and an hour later rang the Club to ask if the name and address of the guest house which he had on his pad could help resolve matters . . .

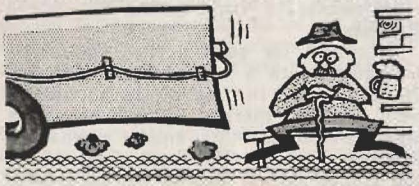
In a flash all was clear. A quick telephone call from the airfield to the number our instructor had left and . . . No reply.

Meanwhile, back at the glider . . .

Our instructor and his crew, their vigil entering its twelfth hour, and the prospect of night driving once again appearing on the horizon, decided that the pilot had clearly made his own way back the previous day, and, thinking how like old DB it was to play such a good practical joke on them, set off on the homeward trek with two gallons of petrol and no money.

Meanwhile, back at the guest house . . .

At that very moment our pilot was trying to overcome his first doubts. After all, he had chosen a guest house on the main road, and had been watching for the trailer to pass on its way to the glider. Surely, under these circumstances, it was unnecessary to go back to the glider? Anyway it looked as if it might rain. However, he decided, first things first. So he explained to the hovering landlord that he had quite forgotten to mention the previous night that he had left his wallet behind, but that the moment that the car and trailer appeared on their way to the glider he would stop them, extract his wallet from the car and settle up. "Oh," said the landlord, "Would that be them?" pointing at the car and trailer which at that very



moment were passing the house, although, unfortunately, in the opposite direction to that in which our pilot was looking. The latter rushed out and pursued them on foot. This, whilst well intentioned, turned out to be in vain, since

the retrieve crew, by now deranged by lack of food, were heading back at no mean speed.

Our pilot now returned to the landlord and, leaving his watch as collateral, started out on foot. Three hours later and two miles further on, as his faith in hitch-hiking was deserting him, he got a lift which was heading towards his home. He decided to cut his losses, go home, and collect his car the following week. Meanwhile our famished band of retrievers, by dint of travelling at such high speed, soon ran out of petrol and, being penniless, begged a few gallons from the nearest garage, leaving all manner of personal belongings as security.

Finally, thirty hours after they had set out, they returned to the airfield. Unfortunately, by this time everyone had left, and, destitute and starving, they faced the problem of getting home . . .

All of which goes to show that, even if you head off on a cross-country with little or no thought for the retrieve, everything works out all right in the end. Of course, it isn't a thing you can do too often, since you do tend to lose friends with astonishing rapidity in the process . . .





SHORT CIRCUIT RACING

By C. E. WALLINGTON

THE problem of providing enough competition for the ever-increasing number of competition pilots is already becoming acute. Entry lists for competitions are usually full and it is no easy matter to stage more competitions; they are expensive for both pilots and organisers and it is doubtful whether enough organisers, officials and helpers would be available for additional competitions.

However, the marked improvement in aircraft performance and operational techniques during recent years provide scope for exploring the possibility of new types of contests. One type worth considering is short circuit racing, somewhat similar to yacht racing.

Courses

A course for such a race should be triangular with a total length of about 20 miles. The turning points should be very clearly marked, preferably with signs which can be made permanent fixtures. Permanently fixed signs along the course should also be set up if possible. To pilots accustomed to navigating without such aids, signs along a 20-mile course may seem quite unnecessary, but navigation is not one of the objects of this racing and, if the envisaged developments occur, exceptionally well marked courses will be required. Each club organised for short circuit racing would try to set up two or three such courses for their site.

Starting and finishing lines should be laid out in positions which, if possible, will keep racing gliders clear of other club flying.

The start

The number of gliders in a race should be between two and about six, the number being determined by the object of the contest, the number of tugs available and the logistics of the complete operations. The aim of the starting procedure would be to release, from aero-tows, all the gliders either simultaneously at a starting line or in a pattern that allows an effectively simultaneous start. The precise method of achieving such a start is a matter for flight trials and developments, but there is enough operational expertise at most clubs to attempt the task. Of course, it would not be necessary for the tugs to be flying in the direction of the race at the time of release; it would be better for them to be flying in the opposite direction so that the gliders could make a 180-degree turn in a mandatory direction on release.

Racing for more gliders than can be

accommodated at a single start should be conducted by arranging heats with a final for the winners of heats or semi-finals.

Turning points

In official races each turning point should be manned by at least one observer who should judge whether a glider rounds the point. The onus should be on the pilot to ensure that he is low enough to be observed rounding the point. As in the short circuit race in this year's Western Regionals, radio contact between gliders and turning points is to be recommended, but for the less serious short circuit racing the pilot should regard the observers as umpires and accept the bad luck of an adverse judgment.

Topics

One of the interesting features of such racing would be the evolution of the tactics of winning a race rather than getting around the course as fast as possible. What sort of jockeying for position would occur in a race between two pilots or two teams?

Such jockeying could increase collision risks, not from a battle of nerves in a thermal, but because manoeuvres would be started or stopped quickly and some attention would be diverted by the urge to press on, the need to keep an eye on more distant opponents and the desire to cut the turning point corners as fine as possible. This is one of the reasons why the course should be exceptionally well marked.

Naturally, flying discipline would need watching and special rules may be necessary.

Future development

In this article only the bare bones of short circuit racing are mentioned. Some planning and logistic work needs to be done to explore the possibilities of such racing. (The race of five times around a 12-mile circuit in the Western Regionals was not of the type envisaged here.) But a large organisation is not needed to test the feasibility of the scheme and if such racing can be developed the future scope is considerable. Clubs could set up fixed local circuits (with perhaps recommended adjacent landing fields). Racing organisation would not need task-setters, scorers or meteorologists; a look at the wind sock and the sky would be enough for deciding which course to set and whether to start a race. Retrieving should be almost unnecessary and in National or Regional competitions short races could be organised quickly enough to take advantage of periods of soaring weather too short or too local to allow the customary types of tasks. Competitions could include local club racing on a "ladder" system, races for single types of glider, local open races, inter-club races, "knock-out" contests*, and races for special and perhaps national trophies. Indeed, such trophies could give short circuit racing sufficient status to attract many pilots to this alternative (and cheaper) outlet for their competitive spirit.

With a division of competitions into forms somewhat analogous to the cruising and dinghy racing of the yachting world, the pressure on the present gliding competition structure could be relieved and a new aspect of the sport could be developed with the prospects of excitement for both pilots and spectators.

*Not to be taken literally.

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ABOUT THE EDITOR

ON the arrival of the tenth anniversary of SAILPLANE & GLIDING I cannot think of a better way of marking it than to focus attention on the man who has been its Editor for all those years — Alan E. Slater.



"Doc" about to start for his B at Rossitten, East Prussia, in May, 1930.

"Doc" has been editing gliding magazines for the past thirty-two years off and on, and has without doubt made his mark in the history of gliding. Indeed I believe it is true to say that but for "Doc" the history of British gliding could not have been so fully covered and preserved.

We should be grateful now that by 1936, when he had to make the choice between SAILPLANE & GLIDER and retaining a salaried position, he disregarded advice from friends and decided to scrape a living from concentration on gliding. This in order to work at something in which he believed and to which he felt he could contribute.

Today he still holds the same view. In over thirty years there have, of course, been many changes, but his remarkable memory never fails him. Whatever piece of information may be required he can at once lay his hands on it, and many are the occasions when such information is of use to our present-day readers.

He has a profound knowledge of many subjects, but meteorology is especially dear to him. As a glider pilot himself (he was the first British ab-initio to get a gliding certificate) his reporting of events is accurate and informed, all the more because he is in fact the only man who has attended all the World Gliding Championship Meetings and our own Nationals from the very first.

In the SAILPLANE AND GLIDER for September-October, 1940, "Doc", in his ten-year review of that magazine, concludes his article with, "I was hoping, in this article, to go on to describe the difference between the SAILPLANE & GLIDER as it has been, and my ideal of what it should be, but there is not enough space. There never has been enough space, and that is one reason for the difference."

In those days the SAILPLANE & GLIDER contained on the average 12 pages, which is roughly the same as 18 pages of our present-day magazine. But thanks to the great interest our readers show by supplying us with a constant flow of articles which are read throughout the world, there is still not enough space, although we now publish between 80 to 112 pages per issue; but this is perhaps the greatest compliment our Editor could wish for, and shows that his decision taken in 1936 was, so far as the gliding fraternity is concerned, the best one he ever took.

R. H.

Editor 1933-1940, SAILPLANE & GLIDER
Editor 1950-1955, GLIDING
Editor 1955- , SAILPLANE & GLIDING



. . . and thirty years later.

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1965

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C.V.S.M. MEETING

THE main points emerging from this meeting of the Motorless Flying Commission of the F.A.I., held in Paris on 29th October, were as follows:—

LILIENTHAL MEDAL.—Al. Parker (first to exceed 1,000 km.) was announced the winner. (Our congratulations!)

RADIO BOTH CLASSES.—In future *transmitters* will be permitted *only* in each competing glider and its tow car. No base stations. No navigational aids. Receivers, no change. (Hooray!)

NEXT WORLD CHAMPIONSHIPS. — No firm offers were received. There is a possibility of France offering for 1967 and, if not, of Poland in 1968. No firm decision is likely before January or February next year.

CHANGES TO THE SPORTING CODE, effective 1st January, 1966:—

1. Diamonds may be added to Silver C Badges.

2. The old and irritating anomaly that a 300-km. flight along a failed triangle does not qualify for a Gold C is to be removed. Wording is complicated — it will be published as soon as available.

3. The following will come into effect later on in 1966 unless valid objections make the C.V.S.M. change its mind: Photographs to be accepted as turning-point evidence must be taken within a semi-circle of radius 1,000 metres whose base runs through the turning point, and is at right angles to the leg of the course just flown. One single photo taken in this sector is enough. (We can see the point of this, but can it be done from, say, 20,000 feet to the satisfaction of the homologating body? Kiwis awake!)

STANDARD CLASS.—For new designs after 1st January, 1967, it is likely (a) that simple flaps will be permitted *as an alternative to airbrakes;* (b) the minimum size of the fixed wheel will be increased to 300 mm. The proposal to limit "flying pencil" cockpit dimensions is dropped.

We continue to be grateful to C.V.S.M. It is unique for a multi-national multi-lingual body to produce so much useful work in so complex a field, it could hardly do this without its multi-lingual Chairman — thanks, Pirat Gehriger!

P. A. W.

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GLIDING CERTIFICATES

DIAMOND FOR HEIGHT

No.	Name	Club	1965
3/45	A. R. Ismail	Surrey	9.7

DIAMOND FOR GOAL

No.	Name	Club	1965
2/190	J. Smoker	Oxford	26.6
2/191	N. L. Bailey	Bannerdown	1.8
2/192	G. W. Camp	Bicester	1.8
2/193	D. C. Reynolds	Bicester	7.8
2/194	M. Thomas	Moonrakers	31.7
2/195	C. H. Gardner	Devon & Somerset	31.7
2/196	J. F. Morris	Bicester	7.8
2/197	A. R. Ismail	Surrey	28.6
2/198	C. Withall	London	20.5
2/199	D. M. R. Riddell	London	7.8
2/200	L. W. S. Manley	Moonrakers	7.8
2/201	C. M. Greaves	E. Midlands	20.8
2/202	K. A. Harrison	Bicester	20.8
2/203	C. D. Lovell	Surrey	31.7
2/204	R. R. Trott	Devon & Somerset	31.7
2/205	W. J. Dean	Surrey	20.8
2/206	D. G. Alty	Bicester	20.8
2/207	L. Kurylowicz	Polish G.A.	20.5

GOLD C COMPLETE

No.	Name	Club	1965
142	B. J. Willson	Bannerdown	20.7
143	A. R. Ismail	Surrey	28.6
144	C. M. Greaves	E. Midlands	20.8
145	T. A. McMullin	London	5.9
146	K. F. S. Chard	Surrey	22.8
147	G. R. Paddick	Surrey	22.8
148	D. G. Alty	Bicester	20.8
149	A. W. F. Erskine	Cambridge Univ.	22.8
150	J. A. Evans	S. Command	22.8
151	L. Kurylowicz	Polish G.A.	20.5
152	R. Fortescue	Cambridge	22.8

GOLD C DISTANCE LEGS

Name	*Club*	1965
L. Kurylowicz	Polish G.A.	20.5
D. G. Alty	Bicester	20.8
R. Fortescue	Cambridge	22.8
R. R. Trott	Dev. & Som.	317
W. J. Dean	Surrey	20.8
C. M. Greaves	E. Midlands	20.8
A. R. Ismail	Cambridge	28.6
J. Smoker	Oxford	26.6
N. L. Bailey	Bannerdown	1.8
G. W. Camp	Bicester	1.8
D. C. Reynolds	Bicester	7.8
M. Thomas	Moonrakers	31.7
C. H. Gardner	Dev. & Som.	317
J. F. Morris	Bicester	7.8
C. Withall	London	20.5
D. M. R. Riddell	London	7.8
K. A. Harrison	Bicester	20.5
L. W. S. Manley	Moonrakers	7.8
C. D. Lovell	Surrey	31.7

GOLD C HEIGHT LEGS

Name	*Club*	1965
B. J. Wilson	Bannerdown	20.7
T. A. Spurling	Fulmar	22.5
G. A. Ross	Moonrakers	15.1
W. E. Malpas	Bristol	23.7
D. T. S. Ware	Cambridge	9.7
J. A. Stirk	Doncaster	24.7
J. G. Wild	E. Midlands	22.8
J. A. Evans	S. Command	22.8
K. F. S. Chard	Surrey	22.8
T. A. McMullin	London	5.9
G. R. Paddick	Surrey	22.8
R. Fortescue	Cambridge	22.8
A. W. F. Erskine	Cambridge	22.8
J. J. Ellis	Silver Wing	14.7

SILVER C CERTIFICATES

No.	*Name*	*Club*	1965
1624	S. D. Cooper	Derby & Lancs.	30.6
1625	N. P. King	Bicester	27.6
1626	L. C. Booth	Midland	7.6
1627	F. L. Fitchett	Leicestershire	4.4
1628	D. Bridson	Moonrakers	19.6
1629	J. L. Weston-Allwork	Moonrakers	20.6
1630	D. R. Hills	Surrey	20.6
1631	P. N. Kingwill	Bicester	28.6
1632	R. V. Barrett	Bristol	28.6
1633	D. R. Godfrey	Chilterns	20.6
1634	S. G. Davies	Silver Wing	11.5
1635	G. Bailey Woods	Ouse	19.6
1636	R. W. Curwen	Cheviots	27.6
1637	R. A. Allton	Lincolnshire	27.6
1638	J. W. Blake	Surrey	20.6
1639	J. S. Humphreys	Farnborough	27.6
1640	C. S. Lister	Laarbruch	4.7
1641	W. T. Gartland	Kent	27.6
1642	L. S. Ash	Yorkshire	7.7
1643	B. D. Jackson	Derby & Lancs.	28.6
1644	K. J. Byatt	Silver Wing	7.6
1645	R. Gordon	Surrey	20.6
1646	B. W. Pritchard	Land's End	26.6
1647	M. F. Parkins	Swindon	17.7
1648	K. Massey	Ouse	20.5
1649	R. J. Burton	Surrey	13.6
1650	J. S. Speight	Yorkshire	8.7
1651	K. A. Ward	Eagle	15.7
1652	D. E. Morris	Nimbus	25.7
1653	J. R. Taylor	Ouse	28.7
1654	A. J. B. Perris	Chilterns	26.6
1655	J. C. Snorter	E. Midlands	27.7
1656	R. A. Hughes	Army	5.6
1657	B. F. Nowell	Chilterns	31.7
1658	A. D. Joss	Cambridge	31.7
1659	S. R. C. Green	Oxford	31.7
1660	H. J. Purser	Northants	1.8
1661	Pamela Shipton	Bicester	31.7
1662	S. R. Cannell	London	31.7
1663	A. Linee	Dorset	31.7
1664	R. Stevens	Coventry	27.7
1665	S. A. J. Morrison	Four Counties	7.6
1666	M. Westwood	Bristol	1.8
1667	B. Cohen	E. Midlands	9.7
1668	S. A. C. Beechey	Kent	1.8
1669	J. W. Coton	Germany	2.5
1670	J. Wills	Surrey	4.6
1671	R. Jefferies	Bristol	31.7
1672	M. J. W. Harper	Bristol	31.7
1673	J. C. Pratelli	Oxford	7.8
1674	N. Humphreys	Heron	31.7
1675	T. G. Brown	Devon & Somerset	31.7
1676	B. C. Morris	Four Counties	5.8
1677	T. M. Nagy	Fenland	11.8
1678	Anne Walker	Midland	31.7
1679	A. A. Turner	Bicester	7.8
1680	L. P. Smith	Bristol	31.7
1681	C. G. Rayner	Chilterns	7.8
1682	N. A. Gould	Moonrakers	7.8
1683	F. Neal	Coventry	7.8
1684	D. G. Lee	Bannerdown	1.8
1685	E. J. W. Barnes	Surrey	8.8
1686	C. R. Faulkner	Derby & Lancs.	7.8
1687	P. Hurwitz	Midland	7.8
1688	G. S. Foster	Bannerdown	16.8
1689	B. A. Davies	Midland	7.8
1690	A. R. Le Roy	E. Midlands	26.7
1691	N. W. Cranfield	Surrey	16.8
1692	J. M. O'Brien	Surrey	11.8
1693	P. R. Horne	Surrey	20.8
1694	N. J. M. Paillips	Southern Command	8.8
1695	J. Dabill	Southern Command	7.8
1696	M. J. Baker	Four Counties	6.8
1697	C. G. Day	Swindon	15.8
1698	M. A. Enser	Fenland	7.8
1699	C. O. O'Leary	N.A.E. Aero Club	19.8
1700	P. J. Strickland	Midland	5.8
1701	R. J. Hale	Condor	23.8
1702	J. M. Sassi	Bannerdown	15.8
1703	D. B. Kitchener	Nimbus	1.8
1704	J. M. Whiteley	Leicester	4.4
1705	F. E. Stickland	Surrey	29.8
1706	B. A. Bower	Imperial College	16.4
1707	D. T. S. Ware	Cambridge	20.8
1708	A. C. Price	Nimbus	25.8
1709	E. Shipley	Bicester	7.9
1710	M. Simons	London	9.9
1711	O. Corsbie	Devon & Somerset	31.8
1712	G. Clark	Doncaster	8.9
1713	H. J. Noonan	Surrey	9.9
1714	P. J. Ross	Silver Wing	15.5
1715	C. V. Webb	Staffordshire	18.9
1716	E. P. Hansen	Eagle	11.9
1717	R. E. Thomas	Surrey	5.9
1718	F. F. G. Walles	Bicester	18.9
1719	M. H. B. Pope	Bristol	8.6
1720	J. Collins	Laarbruch	25.9
1721	A. E. Gee	R.A.E.	20.9
1722	M. M. Erdman	London	19.9
1723	L. Woods	London	19.9

BOOK REVIEW

The Clouded Sky, by JOHN IGGULDEN. Published by Macmillan & Co., London. Price 30s.

SOME years ago, John Iggulden, who is one of the pillars of Australian gliding, was seized by a compulsion to write. The result to date has been three novels, "Breakthrough", "The Storms of Summer", and now "The Clouded Sky". This last is his longest work, an immense novel of 438 pages. Its background is Australia, its hero runs a family building company, and is obsessed with gliding and a complicated sex-life. All three run him, and everyone associated with him, into a lot of trouble.

It is the first time that gliding has been pictured, by a professional writer of skill, as an integral part of a whole life, which of course it is. I know Australia fairly well, and the feeling of the country is well conveyed, whilst many of the descriptions of gliding are the best I have read anywhere. If I were to criticize the hero, I would say he treats his thermals — as he treats his women — pretty rough. As the first adult novel with a strong gliding theme woven into it, this is quite a landmark.

P. A. W.

Building Aeroplanes for "Those Magnificent Men" by AIR COMMODORE ALLEN WHEELER, C.B.E. Published by Foulis & Co., London. Obtainable from B.G.A., price 15s. or 16s. 9d. postage included.

AIR COMMODORE WHEELER was technical adviser to Twentieth Century Fox during the making of the film "Those Magnificent Men in their Flying Machines", and in this book, after some preliminary information on the selection of suitable types, he describes in detail the construction and test flying of the six major aircraft used in the film and adds a chapter on the "Weirdies", the non-flying oddities which also took part.

Air Commodore Wheeler is not only a man to whom things tend to happen; he has the fortunate knack of being able to describe them in a light-hearted, narrative style. It may be imagined that there were incidents in plenty during the building of these machines and the making of the film, and you will find them all in this book.

The effort put into this extremely fine film by all concerned was most praiseworthy and must be unique in the history of film making. Even Howard Hughes, in his classic "Hell's Angels", had all his aircraft available from war surplus and other stocks.

It is worthwhile buying this book simply for the pleasure of reading it, but it also forms a fascinating record of a unique achievement, not only in the world of film-making but in that of aviation.

J. H. B.

The Gliding Book, edited by RICHARD SERJEANT and ALEX WATSON. Published by Nicholas Kaye, London. Price 30s. in U.K.

THIS book appears to be aimed primarily at the Air Training Corps and would therefore be found useful by anyone in the early stages of gliding. But it also contains material of general interest to all gliding people. John Furlong starts off with reminiscences of his part in introducing gliding into the A.T.C., his general gliding career, and the development of gliding in Britain; it reads as if it was dictated, and it should have been checked before publication (e.g. Daglings are called "copies of the German Kronfeld"). "The Elements of Gliding Flight", by Flt. Lt. E. G. Hart, is a good introduction; then Alex Watson, on "A.T.C. Gliding and the A and B Certificates" gives further advice to A.T.C. beginners. C. E. Wallington, in "The Ever-Changing Sky", adapts his usual style to less knowledgable readers and, incidentally, puts wave-soaring immediately after hill lift and

before thermals. Ken O'Riley, in "Higher Degrees", describes the various C certificates — ordinary, Silver, Gold and Diamond, and adds some instructing experiences (". . . a young girl pupil who was very underconfident", ". . . a pupil who was a perfect pest").

Fred Slingsby, in "Making Gliders", has at last been given an opportunity of recounting his life as a glider manufacturer; his chapter is of the greatest interest, and virtually free from any historical inaccuracies. Finally Nicholas Goodhart has a splendid chapter, "Achievement", about flying in International Championships and breaking records; his opening paragraph is: "Gliding, perhaps more than any other sport, always offers a goal just ahead of all participants, be they brand-new pupil or old hand. It is the achievement of these ever-unfolding goals that gives to gliding the special appeal which so firmly holds its devotees."

In a short appendix Derek Piggott gives his views on the advantages of motorized training, and another appendix lists all British gliding clubs and the gliding organizations and principal centres in 23 overseas countries.

Am Himmel der Pampa, by HANS GRAWE. Published by the author at 463 Bochum, Overhoffstrasse 5, West Germany. Price 14.80 DM.

THIS is one of the few accounts of a World Championship meeting published in book form — previous ones were about the 1948, 1950 and 1960 meetings. Herr Gräwe gives a fully detailed record of the 1963 World Championships in Argentina. It is all in German, but even readers with only a smattering of German might consider it worth getting, if only for the large number of excellent photographs. We understand the author is preparing a short supplement on the Championships at South Cerney, to be included in a future edition.

The Sky Tramps: the story of Air Charter, by PETER JACKSON. Published by Souvenir Press Ltd., London. Price 25s.

THIS is no mere sober account of the business tranactions of charter firms. Charter planes have thrilling adventures and get into dire trouble, carrying revolutionaries to secret destinations and illegal immigrants to Israel, being shot at in the Berlin corridor and dabbling in Congo politics, being forced to change course at gunpoint, and so on. A Halifax gets lifted in a cu-nim at 1,000 ft./min. far above its normal ceiling of 9,000 ft. and is iced up.

For those who remember Graham Humby, the first ab-initio pupil to get British A, B and C gliding certificates, the book is of special interest. Soon after the last war he started a flying club at Elstree, then founded a real "tramp" organisation for carrying odd cargoes all over the world, buying 43 Halifaxes in the course of two years. But the firm collapsed when Humby went down with tuberculosis which he had picked up when tending Australian prisoners of war returning from Japanese camps in an aircraft carrier.

But, in contrast to the old days, "customers now expect corporation standards of sophistication from charter companies less than fifteen years after the ex-bomber was their basic airliner."

The Flying Cathedral, by ARTHUR GOULD LEE. Published by Methuen & Co. Ltd., London. Price 30s.

THIS is a biography of S. F. Cody, the picturesque Texan who became a leading figure in the early years of British aviation. The Kronfeld Club heard all about him some years ago from one of his assistants, the late G. A. Broomfield, whose book, "Pioneer of the Air", dealt mainly with his own experiences with Cody. This book, on the other hand, takes us right through Cody's life, and his first aviation experiments with man-lifting kites come two-fifths of the way through.

Cody came to England through being invited to do a sharpshooting turn on the music halls, because such activities had been popularised by the "Wild West Show" of William Cody, alias "Buffalo Bill". In the reviewer's schooldays the two Codys

were reputed to be brothers, but they were not related, though they met several times in an air of mutual admiration.

The author has been to much trouble in consulting original sources, including Cody's surviving relatives. The result is a good and comprehensive book; and it includes many details of Cody's first and only glider, a biplane, built during the winter of 1905-6. Although he had used warping wings for lateral control on his big box-kites, which had wing-like extensions, Cody thought his glider too frail to stand up to wing-warping, so he fitted "diamond-shaped ailerons on fins under the leading edges of the lower planes" (the author is wrong in stating that these were called "elevons" — even the word "aileron" was not yet in use). It is not surprising to read that "a later version of the glider had a supplementary elevator at the rear". A photograph of the glider is included; the wings appear to have no camber and the precise situation of the alleged "elevons" is not clear.

Two items from the book: Aeroplane dope had not yet been invented, so Cody used the syrup from tapioca pudding for the purpose. And in 1911 Cody phophesied: "In about ten years' time we shall have large passenger-carrying aeroplanes able to compete successfully with steamers and trains." A. E. S.

CORRESPONDENCE

THE DESIGNATED START

Dear Sir,

I was delighted to read my good friend Dick Johnson's remarks on the last World Championships, with his plea to return to the bad old days.

We in England had long resisted the designated start system, which has been in general use in competitions in most European countries for a number of years. After quite a bit of natural conservatism, the step was taken and I believe to nearly all pilots' advantage, whatever the type of glider they were flying.

In essence, the system is about twice as efficient a method of launching as the old starting-board. The *same* number of aircraft will launch a given number of gliders twice as quickly. Provided that the decision to launch is given when it is only *just* possible to stay airborne — and in general this was the case for at least one Class at South Cerney — I can see no really valid objection to the new (for Britain) system.

A further advantage, which he does not quote, is that it is nearly impossible to predict in the early morning the right moment to go across the start line, let alone take a launch. With the old system, pilots were meant to be cleverer than met. men. Like most experienced glider pilots, I think I can usually say that I want a launch *now*, by looking at the sky. In competition conditions, I might well have gambled wrong some two or three hours earlier and this moment of truth might be quite a lot out. In practice, of course, most pilots get off as early as they can by starting board and then stay soaring locally until time to cross the line. The designated start takes the guesswork out of the earliest moment to take off and then gets all pilots airborne in half the time.

The first disadvantage he mentions of increased collision risks sounds reasonable until it is analysed. If we assume that no glider will start the task until all gliders are airborne, which is usually roughly correct, the difference between the two systems is one of rate of "feeding" the sky over the base airfield. There is no particular urgency on the pilot before crossing the start line and he should be maintaining a maximum lookout. The danger comes after crossing, when some pilots bury their heads in their cockpits in their efforts to extract the maximum out of a thermal. The moment to start the task is more a question of pilot skill and how long he thinks he is going to take. The only collision which occurred, happened ten miles out on course and not over the base airfield. I believe there

were only four gliders in this particular thermal at the time.

The second disadvantage he mentions of not allowing low wing-loading gliders to take off early and thereby make up in distance what they may lack in speed, only applies to distance tasks. This hardly applies at South Cerney when "thermal snifting" was done by two low wing-loading gliders, and the launch was started for one of the Classes *as soon as one or other could stay up.*

The third disadvantage of requiring a lot of tow 'planes also does not apply. If only a few 'planes are available to tow off a large number of gliders, the total time taken will be longer and will approach that used with the starting-board system. Alternatively, the type of task which it is possible to set will be reduced in length. Except for distance tasks, a reduction in the number of towing aircraft will force the setting of shorter speed tasks (to allow all gliders a fair chance) and this will usually favour the "hot ships".

The fourth disadvantage, that more observers are required at start line and turning points, does not apply theoretically, as I have already explained, but may be correct if the decision to launch a Class is too close to the optimum time to cross the line. The problem is much more concerned with the total numbers of gliders taking part, rather than the method of launch.

The last disadvantage that he puts forward, that the Competition Director may unduly influence the outcome of the competition, will only apply if the Director is also the task-setter and short tasks are set on very good days. This disadvantage is again a plea for the distance tasks at the expense of races, and I am afraid the tendency is quite the reverse. I heard quite a lot of pilots expressing the view during the Championships that the retrieving problems of free distance tasks had made this task out of date. It is surprising how many times the day following free distance (which is usually a rest day) produces ideal soaring conditions. The "distance along a line" task set for the last day at South Cerney proved nothing, except that it should have been a race to separate out pilots and gliders.

The problem of over-emphasis of speed versus distance is one which strikes at the heart of task-setting and competitive gliding. It is by no means proven that the glider designed to go fastest under West European conditions will not also go the furthest. There will always be times during international competitions when tasks will be set on very weak days or when several tens of miles have to be covered in such conditions. The specialist record-breaker designed only for Texas or South Africa (sorry, Pat!) will never win the competition as a whole, and the type will remain a one-off freak. On the other hand, the rules at South Cerney were specifically designed to prevent a small proportion of gliders creeping away in a very local clearance and thus making it a competition day. Most people would regard a success of this sort as requiring more luck than skill, and the days concerned were therefore declared no-contest days.

This is the great advantage of World Championships. It prevents the designers from taking too extreme a view and prizes in future will still go to the gliders (and pilots) who fly "the furthest, the fastest and on the mostest days" (to misquote a saying by a famous General in the American Civil War).

In my opinion, the designated start might also be used for free distance days, always provided that the decision to launch was taken as early as possible. This may mean that the hot ship will have to land for a re-light; but that is probably as it should be. A combination of guesstimation and boardmanship may get a pilot off at the head of the queue. This does not seem to me to be anything to do with his skill as a pilot or the quality of his glider — particularly if the designated start would get all gliders airborne in half the time.

The designated start is potentially the biggest advance in competition gliding seen in this country. The old system was a development from winch launching and hill soaring, and should have been given up years ago.

Camberley, Surrey. TONY DEANE-DRUMMOND

REFLECTIONS ON A GLIDER

Dear Sir,

Having read in your August-September issue about the experiments carried out in tracking gliders by radar, I wish to inform you that on several occasions I have been tracked successfully by the Selenia Meteor 200 RMT 1 L radar equipment of the Israel Meteorological Service. This was done in order to ascertain the possibility of tracking gliders for air traffic control and for meteorological research. On these occasions several pieces, 1 ft. square, of household aluminium foil were placed on the sides of the glider, from the inside, and under the seat.

The tracking was done automatically up to a slant distance of 51 kms., at elevations from 1.8 to 0.5 degrees, and at heights from 2,000 to 4,000 ft. On one occasion the echoes became very weak over the hill region, and the automatic tracking device picked up another aeroplane instead. On other occasions flights of storks were spotted at about 3,500 ft. at similar distances, and were tracked temporarily by the automatic equipment. It is expected to get better results with proper radar corner reflectors to be installed in the glider fuselage in the near future.

Lod Airport, Israel. DAN ARBER.

A PERFECT SEAT BACK

Dear Sir,

Owners of Olympia 460's might like to know that the detachable front seat cushion of a Land-Rover makes a perfect seat back when flying without a parachute; so much so that it would be worthwhile buying one for club machines frequently so flown.

48 *King's Gate, Aberdeen.* ANTHONY EDWARDS

ABOUT THE SISU

Dear Sir,

I should like to take issue with a statement written about the Sisu in SAILPLANE & GLIDING, October-November, 1965 issue, page 390: "The spin characteristics of Sisu are sufficiently bad that it is not spun deliberately." This simply is not true.

The Sisu neither has bad spin characteristics nor any bad recovery characteristics that I know of under normal flight conditions. I have spun the Sisu innumerable times and recovery may be effected immediately after the spin is initiated.

I find it hard to believe that a pilot will purchase a "plastic" sai'plane that has such torsional flexibility of the wings that in a spiral dive recovery cannot be effected until "forced dihedral" is achieved at a speed of 90 knots. One could well meet the ground before a speed of 90 knots is achieved, and/or recovery is made.

Progress in design, construction, and performance of sailplanes must continue, gentlemen, but not at the cost of safety in flight or on the ground. This is what the "fussy" engineering of the Sisu is all about — safety in high performance. The records still stand.

Baugh Industries, Arlington Aircraft Division (Sisu), Charlotte, North Carolina, U.S.A. P. J. BAUGH

THE GAP BETWEEN SILVER AND GOLD

Dear Sir,

There was an interesting discussion in the bar at Bicester the other night about the differences between the standards required for the Silver and Gold C badges. There was general agreement that the gap is too great. The Silver C is nowadays a very elementary achievement, and many of the more experienced pilots felt that they should have something to show for the fact that they are not of basic Silver C standard, but of somewhat greater ability. The intermediate standard suggested was 150 kilometres distance, five hours duration, and a gain of height of 2,000 metres. This would be the Silver C, and the lower standard would be the Bronze C, with requirements the same as the present Silver C, but with the duration test being only three hours. The Gold would remain as at present. The Gold — Silver — Bronze gradings would bring gliding into line with other sports.

The advantages of these revised standards are fairly obvious, and it is only necessary to point out a few. The three-hour duration for the Bronze is logical. Many people are today denied their Silver, not through lack of soaring ability, but through lack of opportunity. There are many days when the weather lasts for three hours, but not for five. If a pilot shows that he can soar continuously for three hours, then it is reasonable to assume that, given the opportunity, he could soar for five. The requirements for the revised Silver badge are equally logical. A 150-km. flight requires some map-reading ability, which 50 kms. may not. It will also require the pilot to demonstrate his ability to avoid bad areas, clamps, etc. The five-hour duration flight is also logical. This in all probability will be achieved during the 150-km. flight, as our candidate has not at this stage learnt much about speed-flying. In any case, as an extension of the argument applied in favour of the three-hour Bronze flight, a five-hour flight shows not only the ability to soar, but also the ability to choose the right time. The 2,000 metre gain of height test inevitably means cloud flying or wave soaring — at least in Britain — and these are necessary requirements of advanced gliding.

It was agreed that the Gold C is about right, but we felt that the standards required for the award of Diamonds are not consistent. A Diamond for goal is invariably gained with the Gold distance (except Muggins — cost me a double lot of beers!). Diamonds should be the ultimate, not as easy to obtain as the next lowest standard. I would suggest that the Diamond for goal be discontinued, and in its place be substituted one for a speed flight of at least 60 k.p.h. round a 200-km. triangle. (As I believe has already been suggested as a fourth Diamond.) Not only is flying of a higher standard needed, but a triangular speed attempt is more practical, being better training for competitions, needing no retrieve (we hope!), and in any case is still a goal flight. One final point regarding Diamonds: there is too much temptation to continue a rapid Gold C height climb in an attempt to get Diamond height, with the dangers of anoxia being ignored. It is suggested that a Diamond height claim should show evidence of the use of oxygen — say an official observer's certificate.

The problem now is what to do about the present badges. All Silver C pilots would automatically be eligible for the new Bronze. Many would be eligible for the new Silver, but without certified barograph traces, landing certificates, etc., be unable to claim. Two years' warning of the introduction of the new badges would give the present Silver C pilots the chance to reach the new standards, failing which they would automatically revert to Bronze C.

Aden Services Gliding Club. JACK HARRISON

AUXILIARY POWERED SAILPLANES

Dear Sir,

The idea of short-circuiting many of the frustrations of launching and retrieving gliders by fitting them with auxiliary engines is a pretty old one. However, with the engines available the result was either a glider with inadequate performance in climb and take-off, or a light aircraft with indifferent soaring potentialities. Many of us who saw Dick Schreder's HP-12 and its auxiliary power supply at South Cerney are beginning to appreciate that the problem can be solved without undue expense.

The HP-12 as a glider compared well with the others in the Standard Class; however, with the removal of the upper half of the nose fairing an auxiliary engine can be attached. The engine is made up of two West Bend go-cart engines linked by a chain drive to a central axle carrying a variable pitch propeller. The quoted performance is a climb at 500 ft./min. and a cruise at 100 knots and 50 miles per gallon.

What then are the prospects? It seems likely that for about the same cost as a glider trailer one can have an auxiliary engine which could give a launch as good as an aero-tow and permit a practicable self-retrieve.

It is essential that the engine can be removed easily without major modification to give a normal sailplane which can compete in competitions on equal terms with conventional sailplanes. With the engine in place and the propeller feathered, the

performance as a glider should not be appreciably affected. The engine should start readily in flight and give a rate of climb of 300 ft./min. or better.

There do not appear to be any major technical problems. Current sailplanes could often be modified at reasonable cost, but it would be better if new gliders should be designed from scratch with auxiliary power in mind. There are a variety of engines available. A Hirth Flat 4 engine has been specially developed for this purpose but seems unduly complicated and expensive. Industrial two-stroke engines are very attractive, being light and cheap in relation to their power output.

The Wankel engine in its air-cooled form produced by N.S.U. or Fichtel & Sachs holds out the best prospects, as amongst other things it can give outputs of 0.5 lb./h.p.

There appears to be a reasonable range of engines available now which should give the performance required; what is required is some sound far-seeing legislation to give a framework in which either firms or individuals can experiment without danger, restriction or heavy expense. Firstly, it is essential that an auxiliary powered sailplane must be regarded as just that and not as a variety of powered aircraft. In other words, with the engine removed the glider should have an ordinary B.G.A. C. of A. like any other glider. The engine itself should be regarded as an auxiliary engine and not as the pilot's sole means of survival.

The engines are small and light enough for the owners to do their own overhauls, only requiring the services of an engineer for supervision as are glider C. of A.s at present. The engines should be based on some form of industrial engine which is readily available in quantity so that the cost of spares and replacements is low. There should be sensible regulations regarding fire walls, C. of A. limits, etc., and ideally the organisation and administration of these requirements should be carried out by a voluntary body such as a sub-committee of the B.G.A. — there are many of its members with the required technical knowledge. Only in this way will this new and interesting possibility of development really get on its way so that we have some prospect of having many of gliding's fundamental frustrations removed.

Marlow, Bucks. D. BRENNIG JAMES.

ROYAL AERONAUTICAL SOCIETY CENTENARY YEAR

Dear Sir,

Many people are already aware that the year 1966 will mark the Centenary of the Royal Aeronautical Society. To celebrate this historic event, the Reading Branch of the Society will be organising, in association with the Lasham Gliding Society, an event to be held at Lasham during the 1966 National Gliding Championships.

The exact form has yet to be settled, but it would seem that it could be divided into two sections:—

(i) HISTORIC GLIDERS.—A precise definition is difficult, but the organisers would be glad to be contacted by anyone who has a "rare" glider built before 1950. A small fund of money has already been provided to assist people with the cost of transport. A *Concours d'Elegance* competition will be held, age being taken into account, and time will be made available during the Championships for historic gliders to be flown.

(ii) STATIC EXHIBITION.—It is hoped to arrange a display of ancillary equipment used by glider pilots since gliding began.

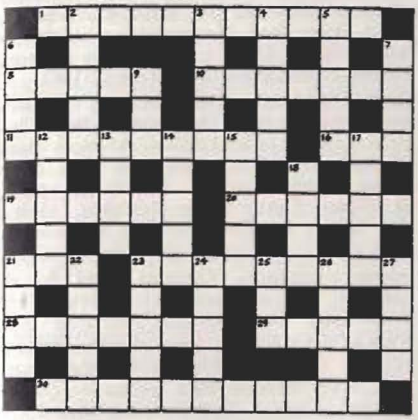
I shall be grateful to receive any helpful suggestions, and it is, of course, essential for the organisers to know as early as possible what support will be forthcoming. Please, therefore, write to me if you are interested, and remember that writing will not commit you to anything.

22a Ray Park Avenue, Maidenhead, Berks. ROGER C. BARNETT

Change of Address — From 5th January, 1966: W. A. H. Kahn, Private Owner Representative and Chairman, Development Committee, address: 5 Caroline Place Mews, Bayswater, London, W.2.

CROSSWORD

By GORDON CAMP



CLUES ACROSS

1. Measure of upward progress (4, 2, 5)
8. Most common component in the construction of metal sailplanes (5)
10. What your oxygen bottle might do if the tap comes into contact with oil or grease (7)
11. Sign of the pundit (4, 5)
16. An alternative to soot in producing barograph charts (3)
19. Element of winch cable (6)
20. Take the weight, on principle? (6)
21. Wide-eyed bird with night rating (3)
23. Meteorological phenomenon which heralds better soaring weather (4, 5)
28. Suffered by many an altimeter! (7)
29. May be taken down in writing, especially at Briefing (5)
30. Sailplanes rarely flown by private owners (4, 7)

CLUES DOWN

2. Characteristic shape of the cirrus surmounting a cumulonimbus (5)
3. Cross-country landing ground (5)
4. Rate at which temperature decreases with height (5)
5. Native of Ao-tea-roa, "The Land of the Long White Cloud" (5)
6. Unpopular aerodynamic force (5)
7. Two-seat sailplane flown at Camphill (4)
9. Auxiliary aerodynamic control surface (3)
12. Situation in which both gliders and trailers often find themselves (2, 3)
13. "Two up" (4)
14. Listen to this for 1 Across! (5)
15. Stuck, with Aerolite perhaps (5)
17. Substance of most aerotow ropes (5)
18. God of Thunder, to be worshipped for your Diamond Height! (4)
21. Unsuitable crop in which to land (4)
22. Bodily location of most 11 Across's (5)
23. Rise up! (5)
24. Permitted by law (5)
25. Fixed stabilising surface to which the rudder is attached (3)
26. Wing tip which travels the faster in a turn (5)
27. Ann Welch's announcement to competing pilots (4)

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"DIRECTORY of All Sailplane Models in U.S.": 114 photos, specifications, performances, statistics; 50 cents. Soaring, Box 66071, Los Angeles 66, Calif., U.S.A.

15 m. Wooden Spar DART with wing roots modified for improved low speed performance. Supplied with one year C. of A., and finished in customer's own colour scheme: £1,325. Slingsby Sailplanes Ltd., Kirbymoorside.

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FOR SALE—*continued*

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"AUSTRALIAN GLIDING"—monthly journal of the Gliding Federation of Australia. Editor, Gary Sunderland. Subscription 30 shillings Australian, 24 shillings Sterling or 4.25 dollars U.S. and Canada. Write for free sample copy, "Australian Gliding", Box 1650M, G.P.O., Adelaide.

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NORTH AMERICAN gliding club requires man to act as Manager and to carry out aircraft maintenance. Interviews will be arranged in London. Box No. SG 210.

FREE gliding holiday in Canada. Qualified gliding instructor required for 4 to 6 weeks in July-August, 1966. Weekends free. Free passage and salary for suitable applicant. Send details of experience to Box SG 211.

WANTED

SKYLARK 4, early spring. Details to: A. Powsey, "Freshfields", Canterbury Road, Brabourne, Ashford, Kent.

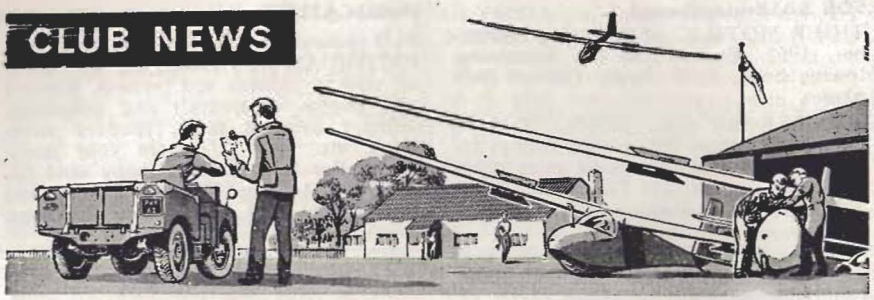
WANTED January. Olympia 2B or Skylark 2B. With instruments, trailer and current C. of A. Parachute and barograph also required. Write Captain S. Marriott, c/o "Barters", Minstead, Lyndhurst, Hants.

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WANTED: The following copies of 'Gliding" and "Sailplane & Gliding". "Gliding" Vol. 1 No. 2, Vol. 3 No. 2, Vol. 6 Nos. 1 and 3. "Sailplane & Gliding" June 1956, June 1957. State price required. Replies to Flt. Lt. L. Tanner, R.A.F. Finningley, Doncaster.

It will, of course, be understood that the British Gliding Association cannot accept responsibility for the claims made by advertisers in "Sailplane and Gliding".

CLUB NEWS



WE leave the dismal summer behind, but, in spite of it, annual club statistics show quite remarkable achievements. Whilst wishing all clubs a Merry Christmas and better soaring in 1966, I would like to thank you all for sending your Club News copy in so promptly and correctly prepared over the past year. Nowadays hardly a club forgets to type double spaced on one side of the paper only, which is a tremendous help to us. Incidentally, we would still like more pictures in this section.

Copy for inclusion in the next issue should reach me at 14 Little Brownings, London, S.E.23, not later than Monday, 13th December.

YVONNE BONHAM (MRS.),
Club News Editor.

13th October, 1965.

ABERDEEN

IT is at this time of year that we used to look on the summer season, blame the weather for our unachieved goals, and praise our hard work and initiative for progress made. This summer is no exception. Despite this, a few cross-countries have been flown and various successful and unsuccessful attempts to soar Bennachie in the Skylark, Swallow, and Ford Pilot, have kept the trailers on the road. The Beagle, too, after a rather chequered career, is fully operational at Litterty, thanks to the efforts of a group of members and friends. The problem of drainage and levelling, however, remains with us, if aerotowing is to increase. Our modest clubhouse has now obtained that "lived-in" look: the need for internal decoration solved by covering the walls with posters, maps, etc., giving it the appearance of a cross between a meteorological office and a travel agency; which of course, it is.

With winter approaching, we are looking forward to some wave-soaring, and with our united enthusiasm this should dispel our "summer blues".

A. J. M.

BATH (Keevil)

DURING the week following August Monday, with the permission of the O.C., R.A.F. Colerne, under whose command we operate at week-ends, we were able to have an enjoyable week's soaring holiday.

Bill Davis set the pattern for the week when he proved it to be possible to reach the Westbury ridge from the airfield from a good launch. He put the situation to good use and, with a mixed bag of ridge and thermal soaring, put in five hours to complete his Silver C. This makes Bill our first member to complete a Silver entirely within the Club.

The following day Ron Lynch took the Swallow to Weymouth to claim his Silver distance. On the way he climbed to 7,000 ft. in cloud and got well and truly iced up for his trouble. Having already obtained his height, his discomfort was to no avail. Ron landed in a holiday camp — does he know how to pick his field!

On the same day Ken Stephens put in 5 hrs. 58 mins. for his duration, and two days later headed for Lasham with the 463, landed ½ mile short, but with his



The President of the Bath Club preparing for take-off.

distance in the bag.

Our president, Viscount Long of Wraxall, celebrated his 73rd birthday with his first ever glider flight. C.F.I. Owen Harris took him for a look at his home, Steeple Ashton Manor, from the air.

Lord Long's remark when he landed should be noted by all who say they are too old to start flying: "I feel ten years younger."

One of our biggest disappointments to date is the refusal of our R.A.F. landlords to back our application for a licence for a bar in the control tower. We hope that they will eventually relent and reverse their decision, because at present we are not experiencing the best of the social side of a gliding club. If they don't — well, I reckon we have the best coffee bar in the business.

K. N. S.

BLACKPOOL & FYLDE

IT is with sadness that the writer takes up his pen to record these notes, for less than one day has passed since the untimely and tragic end, in a flying accident, of our friend Ernie Dodd, the hard-working Chairman of our neighbour club — the Lakes G.C. He will be sadly missed.

Congratulations to Ken Cooper on his five hours in our Club Olympia 2B which he took to Portmoak late in July accompanied by Ivor Stretch, John Gibson and Terry and Eileen Hogben. They logged 17 hours 16 mins. during their six days in Scotland, which was not so bad considering the somewhat unfavourable weather.

Dennis Cooper went solo in September, and Martin Shaw and Graham Wright and, probably, a clutch of other members should be doing so very shortly. August provided some very satisfying soaring, but September was rather disappointing. The second Sunday in October was an excellent day and several very new members had their first taste of soaring to whet their appetites.

We anticipate moving back to our home site at Blackpool Airport for the winter, at the end of October. The return to Samlesbury Airfield is usually at the end of March or early April. The usual alternate Thursday night dances, held in the Log Cabin at our clubhouse, continue to be well supported. British United Airways held a very successful dance in September, and the British Aircraft Corporation Flying Club will be holding an Autumn Dance and presentation to their "Pilot of the Year". We hope to resume

the fortnightly lectures and film shows which proved so instructive the winter before last. A cordial welcome is extended to all.

J. S. A.

BRISTOL

THE thermal season seems to have come to an unspectacular end and we are hoping to get our share of north-westerlies this winter to keep our feet cold above the ridge.

The most notable flight recently was Jim Stuart's Out-and-Return Lasham, which he completed in 5½ hours. When Jim experienced R.T. trouble, the link via "Can-Can" over Lasham was much appreciated.

Congratulations to Cooper, Herbert, Harding, Sewell and Grey-Walter: all solo since the last issue, Tim Grey-Walter achieving his on his 16th birthday. Bill Malpas has chalked up enough flying in the U.S. to gain him second place on the Club Ladder. Talking of Ladders, if any club is interested to compete with us on an inter-club Ladder, please let Roger Barnett know.

Various club members have been up to quite different tricks. Ron Sandford, "seemingly out of control" according to the local newspaper (we don't know the truth) entertained a big crowd at a Staverton Airport Display in his 463. Peter Simmons, on completing a course at Lasham, has become a Club Instructor.

Our Christmas Party is on 11th December and visitors will be most welcome to this annual hooley.

R. G.

CORNISH

LIKE the proverbial little girl, the weather down here has been either very good, or horrid. Mostly horrid. Up to the time of writing we have had only 80 Club flying days as opposed to 93 during the same period last year. (This does not include courses.)

In spite of this we have had very much more flying. In figures this amounts to

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Photo: A. E. Slater

The clubhouse at Perranporth.

an increase of 36% in launches and 24% in flying time, a pretty good result by any standards. In addition we have got the clubhouse cleaned up and electric light (mains) installed.

It would be invidious to single out any one person as being responsible for all this, when everyone has contributed, but we might mention that we have chalked up over 300 aero-tows this year, and are well on the way to the 350 mark, thanks to the efforts of our tug pilots, both local and visiting.

G. E. T.

COTSWOLD

HAVING successfully completed our first year of operation, here is a brief synopsis of our activities.

We formed in June last year, and by September we were fully operational with ground equipment and a T-21B which we hired to get the Club going and which we have now bought.

The majority of members were *ab-initio*, but of those who regularly flew through the winter, some dozen have gone solo and six have obtained their C. This is an achievement we are quite proud of, as we have only had one machine in the air regularly.

Our airfield is Long Newnton in Gloucestershire, which we find excellent: some members have had flights of half an hour and a one-hour flight has been logged in the T-21.

We have the use of a section of a very commodious hangar to store our equipment and the clubhouse (all mod cons) contains a very excellent canteen run (very profitably!) by Marjory Cropp, the secretary's wife.

On the social side, we look forward to a repeat of last year's Christmas Dinner and Dance. We have also held a very successful barbecue.

We held a course this year before Whitsun for which we borrowed the Worcestershire Club's Tutor (for which we are very grateful), and we were pleased to welcome John Hulme from Cambridge, who brought his T-21 for the week. All who attended learned a lot about gliding and had a great time as well. An unexpected visitor during the week was Wally Scott of the U.S.A. team at the World Championships, who could not quite get back to South Cerney. He was, of course, made very welcome, and we gave him a trip in the T-21 which was quite a novel experience for him.

A word of thanks to our committee who have been working hard and done a very good job. Finally, we shall be

glad to see anyone with or without a machine who cares to come and do some flying with us.

D. G. M.

COVENTRY

A RECENT heavy landing having incapacitated the T-21, we can only report two solos over the past couple of months, the most recent being I. Tennant following closely upon that of his brother. Congratulations to both, also Phil Banks on gaining his C.

At the moment we are without the use of either of our Tigers, as one has been traded in against a rebuilt machine and the other is undergoing a major engine overhaul; but fortunately we have the kind loan of a machine, complete with pilot, by some friends who also helped us out with our Competition tugging.

Radio seems to be the up-and-coming thing these days, and one or two enterprising senior pilots are to be seen dashing round the field at week-ends extracting money, or promises of money, for the installation of a radio in the Club Skylark 3 next season. We also now have on the site the ex-Rearsby Skylark 4 which is the new pride and joy of a fresh syndicate of five members.

Our clubhouse goes from strength to strength under an enterprising House Committee, and even though we say it ourselves we are very proud of what has been achieved at Husbands Bosworth since we first purchased the barren site. The thought of continued hot meals, and our own licensed bar throughout the long winter ahead, is most comforting, and plans are now well under way for various social activities including a Christmas Party and Raffle Draw on 18th December, followed by a New Year's Eve get-together.

We were all deeply saddened in early October by the death of John Edwards, our tug pilot, in an accident to a Tiger Moth in which he was flying from Coventry to see us. John was a particularly popular pilot of exceptional ability who was always willing to do a hard day's stint tugging, if occasion demanded. He will be greatly missed around the Club. Our deepest sympathies are extended to his mother, Mrs. Edwards.

Our instructor, Phil Winkley, who was with him at the time, is, we are glad to say, progressing in hospital.

KENT

THE clubhouse lounge and bar was opened for the first time on Saturday, 21st August, with Mike Wilson pulling the first pint. Since then slide and film shows have been held and quite a number of members usually foregather there after flying.

The barbecue held on 11th September was attended by about 80 members and friends, who enjoyed luscious chops, sausages, mushrooms, etc., by the light of a full moon.

During August Judith Rogers and Peter Clark both qualified for C certificates. Soaring has generally been of the local variety, though members of the Skylark 4 syndicate have flown some short out-and-returns.

P. B.

LAKES



ERNEST WILLIAM DODD

THE untimely death of our chairman, Ernest Dodd, as the result of a flying accident at Walney on 10th October, at the comparatively early age of 45 years, has robbed the gliding movement of one of its brighter characters.

Ernie started working life as a skilled pattern-maker but transferred his energies to the teaching profession, and finally to the development of a large and successful radio and electrical contracting business in Dalton with branches in Barrow and Ulverston. He had many other interests, for it was characteristic of him that his

active brain and boundless physical energy enabled him to perform prodigious labours with apparent ease.

In 1959 he joined a course run by the Lakes Gliding Club at Tebay, and from that time forward became an active member of the Club. He often confessed that he found his first flights a little startling and that the art of flying did not come easily to him, but he accepted the challenge and overcame it.

His popularity marked him as a leader of exceptional quality and his enthusiasm rubbed off on all with whom he came in contact. His election as Chairman in 1962 was a natural event, and he took over at a time when the Club's difficulties were formidable. He surmounted in turn problems arising from the loss of the Club's two-seater, gale damage to the hangar, and the virtual ruination of the site by adverse weather. His negotiations with Messrs. Vickers enabled the Club to re-establish itself at Walney, build and a equip a new clubhouse, and place itself on a sound financial footing. Yet during this time he found time to obtain his P.P.L., gain his Silver C, and qualify as a certified ground engineer.

Our sympathy goes out to his wife and daughter and to his mother, of whom he was inordinately fond. To all those who were privileged to know him, the name of Ernie Dodd will be remembered with affection and respect.

F. G. R.

LAND'S END

AFTER a highly successful start to our career we are now drawing a deep breath and digging in for the winter to consolidate our organisation as a Club.

At time of writing we have just concluded negotiations with the Ministry of Aviation to act as Managers of the airfield until late 1967, when its ultimate fate will be decided.

Under the terms of the Agreement we have to provide facilities for all comers to use the airfield, but this in no way inhibits our own gliding and flying activities.

In the five months since taking the air we have had approaching 1,800 launches, 350 by aero-tow, giving some 280 hours' flying. With soaring on 35 of the 101 flying days, we have three 5-hour legs to report, and a number of ab-initio members are approaching solo in spite of the appalling weather which has dogged our week-ends. Although we feel this is a fair record, we are working hard to make sure of a substantial improvement next year.

Continued exploration has been the theme of our solo flying, one enterprising expedition setting off from low winch launches one Sunday evening, scraping upwind along Cot valley to reach Cape Cornwall at unmentionable altitudes. Strong lift off the Cape whisked Alan Davie in his 4 and Brian Pritchard in the Club 3 up to over 2,000 ft. and they pair-flew to St. Ives and back—a modest 25-mile out-and-return along the cliffs.

On another occasion a wave was soared along an eight-mile beat from St. Michael's Mount to the airfield at between 3,000 and 3,500 ft., but our "high day" came when a sea-breeze street developed between Land's End and Pendeen in a south wind, giving lift of up to 10 knots. All three Club gliders soared for long periods. A visiting I.T.V. cameraman took lots of film and the edited version shown a few days later on Westward Diary was splendid. But the Auster could not keep up with the Blanik . . .

A scholarship scheme has been started to encourage young people to fly, with two boys and one girl from local grammar Schools being awarded the first three places. The scheme will take them initially to C certificate, when they will be assessed for suitability to continue with power training to P.P.L. We hope by that time they will be sufficiently bitten to continue gliding as well.

W. D. T.

SPEEDWELL AILPLANES
Speedwell Works, Bosden Hall Farm,
Hazel Grove, Cheshire
Telephone: Stepping Hill 5742



Photo: Lorna Minton

LASHAM

Steaming past the Lasham hangar on its first trial run is this latest acquisition by a syndicate of members headed by Mike Neale. It will earn its keep by flattening out the bumpier parts of the airfield.

LEICESTERSHIRE (Rearsby)

AS the soaring season closes and we all sadly face the winter months of thermal inactivity together, this is the time to put draught-strip round the club-house door, stoke the fire regardless and recall the summer that really wasn't. Recall the numerous days when everything was right until a quarter past eleven. Then, with swift determination, the upper sky became thoroughly covered with alto-stratus "except for that bit of Nottingham" — that elusive bit which invariably closes up when chased. And the days when Harby (or Broughton) ridge should have worked but then the wind dropped to nothing and only revived as the trailers left for home.

Not to mention the memorable occasions when the Tiger blew a gasket; the tractor tyre, so lovingly patched for so long by so many, finally exploded; and the latest syndicate Ka-6 had its turn-and-bank indicator wired-up the wrong way round—we hear all was well up to 8,000 ft. but after that, in very bumpy air and very noisy hail, concentration was difficult!

However, in spite of all our trials, tribulations and tug pilots we succeeded in flying as many hours as in 1964. This is not to say that we oughtn't to improve, but it is consolation for the fact that our Club Olympia spent so many hours on the grass when conditions were poor.

1966 promises greater things — better tugs and a tractor which works (thanks to Tom, Brian and Mike, to name but a few). And quite a multitude of new members eager to soar.

D. A.

LINCOLNSHIRE

FOLLOWING the resignation of Siggy Romrig, C.F.I. for the past year, Jack Nicoll has accepted the post, and we are sure he will make an excellent

and popular C.F.I. Congratulations also to Jack on completing his course at Lasham, and his B.G.A. instructor's category. The club's dire need is the building up of a team of instructors. Jack has already announced his training programme.

Fred Brackenby, Mike Royce and Brian James have completed A and B, and Roger Smalley his C in the Grunau Baby. Mike was soon slipping-in his T-31 with a very nice touch, and has been heard requesting spot landing competitions. He was testing Spitfires for Rolls-Royce during the war and quite a lot of this flying was over Lincolnshire. He claims 12 away-landings in this county on a "dead-stick" and reckons he's had a taste for gliding ever since.

Our new pulley winch is working like a charm. With two Champ auto-tow cars and 4,000 ft. of cable, we are getting excellent launches with very few snags or breaks and with an excellent turnover. We shall be further indebted to Arthur Strickson, Allan Peck and Allan Wall, makers of the pulley, who are now purchasing a Tutor, which they most generously propose to allow all members to fly. This follows a similar big-hearted and most kind offer by new members Mike Royce and Dennis Murdoch of their newly-acquired T-31 for club use.

With only one T-31 Club aircraft to our name, we are desperately awaiting the day when the Government eases its financial restrictions, and we hope will meet our application for grant aid for the purchase of two aircraft. We now have 100 fully paid-up members.

In the meanwhile, we are proud to proclaim what surely must be an unparalleled situation in British Gliding, where all six syndicate-owned gliders in the Club are available for Club members to fly (suitably qualified): T-31, Tutor, Grunau Baby, Eon Baby, Olympia 2 and Skylark 3F.

E. B.

MIDLAND

OUR course season finished at the beginning of October and we take this opportunity of thanking all those who have helped with the running of them.

Easterly winds blew in October and on the 10th of that month Rick Prestwich contacted a lee wave and reached 5,200 feet a.s.l. The only other flight on that day ended with the C.F.I. landing in the valley.

The Club was well represented at the wedding of Bob Swift and Jane Alldridge on Tuesday, 5th October.

During the year, the Club fleet has undergone several changes and now comprises 2 Capstans, 2 Swallows, 1 Olympia 2B, 1 Skylark 2 and an Olympia 460. The trailer fleet has also improved with the addition of a new trailer for the Capstan and one for the 460.

Mynd-based private owners took part in competitions at Nympsfield and

LONDON



. . . and here another unit of horsepower seems to be insisting that it still has a part to play in gliding as its forebears did for Percy Pilcher in the 1890's and for many a gliding club since.

Dunkeswell; two teams went to Nympsfield and three teams went to Dunkeswell, one in July and two in August.

Thanks to Robin Bull and his plumbers' mates, we now have electric water-heating to supplement the coke-fired boiler. This should result in a cooler kitchen during the summer.

K. R. M.

NORTHUMBRIA

THE Club's A.G.M. produced the usual rash of shrinking violets when it came to volunteers for office. All candidates were elected — as ever — without opposition. Roy Bousfield, our very able chairman, continues in office for another year, and Tony Whitsey takes over the heavy work of secretary. Yours truly continues to write "Phil's Page".

The Club has had an above-average soaring season. In the eight months ending 31st August, 23 of the 55 flying days were soarable. The launch rate is down at 946 launches which produced 145 hours' flying. Cross-country was negligible — Alan Brown's 16 miles to Whalton and a few embarrassingly close landings-out after too much hopeful scraping. Two members went solo and there is now quite a long list of prospective Tutor pilots.

The proposed airway passing over Hedley at only 2,800 ft. and cuts in Government grants caused a serious setback to the Club's ambitious programme for the future, but meanwhile all concerned are keeping their fingers crossed.

P. W. L.

OUSE

FIVE more Silver C duration legs have been achieved recently. Mike Greaves got his at Camphill with the Swallow in July, and is now flying the Skylark. This was followed by Tim Wray completing his badge with 5 hours at Sutton Bank. One particular Wednesday in August resulted in a mass attack on the Bank with Fred Lees, Les Smith (both Swallow) and John Mawson (Skylark) taking advantage of an excellent soaring day to obtain their durations. Fred, incidentally, had watch trouble — he did almost 7 hours.

Norman Worthy completed Silver distance with a flight in the Swallow to Skipsea (42 miles), but just missed out on height. Mike Annison, however, made no mistake with a climb to 7,000 ft. in cloud, again with the Swallow. This machine, with its modified Skylark 4 canopy, always takes the eye when visiting other clubs. Mike Mellor achieved his C in the T-31B in the middle of October. Brian Pearson has completed his C and is now flying the Swallow. Marjorie and John Newlove have soloed, while Jim Park and Les Smith have converted to the Skylark.



Photo: Keith Massey

Ouse Club members huddle together in their canteen last Boxing Day. Will it be as cold this time?

Our T-21B has now arrived to cope with the many new members as well as giving advanced instruction to those whose basic dual has been in the T-31B. Two of our keener members, John Taylor and David Park, have now left us for a while — John going to Cambridge University and David to the Persian Gulf.

G. L. B.

OXFORD

WITH the Weston-on-the-Green landscape rapidly turning to gold, autumn deepens to remind us of a crop of rather uneventful late summer week-ends. However, Monday of the revised August Bank Holiday produced several respectable soaring flights, together with the visit of no less than three rather despondent Olympia 2 pilots, taking part in the R.A.F.G.S.A. inter-services competition, who fell short of Bicester whilst on an out-and-return race.

The same week-end our respected ex-member Ray Stafford Allen and his Capstan joined us. We trust he enjoyed winging with our own gliders and many from Bicester.

Early September heralded the new Dart 17R, No. 330 of the Pratelli-Adams-Laurie syndicate, resplendent in its Brunswick green and white livery. Inaugural flights completed, a number of enthralled Club members were treated, after an invitation to assist with de-rigging, to a close scrutiny and demonstration in the workshop of the retractable undercarriage accompanied by much warning light flashing and klaxon sounding.

After some four years with two Skylark 2B's at the top of the Club fleet, negotiations are now nearing completion for the replacement of one 2B by the Dart Group's exquisite Skylark 3F No. 168. John Ellis, our C.F.I., is now being pounded by many ideas on how best to implant this aircraft.

Until now our aero-tow facilities have been irregular due to only occasional availability of the Kidlington Terrier. Malcolm Laurie, our chairman, has most kindly remedied this with his recently-acquired Auster which will grace our launch point at week-ends. To help the utilisation members are already planning stimulated cross-countries.

Enthusiasm runs high now that John Pratelli, Bob Collisson, Graham Smith and Chris Tompkins have graduated to the impressive glide angle of our Skylark 2B's. The latest members to proceed up, round and down in the T-21, with their instructors watching from below, are Parker, Stobo and Moxon, with the latter claiming his C only a week later.

C. J. T.

PERKINS

WE seem to have had a rather poor year in more ways than one. The weather has been so bad that there was little news to report, hence our absence.

We have almost completed our second year at Spanhoe, and are managing to live amicably with our near neighbours at R.A.F. Wittering.

The weather has resulted in below average total hours flown, and a below average launch rate, but, in spite of the weather and the proximity of the R.A.F., we have managed to run a two-week training course and a five-day course for instructors presided over by John Everitt.

We were lucky enough earlier on in the season to have a week-end visit from Ray Stafford Allen, who arrived complete with his Capstan, thus enabling the majority of our members to sample the latest British training aircraft. Our winch, after having done many years sterling service, has been overhauled and re-engined, all by Club voluntary efforts, and with this and the new safety release hook, designed and fitted to the cable retrieve motor-cycle by one of our members, we hope to enjoy trouble-free launching for the rest of this season and next.

We shall close down early in December in time for our Annual Dinner scheduled for 17th December, and to enable the annual maintenance schedule to be carried out in time for an early start next year.

T. J. D.

R.A.E.

THIS season has been the best that we have had since we started operating from the Farnborough Airfield in 1959. Our membership is up on last year; we have had better aircraft utilisation and have done more soaring and cross-country flying. This is the direct result

of some forward-looking and hard work by our committee which has resulted in the Club being provided with a T-21 instead of our previous tandem trainer, a new Ford F-100 tow-car, and a new Olympia 460.

The introduction of a pre-payment scheme has also been a major contributing factor in the increase in flying activity. A member joining this scheme flies as much as he likes during the year on pre-payment of a lump sum or £30 (or four quarterly instalments). The scheme has been a considerable success. This is not measured in terms of any possible profit to the Club but by the increase in the flying activity and keenness of the members.

One highlight of the season was the Summer Camp, held at Dunkeswell with the kind and much appreciated co-operation of the Devon and Somerset Gliding Club. Club members made 200 flights during the two weeks of the Camp and also flew sailplanes belonging to the Devon and Somerset Club. Although many soaring flights were made, the weather was not suitable for cross-countries. On the competition side, Peter Dale, our C.F.I., helped the Royal Navy into second place in the Inter-Services Competitions at Bicester in August, using our Olympia 460.

The main winter job for the Olympia pilots is to complete the new trailer so that we can make 1966 a record year for cross-country flying.

Regular readers will know that the R.A.E. Gliding Club and the Crown Agents Gliding Club have been amalgamated, with sections of the Club operating at Farnborough and Lasham. Also, several of our members have taken an active part in the formation of CISAVIA, the Civil Service Aviation Association.

G. J. W.

SCOTTISH

A NOTABLE feature of the last few months at Portmoak has been a large number of visiting groups, complete with aircraft, and even some with their own tugs. There have been parties from Lasham, Dunstable, Cambridge and Sutton Bank, among others, while V.I.P's included Ann Welch and Derek Goddard. Although the weather has been poor in general, most managed some exploration of the local air, and on Saturday, 18th September, no fewer than eight Gold C heights were flown by visitors, while six more were made by people who did not require them. Our own members missed out that day, the only one to contact being Bill Lawson, flying his 460.

The latest civil engineering project has been the construction of a hangar to house our Tiger Moth, which previously fitted into our main hangar with only inches to spare. The work has gone forward at a great speed for Club projects, and we hope to have it completed very shortly.

A recent reshuffle on the administration side resulted in Bill Shanks handing over to Ray Grieve as secretary, while Ian Dandie has taken over the duties of C.F.I. from Tom Davidson, who retains his position as director i/c flying. During her visit, Ann Welch presented Tom with a trophy from the Hungarian World Championship team, in recognition of his services at South Cerney.

B. M.

STAFFORDSHIRE

CHARLES WEBB has completed his Silver C with a five-hour flight at the Mynd, bringing the Club's score to three. Our second lady to solo is Marion Aldridge, who will no doubt be following Jacqueline Hurst on to the Tutor very shortly. Jacqueline's first launch in the Tutor took her into a thermal and she just missed getting her C. To prove it was no fluke, she had a second try and just missed it again!

To bridge the gap between Tutor and Olympia, a Swallow has been ordered for delivery in December. This brings the Club fleet to four sailplanes and a tug. The Swallow being towable, it is hoped that the demand for aero-tows will rise to meet the supply.

Two of the Club's enthusiastic members have recently moved on, and we wish Barry Ward and John Greig lots of luck in their new spheres of activity in which both will be learning powered flying.

The death of John Edwards of the Coventry Club has come as a great shock to the many friends he made at Meir during the period when he checked out tug pilots for us.

A. W. H. L. W.

SOUTHDOWN

SINCE our last appearance in these pages we have had a very welcome increase in our flying membership to well over the 100 mark, for the first time in the Club's history.

We took delivery in October of an Olympia 460, which is a very welcome addition to our fleet.

Our congratulations to Derek Holland and Norman Elliott on completing their Silver C, and to Jenny Goldstein and Peter Henderson on their marriage.

Some interesting flights have been achieved during the summer from Lasham in our Olympia 2 whilst it was stationed there, and we thank them for their hospitality.

Recent first solos were Hilda Woolnough, Fred Head, Gordon Smith, Ray Sigrist, John Hart and "Pop" Ofrord A first solo flight in his 70th year is perhaps a record ?

The season for north-easters is now upon us, when flights of 50 miles or more along the Downs are possible. We welcome any adventurous visitors.

E. M. K.

SOUTH WALES

DURING recent months we have made more than our average progress, no doubt due to the run of westerly winds.

A and B certificates have been gained by John Ellis, Doug Hall, Viv Charles, Charlie Cook, Ken Taylor and Cyril Kelly; C certificates by Ron Hook and Kath Prout (the first lady C in the Club — we needed a stop-watch on this). Hugh Evans graduated to the Swallow to get the vital 15 minutes in. Danny Roberts earned a leg of his Silver C by staying up for five hours in the Kite.

Cross-countries have also been started with a couple of flights to Newport by Danny Roberts and Don Prout.

A new ridge has been explored which, in a N.W. wind, is within striking distance of the Club, and three hours' soaring by Ivor Shattock in the Skylark seems to confirm that we have a N.W. ridge.

Sea-breeze fronts have been in much evidence, sometimes giving long flights over the site and over an area 20 miles long.

Invitations are extended to all to break our very old height record of 2.500 ft. in the '31.

The only black spot is the suspension of the Ministry of Education grant for a T-21. Let's hope the pound continues to gain ground.

I. S.

SURREY

AN otherwise dismal August produced a few outstanding days. The first of these was Friday, 20th, when Bill Dean flew to Horsham St. Faith via Marlborough for his Gold Distance and Diamond Goal, Alan Purnell did an out-and-return of nearly 300 km. to Worcester, and John Barrows went to Frome and back. The same day Peter Horne got his Silver Distance with a flight to Shoreham and John China did the same trip but with his barograph switched off. Sunday, 22nd, was a cu-nim day; Tony Burton gained 10,000 feet, which was just not enough for Gold Height — he was unlucky as Heights were achieved by two syndicate pilots that afternoon. On the 29th Fred Stickland set out for Shoreham, generally considered only just far enough for Silver Distance from a low release height. He didn't make Shoreham, which is at sea level, but still managed the Distance, and a completed Silver badge, by landing on top of a 600-ft. hill.

On 4th September Alan Purnell went to Frome and back in a strong westerly wind. He only used four thermals on the upwind leg, but his climb in each was quite spectacular! On the 19th, John China set out on another Silver Distance attempt. He succeeded again by getting to Kidlington, and this time his barograph was ticking merrily.

In September a wave expedition spent three weeks at Portmoak, and took with them two Club Skylark 3's, four syndicate aircraft, sundry oxygen and radio sets and an Auster for towing. Fifteen members took part at varying times, and of these Roy Smith, Ron Willbie, John Stanley, Derek Johnson, Bill Dean and Peter Treadaway all got Gold Heights in wave. In addition, three other pilots who had their Heights already got them again, so what with this and the superb hill-soaring available most of the time, the expedition was reckoned to be very suc-

cessful as well as most enjoyable. The hospitality of the Scottish Gliding Union was really out of this world; the comforts of their clubhouse are certainly unequalled in the rest of the gliding movement.

P. G.

SWINDON

THIS season has shown great progress in the cross-country activities of our members and many previously home-loving pilots have groped their way down wind to qualify for incipient pundit-hood. Our more experienced pilots have also had a good year and between them brought the cross-country mileage to a total for the season greater than all other previous flights from this Club.

The Club fleet was expanded earlier this year by the arrival of the Blanik which the owner, Chris Day, has arranged to be available for advanced training. Chris has recently completed his Silver C in the "Tin Ship" upon which we all congratulate him.

Our plans for the winter include the establishment of a semi-permanent hill site for ridge-bashing and a visit to Portmoak in February in the hope that the famous wave conditions there will co-operate with those of us hardy enough to make the pilgrimage to the frozen north.

This summer we were glad to welcome a group of new members from the Royal Military College of Science, Shrivenham, which included a number of very experienced power pilots who quickly adapted themselves to the idea of aeroplanes without fans on the front and soloed with the minimum of delay.

E. C. C.

WYCOMBE AIR PARK

A NEW light Aviation Centre has been formed at the Old Booker Airfield near High Wycombe, known as Wycombe Air Park. Its purpose is to further gliding and light power flying.

At present the gliding consists of the Airways Flying Club (joint B.E.A./B.O.A.C.), the Post Office Flying and the Thames Valley Gliding Clubs. All training is done by the Centre which operates two T-21's, a Ka-7 and two Swallows. The training gliders are owned by the A.F.C., except for one of the Swallows which has been provided by CISAVIA, the parent body of the P.O.F.C. High-performance gliders are the responsibility of individual clubs or private owners.

The power side training is also operated by the A.F.C. and there are facilities for private owners.

The airfield is subject to Prior Permission Only for powered aircraft but not for gliders. Opposite direction circuits are in force, and gliders should fly the opposite circuit to that indicated by the signals square.

We welcome any visiting pilots, but would request a sharp look-out. Landing fees will not be charged for tugs retrieving gliders from cross-country landings. In the fairly near future, tea — and other comforts — will be available.

The Airpark Manager is "Pat" Pattison and the telephone number after December 11th is High Wycombe 29261.

R. A. L. N.

YORKSHIRE

OUR absence from these pages in recent issues serves only to indicate our preoccupation with our domestic and constitutional affairs. These have been under detailed scrutiny with a view to more effectively accommodating the growth and changes taking place and the anticipated developments in the future. The outcome has been the setting up of a Club organisation which it is hoped will strike a happy balance between member participation and professional management.

The members approved the appointment of Eric Reed as Chairman of the Club and Board of Directors. Co-directors are Peter Lockwood, Chris Riddell and Guy Reed.

The professional staff are now appointed and, in addition to our C.F.I. Henryk Doktor, now include Pat Simpson (Secretary) and Doug and Marny Percival (Steward and Stewardess), all acting in a full-time capacity and settling down to their duties with enthusiasm.

Members' interests are now catered for by four committees looking after Flying, Airfield, Clubhouse and Membership respectively.

Specific new developments have been agreed in principle and will be reported as progress takes place. The first and by

far the largest of these is the draining, levelling and re-seeding of our 80 acres, expected to be completed by April, 1966.

Recent months have not been blessed with perfect gliding conditions, but Barry Goldsborough made an outstanding wave flight to Newcastle, Knaresborough and return, reaching a height of 16,800 ft., airborne for 7 hours, in his Sky on 20th June.

Tim Birch in the Club Skylark 2 made a flight of 60 miles along a sea-breeze front at 6 p.m., thus completing his Silver C.

Several members have completed their Silver C's this year and others participated in the Northern Competitions at Doncaster.

E. R.

SERVICE NEWS

BANNERDOWN (Colerne)

NOTWITHSTANDING the relatively poor weather, the Bannerdown story was one of great activity and success during the summer. Trailers have been shuttling in and out like trains in a marshalling yard, and Club records have been made and remade. One Club achievement, which may be unique, came on one week-end when Bannerdown members flew for and obtained at least one of each of *every* type of certificate — A, B, C, Silver, Gold and Diamond legs. We should like to hear of any comparable performance. Hours flown in the June/July period were a record, 277 for 1,633 launches. This was capped by the huge August total of 1,030 launches for 206 hours when we logged over 1,000 cross-country miles.

Individual successes have been chalked up by Bill Brown, John Dungate, Ben Lyon, Sarah Wharnhurst, U.S.A.'s Martin and Winton, who soloed for A's and B's; Ray Carey, Bob Bryant, John Mayo, Bruce Coutts and Jack Powe flew C's. Sandy Sanderson and Douglas Collins gained Silver distance and the latter the height leg in a 7,000-ft. cloud climb. Pat Sassi got near Odiham for Distance and later completed with a five-hour leg. George Lee in a 5½-hour trip got Height, Distance and duration but regulations permit only two legs to be claimed. George Foster also completed with a flight to Tidpit near Salisbury, and followed with 5 hours in August. Our archangels have not been idle either. Tiny Whitney has been to Brize Norton and Nympsfield, Mitch Mitchell to Woburn, and Mac Macintyre spent 5½ hours in a nearly successful triangle. With great determination he followed this with a marathon 7¾ hours and was still 3 kms. short! Appropriately setting a good example to all. Bill Bailey did gold distance, and C.F.I. "Tug" Willson flew two 6½-hour 300-km. triangles for Gold distance and Diamond goal, and followed this by Gold height in a local cu-nim.

Upgrading of aircraft and equipment continues; the Grunau is back and in regular use, the 403 has been sold to Bath Club, and a fine Skylark received from Upavon. Alas, this was subsequently written off at Bicester, but a replacement has since arrived and had high utilisation. We are all agog for a successful conclusion to negotiations for an Auster tug. A lightweight spaceframe trailer for the Sky was built by Mac, Sandy & Co. and there are plans for converting a diesel truck with transfer box to give us a self-contained mobile winch.

P. H.

CHILTERNS (Benson)

OUR recent absence from these pages has been due to service commitments.

Silver distance has been flown by Adrian Dalton, Terry Slater and George Raynor — all to R.A.F. Henlow — and Barry Nowell to Luton, the latter two completing their Silver badges with these flights. "Puddles" Elsom has gained his C and converted to the Olympia, as has Dereck Damant. Reg Bowen also has his C now and his wife Maureen should soon be going solo. Our four new solo pilots are Joan Maltby, Pete Gibbins, Gary Learmunth and John Robson.

We have acquired a new diesel winch engine which should be in operation very shortly, helping to reduce our flying costs. Jim Blundell has been fettling our M.T. with Dusty Miller and keeping us mobile.

Our finest hour came last week with the delivery of a brand new Ka-6. Our pundits, with stars in their eyes, have

been showing it the Oxford countryside at every opportunity.

Bill and Joan Maltby, our husband and wife team, attempted to break the U.K. two-seater record in a T-21, doing a total distance of 200 yards, and were last seen on a final glide sinking gracefully into a field of growing corn.

Finally, Colin Miller has been up the road to Mecca (Bicester) and has returned with a shiny new instructor's category.

H. W. M.

EAST MIDLANDS (Swinderby)

WE have had better soaring conditions since our last report; various cross-countries have been flown. The notable flight of this period was Con Greaves' Gold C Distance and Diamond Goal from Swinderby to Martlesham Heath via Bicester.

Other certificates have been a Gold C height to Jim Wild, who climbed to 14,000 ft. from a 1,000 ft. launch, C's to Bob Styles and Jeff Keast, and A and B to Carter, Drewitt, Campbell, Allan, Taylor and Fenna.

Our Club provided four pilots for the Bicester contest during August, in addition to the four who flew for us at Easter. The very pleasing results for both pilots and Club were Chas Morgan and Chris Gildea, 1st and 6th in League 1, and Jim Wild and Paddy Hogg, 3rd and 9th in League 2.

Winter projects are uppermost in our minds and we hope to utilise the "flat" portion of the year to the full.

John Shorter now has a full category, bringing to 12 the number of full category instructors in the Club. We have been joined by John Prince, who becomes our Deputy C.F.I.

J. G. W.

FENLAND (R.A.F. Feltwell)

IT is with regret that we finally say "goodbye" to our C.F.I., Fg. Off. "Stu" Mead. He has decided to give up the rigours of R.A.F. life, and go and show the London Gliding Club how to do it. We wish him well in his new appointment as C.F.I. Manager at Dunstable. Our loss is their gain!

We welcome to the realm of "pundits" Mrs. Hitchcock and Mrs. Alison Houtheusen, who gained their A's and B's during September. Capt. Polis (U.S.A.F.) also soloed, as did Ray Madden, who went solo on 9th October and flew his C the next day. The week-end 9th-10th October was so good for soaring that we managed no less than four C certificates and one Silver distance leg, flown by "Mac" McKenna, who managed 73 km. C certificates were flown by Jim Pignott; Graham Perry and, at last, Arthur Downs, who should have been given it a long time ago, for pure persistance!

A creditable height and distance flight was made by Tony Weldon; in one of the rare moments he was degreased enough to be allowed to fly. We welcome to our ever-growing band of instructors our chairman, Sqn./Ldr. Smith; "Mac" McKenna, and "Ginge" Kerry.

One final word: your scribe, Colin "Herb" Elliott, has been pleased to accept the post of C.F.I. The Aircraft Member will now be "Geoff" Dodd.

C. R. E.

FOUR COUNTIES (R.A.F. Spitalgate)

WE are indebted to the Scottish Gliding Union for their hospitality, both when Stephen Hart visited Portmoak with the 463 in September, and when a small party took the Olympia in October. Though the weather was disappointing for much of the time on both occasions, some enjoyable flying was done. Steph did a Gold C climb in wave to 14,000 ft. on 18th September, and during the October visit Dinger Bell got his five hours, so did Jeff Argent to complete his Silver, and Stan Grierson achieved his Silver C height and duration.

Meanwhile, at the home site, Mike Ball has soloed. Congratulations.

We now hear that Wally Pearse is posted back into the area, to Cranwell at the end of the year, and that Dave Brooke, a former Club C.F.I., is posted back to Wittering in the spring, and we look forward to seeing them both at the Club again.

MENDIPS (R.A.F. Locking)

WE are very sad to be losing our Deputy C.F.I. Jim Martin. Jim





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has been with the Club since its inception two years ago; in this time he has carried out more than 1,000 training flights and has done more than anyone to "keep 'em flying". The back seat of the T-31 will always be affectionately known as "Jim's perch". We wish him all the very best for the future.

We welcome Roy Back to the ranks as an Assistant Instructor and congratulate him on his recent engagement.

The poor summer produced a disappointing number of notable flights. "Ben" Benoist claimed his C in the Tutor with a creditable 51 minutes. He had more trouble getting down than up — fancy leaving 20 up just because you're cold! Roy Back, Howard Cox and Dixie Dixon have flown the groove from Upavon to Lasham for their Silver distances. Recent solos have been made by McLeod, Kehoe, Nelson, and resolos by Ramsey and Ward.

A very successful week's summer camp was run by our C.F.I., John Williamson, with the Moonrakers at Upavon. The weather was very kind and enabled everyone to get in plenty of soaring. During the week C certificates were gained by "Doc" Insley, P. Bryan and G. McLeod. Murgatroyd claimed his Silver height and distance — to Lasham, of course.

Many other cross-country and extended soaring flights were made. The only disappointing feature was that John Willie couldn't persuade the weather to co-operate to the extent of breaking a British Record. Our thanks to the Moonrakers for making us so welcome.

The Grunau now has a new C. of A. and new colour scheme as well.

With the growing list of Olympia pilots queueing up for 5-hour attempts, the ridge looks like being busy this winter.

P. S. B.

MOONRAKERS (R.A.F. Upavon)

ALTHOUGH garrulous where gliding is concerned, most Moonrakers seldom put pen to paper — a glance at Club records and personal log books provide ample proof of this lack of practice. Having tactlessly mentioned within hearing of the C.F.I. that I

could actually write, the job of publicity member was promptly allotted, and so for the first time in six months news of our less notorious exploits reach the gliding world. We have certainly had an eventful six months with 5 Diamond, 7 Gold and 12 Silver legs confirmed and 11 C and 11 A and B certificates completed.

June started well with Whit Week-end when Tony Morris and Rupert Butler managed some good cross-country flights and three Silver legs and three C certificates were completed. Later, Steve Warwick-Flemming inaugurated the milkrun to Great Yarmouth, completing his Gold C and getting a Diamond Goal. The following day John Weston Allwork and Derick Bridson completed their Silvers and Scratcher MacMillan flew 136 miles towards Great Yarmouth before the East Anglican sea breeze defeated him.

July was slightly marred by a malignant barograph which, although "repaired" several times, spoilt two Silver and one Gold height claims before it was fixed. Ed Meddings, peering out of his office window one Wednesday afternoon, saw a big black cloud right over his winches. Still in his uniform, he rushed to the launch point, jumped straight into the Oly, and half an hour later was back on the ground with a Gold height to complete his Gold C. Stew Levitt, Adrian Goodwin and Jim Porter completed their A and B and then C certificates in close succession.

August started with a real bang: Taff Thomas and Andy Whitaker flew to Great Yarmouth on successive days for Gold distance and Diamond goal and Andy got his height as well to complete his Gold C. Meanwhile, Tony Chew and Trevor North flew to Lasham for Silver distance and Gillian Bridson was at last persuaded to sit her air law exam and so passed her C. The next week-end the procession eastwards continued; Les Manley got to Great Yarmouth for his 300-km. goal and Norman Gould drifted over to Lasham and hung around there scaring the locals out of their thermals until he had completed five hours and his Silver C. Ed Meddings tried something different and set off on a 500-km. triangle; in 9 hours he had completed 230 miles for what looks like being our longest flight this year.

Our August gliding week was a combined effort with the Mendipians; John Willy in charge. The weather was marvellous but not always useable since our tug failed to appear. Getting away was always a bit chancy for those going cross-country, but A's, B's and C's came thick and fast. Paul Gibson got his C and so did several Mendipians. Doug Bridson, getting into the groove, did a 100-km. triangle in 1 hour 12 mins. and finally Tony Morris finished off the week on another high note by flying to Great Yarmouth, but two vehicles broke down on the retrieve.

Socially the week was a great success. Most nights we dined together at the Ship in Upavon. Two barbecues at our wooded caravan site continued until the early hours and were enlivened by Hot-Lips Whitaker and his trumpet.

N. A. G.

PORTSMOUTH NAVAL

WE did not appear in the last issue as our Records Secretary, Keith Morton, was busy getting married at the time.

Bill Armer, Derek Ramsden, Peter Brown and J. Kosak have gone solo and Pat Ring and Ricky Knight have gained their C durations. Dave Alty completed his Gold C and achieved a Diamond goal leg from Bicester recently. Sandra Williams has converted to the Skylark and is clearly enjoying the new experience.

On 7th and 8th August we were unable to fly at Lee and so we moved to Lasham. A successful two-days' flying was had there, and a number of pilots enjoyed flying at another site for the first time.

On 22nd August John Bradley of the Royal Artillery Gliding Association landed at Lee, having flown from Netheravon to complete his Silver C, collecting a Gold height on the way. As he had never flown a Swallow, his first act was to take off in ours for the experience. Peter Davies, our C.F.I., and Keith Morton have obtained their PPL's and are now tugging.

We are glad to hear that a Gliding Club is to be started at Culdrose. Portsmouth is doing its best to help the new Club and it is hoped that other R.N.G.S.A. Clubs will give all the help they can.

L. D. V.

SOUTHERN COMMAND (Netheravon)

DARE I say that the Club has been so active this summer that I have not been able to keep up with recording its feats? The summer months certainly have been busy.

We have run three courses for Club members which produced 13 solo pilots, a very welcome return for the hard work put in by the instructors. The certificates completed or partially completed this year have broken all our previous records. We have so far seen 18 pilots go solo, three C certificates completed, two Silver C's completed, our C.F.I., John Evans, has at last managed to climb high enough to complete his Gold C and we have a further few Silver C legs and one Gold leg in the bag.

Dick Bradley holds this year's record for the longest flight with an attempt at his 300 km. by flying 230 km. to King's Lynn in seven hours. His retrieve took somewhat longer (see his article).

We welcomed the Moonrakers to Netheravon one day in June when their own airfield was required for a Fête. Shortly afterwards we were made very welcome by them at Upavon when Netheravon was being used as a dropping zone. A few members joined them in a "Ridging" expedition to a site near Salisbury. We hope to continue this excellent inter-service co-operation.

We have had very few visitors arrive by glider. One competitor in the World Championships landed here in the evening mid-week. Fortunately a Club member was able to see him safely on his way back to South Cerney. Our only other visitor, from Lasham, made a precautionary landing as he felt his glider vibrating, and hollow booming noises coming from the rear fuselage. He was relieved but somewhat disgusted to learn that this was nothing more serious than the shock waves of the guns on the Larkhill ranges being amplified in the fuselage.

These notes would not be complete without a mention of John Schooling who left us in August on a posting to the Far East. In three years he has gone from ab-initio to Silver C and Club Instructor, and also has put in many hours' work as secretary and treasurer. Our thanks go to him for all his hard work and our best wishes to him and his family in their new home.

P. G.

CRUSADERS (Cyprus)

THE Crusaders went en bloc to set up a two-week soaring camp at Kingsfield, Dhekalia, hoping that it would coincide with the breakdown of the normal stable summer weather pattern. It was on the day we returned that the first Cu and thunderstorms appeared! So it goes in gliding—however, some good soaring was achieved, and a great time was had by all.

During the camp, C certificates were achieved by Ro Turrell, Sue and Dennis Gould, "Steve" Stevenson, Mike Gilmore, Tom Beck and Alan Madge. Penny Potts gained her Silver height, and so did Tony Gee, who on the same flight missed his 5 hours by only 8 mins.

Over 650 launches were flown, totalling nearly 90 hours, and about 10% of these were soaring flights. Doc Saundby went up to 6,000 ft. twice in a T-21 — we weren't allowed to go any higher. Looks as if he was after more two-seater height records!

A great deal of interest was shown by the folk up that end of the Island, and more than 60 visitors were flown. On the home comforts side, Mike Bisby not only fed us very well, but also took up gliding, and now has about 15 launches to his credit, as well as a particularly good dinner the night our President and Chairman, Air Commodore North-Lewis, and Wing Commander Pete Latham, visited the camp. This was by no means "roughing it".

Our normal interruptions to gliding by powered aircraft were mercifully absent: instead, when on finals one was quite liable to see on the runway two large water bowsers, two steam rollers, a shepherd with a large flock of sheep and/or goats, and the odd peripatetic farmer. It made one's landings quite interesting, anyway!

Great credit for the camp's success must go to Roy Bullers, who as Camp Commandant did wonders, and to John Beckett, our C.F.I., who by the end of the fortnight had managed to please everybody by showing them they'd all had about the same amount of flying!

Congratulations also to John and the instructors on the way almost everyone got their C as soon as they were offered suitable conditions—it says much for the high standard of their teaching.

H. F. O.

EAGLE (Detmold, Germany)

THIS year will go down as the year we converted from a circuit-mill to a soaring club and also as the year of the weather. We did not need the locals to convince us that this is the worst German summer for *n* years — 3 out of 4 courses run by the Club at Vennebeck (under the Minden Ridge) being blighted by it. A quick look at our statistics shows, however, that we have not succumbed, either to the weather or to "exigencies of the Service" (rough translation for civilians — "trained today, gone tomorrow").

Launches: 2,048. Hours: 436. Cross-country: 700 km. (excluding comps). A & B: Smithson, Harris, Pearson, North, Williams, Cantelo, Allen, Rolls, Hartfield, Robinson, Russell, Musters, Barnetson. C: Cantelo, Barnetson.

Silver height: Lombard.

Silver duration: Kelly. Silver completed: Ken Ward and Peter Hansen. Peter gained duration and height on one day and distance on the next! Is this a record?

Congratulations to all the above, and condolences to Jeremy Wheeler who fell about 35 km. short on a 300-km. out-and-return attempt.

On Sunday, 5th September, we and the Detmold Luftsportverein jointly said fairwell to Ted Shephard. Speeches by the two Club Presidents and Ted were translated by our old friend Horst Mahlmann, whose American-English and German versions had everyone in fits of laughter. This set the standard for the evening from which Ted eventually retired bearing his spoils — a magnificent album of photographs *cum* cartoons of Detmold gliding life from the German club, and a model Ka-6 from us. Ted founded the Club in the face of tremendous difficulty, and we will miss him and Catherine very much. Our good wishes go with them both to Manchester (understood to be a small wet village not far from Camphill).

Jeremy Wheeler has taken over as club chairman and Norman Smith as C.F.I. Ambitious plans are afoot for improving ground equipment and streamlining the Club fleet. We have already swapped the T-21 for a Ka-4 Rhönlerche in order to improve the launches and aero-tows available from our rather short field.

W. C. L.

PHOENIX (Bruggen, Germany)

THE weather has been as undramatic here as we hear it has been on the other side of the Channel, but having at last given up waiting for the soaring season to begin, we can look back on quite a good season on the training and early solo soaring side. Up to October we have had 20 A and B, and 15 C certificates in the course of about 4,400 launches.

Higher up the scale, Silver heights have been gained by Ken Phipps and Tom Harding, Silver distances by Chris Foot and Ray Passfield, and one 5-hour by Chris Foot, which completes his Silver C. Ray Passfield made a "near miss" with 4 hours 36 mins. — never mind, it helps to knock the hours up though, doesn't it? And to round off the list, Chris Foot made a climb to 11,200 ft. to claim a Gold height and Derick Twigg to 23,000 ft. at Issoire to claim a Gold and a Diamond height. In May, the Club entered the Skylark and Ka-2 in the R.A.F. Germany Comps at Butzweilerhof. Let it suffice to say that our great success of the previous year was not repeated this year !

We have been glad to welcome gliders from several German gliding clubs who have "dropped in" during the year, including those from the Viersen Club and from Bonn (Hangelar) to complete Silver distances. In turn, we have spent a few days in August flying with the Venlo Gliding Club, just over the border from us in Holland.

On the Other Activities side (and those of one or two of our members I will not go into here), we held, in June, the third bar-opening celebration party at Brüggen in two years. In case that sounds odd, I might explain we had to move from our old clubroom in the hangar to a place on the other side of the airfield, so after suitable decorating, painting, etc., it was decided to have a "fly-in" party. Only two gliders flew in, including a two-

seater from R.A.F. Laarbruch, but the clubroom, known as "The Glide Inn", was opened in fine style. At this same party we said goodbye, on his return to U.K. to Derek Twigg, who after three years here had become one of the Oldest Local Inhabitants. Also earlier in the year departed Sid Tee, who had long been one of the mainstays of the Club. Pete Dawson, who started to glide at Brüggen two tours ago, has now returned as C.F.I., and the effect of his return over the last year has been more than noticeable (on the beneficial side, that is).

On the equipment side we have, to fly, 2 two-seaters, Ka-4 Rhönlerche and Ka-2, two Grunau Baby 3's, a Swallow and a Skylark 3. For a number of good reasons, we are looking for a replacement for the Skylark, preferably something better. The Swallow was received in July with great enthusiasm, since we had been expecting it next week ever since February; Pete Dawson eventually made the marathon trip from here to Kirbymoorside to collect it. L. S. H.

OVERSEAS NEWS



We would be pleased to receive news for this section from every country in the world where soaring is done.—A. E. SLATER, *Overseas News Editor.*

AUSTRALIA

NEGOTIATIONS between the Gliding Federation of Australia and the New Zealand Gliding Association are continuing with a view to holding "Tasman Gliding Championships" between the two countries. Tentative proposals have been made to hold the first of these concurrently with the next Australian Nationals. The two nations would alternate as host, but the frequency would be by challenge, not as a set event.

The Sixth Australian National Gliding Championships will be held at Waikerie, South Australia, under the auspices of the South Australian Gliding Association and the Waikerie Gliding Club, from Monday, 27th December, 1965, to Sunday, 9th January, 1966. As last time, turning-point observers will be recruited by co-opting one member from each team. Accommodation is being arranged for at least 300 people.

FREE SCHOLARSHIPS.—To mark the Leichardt Soaring Club's 10th anniversary, it offers two free flying scholarships for the age groups 14-17 and 17-30. The scholarships will be the first of their kind to be offered in Queensland. Entry conditions will be: a nominal launching fee to cover costs of assessing flights, during which the candidate controls the sailplane under tuition of a Club instructor, and later assessment of the candidate's mechanical aptitude and adaptability.

Bill Saedder, who started flying with the Club at the age of 14, has been selected for the R.A.A.F. and is on a jet flying course.

Australian Gliding.

BELGIUM

KEIHEUVEL was the site of the National Championships in the week of 21st July. Only seven pilots took part, but some good performances were put up. Jozef Boone (a jet pilot), Jean De-Fossé and Bert Zegels all exceeded 3,000 metres climb. Boone made a 300-km. goal flight; and Michel Bluekens com-

pleted the first 300-km. triangle over Belgian territory. Final results:

Pilot	*Sailplane*	*Pts.*
J. Boone	Ka-7	3,250
F. Breugelmans	Mucha	2,736
M. Bluekens	Vasama	2,187
B. Zegels	Ka-8B	1,608
J. DeFossé	Ka-6	1,162
D. Wanders	Mucha	711

VICTOR BOIN TROPHY.—As already stated in news from Holland, this one-day event was won jointly by two Dutch visitors, Reparon and Van Bree, who each made 503 km. to Lübeck. Of 26 competitors, all but four exceeded 200 km.; 15 exceeded 300 km. and 8 exceeded 400 km. Best distances were:

Pilot	*Sailplane*	*Km.*
Reparon	Ka-6CR	503
Van Bree	Ka-6CR	503
Mees	M-100	461
Bluekens	Ka-8B	431
Van Assche	Ka-6CR	420
Baeke	Foka	416
Smet	S-Sagitta	412
Vrancken	L-Spatz	402

A "Four Days of Gand" (Ghent) contest at St. Denis was attended by 28 pilots, including five French visitors, two of whom took top places — Labar with an Edelweiss and Klein with a Zugvogel. Best of the Belgians, Tommy Lacroix, took 3rd place with an Austria, and Bluekens was 4th with a Ka-8. Sailplane types competing also included Ka-6, M-100s, Mucha, Spatz, Ka-7, Ka-2B, Foka, Jaskolka, and a lady pilot, Mme Ooms, flew a Fauvette (Breguet 905), while the French contributed a Fauconnet and a Bijave.

Tasks were: 13th Aug., 110-km. Triangle which no one completed; best performances, in order, were by Klein (France), Bluekens, Labar (France) and Lacroix. 14th, 90-km. triangle cancelled. 15th, 111-km. triangle won by Klein in 1 hr. 52 min. 16th, 142-km. triangle won by Lacroix in 2 hr. 33 min.; Baeke took 2 hr. 56 min. and Labar 2 hr. 58 min.; cunims were present with lift of 3-4 m/sec.

Conquête de l'Air and *Aviasport*

CANADA

NEW regulations for "Flight Crew Licenses" issued by the Department of Transport include gliders. For a glider pilot's licence the candidate must be aged at least 16, and have done 3 hours' glider flying, including 2 hours solo with 20 take-offs and landings and 10 flights with 360-degree turns in both directions. A medical examination is needed, and if he is declared unfit to be a private aeroplane pilot, he is also unfit to be a glider pilot. Examinations have to be passed in flying regulations, flight mechanics, elementary met., maps, and instruments. A licence allows solo flying on all glider types of less than 6 tons all-up weight, and carrying passengers after 10 hours' solo flying and specified experience with the type flown.

Aviasport

EAST GERMANY

ROITZSCHJORA Flying Club was the venue for the first feminine gliding contest. Two visitors from Czechoslovakia were among the 13 entrants, all of whom flew the Libelle Standard type except for two Meises. Poor weather allowed only three tasks during the fortnight, so that only 1,158 km. were flown across country. Frau Grunert, chairman of the Demokratische Frauenbund, opened the contest.

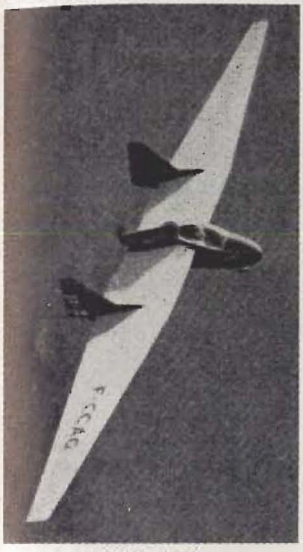
During the contest there were only two cases of slight damage, and there was no damage with field landings. Some of the women showed lack of confidence in the high-performance Libelle.

The top two places were taken by the Czechoslovak visitors. Three of the German competitors scored no points. Leading final results:

	Pilot	*Points*
1.	Vera Hudcowa	1382
2.	Eva Vrbacka	1298
3.	Irmgard Morgner	804
4.	Ursel Heinicke	797
5.	Ina Iske	682

FIVE-MARK VARIOMETER. — Günter Frank, of Ilmenau Flying Club, has invented a cheap variometer. A tube collects the airstream from the pitot. It emerges from this tube as a narrow jet which passes close to a hole leading to the usual flask. If the glider is rising, the jet is directed into one "cell" of a mouth-organ and plays a note. When the glider sinks, the jet is deflected away from the mouth-organ towards the flask, and silence reigns.

Aerosport



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Single Seater

FAUVEL AV 221

Two Seaters

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TRUE SAILPLANES

Max. Glide: 1:27 & 1:25

Min. Sink: 0.82M/S (2.68 ft/s) AV 45
0.92M/S (3 ft/s) AV 221

"SURVOL" Sarl

30 Chemin de la Roubine

CANNES-LA-BOCCA (A.M.) FRANCE

FRANCE

TWO proposals to hold national championships in the form of contests between clubs, to enable the greatest possible number of pilots to participate, are described in *Air et Cosmos* for 2nd and 9th October.

The first is proposed by François Henry, present World Champion in the Standard Class. Each club would enter two gliders, each flown by at least three pilots in turn: between mid-April and the end of July, local groups of not more than 6 clubs should each hold contests between various pairs of clubs on two week-ends out of every three, i.e. each of a pair of clubs would have one home and one away match, followed by a week for recovery, and then pair off with a different club and repeat the process. Then, every day from 1st to 10th August, the winning clubs of the local groups would compete against each other for the national championship.

The second scheme has been thought up by M. Eyrand, president of the motorless flight commission of the French Aero Club. He likewise wants a contest between clubs, but in such a manner that, after the first three years, the clubs will be ranged in "divisions" — a 1st division of 8 clubs, a 2nd of 8 clubs, and a 3rd of a variable number of clubs. Each division would then have its own champion, e.g. "Champion de France 2me division 1967". His scheme, celle d'un championnat de France individuel, qui reste indispensable".

The Societé Avialsa proposes to organise next year a one-class soaring contest for the type A-60 Fauconnet. (Presumably M. Fauvel is responsible.—Ed.)

Air et Cosmos

Huit Jours d'Angers

This notable annual event brought 52 entries, including 9 from Germany, 3 each from Switzerland and Belgium, and one from Italy. There were six contests, all triangular races.

15th July.—202-km. Triangle via Mortagne-sur-Sevre and Montsoreau. Wind S.W., 6-8 kt., N. later. 518 cu. lift, 2 m/s mean, 4 m/s max.

Labar won at 60 km/h, taking 201 mins.; Knieper (Germany) was 2nd. 21 completed the course.

17*th July*.—203-km. Triangle via Nantes aerodrome and Mortagne-sur-Sevres. Cu started at 8 a.m. but disappeared when strato-cu came over at 15.30. Wind N, 4-8 kt. Lift 2.5 m/s mean, 3.5 m/s max., feeble under strato-cu till 18.00 hrs. Labar won again at 71.5 km/h in 170 mins.; Henry 2nd with 272 mins. 33 completed the course.

19*th July*.—201-km. Triangle via Langeais and Thouars. Cu started at 11.15; banks of alto-cu castellanus, especially over last leg. Wind S.S.W. 8 kt. morning, W.S.W. 15 kt. afternoon. Lift in morning 3 m/s mean, 4 m/s max.; in afternoon, 2 m/s mean, 3 m/s max.; on last leg, 1 m/s. Seiler of Switzerland won at 78 km/h; Labar was 2nd. 42 completed the course.

21*st July*.—103-km. Triangle via Serge and Varades. As soon as a layer of alto-cu passed away at 11 a.m., cu appeared and grew rapidly, becoming cu-nim by 13.00 hrs. Lift generally feeble and irregular. Nobody completed the course. Gavillet won with 441 points; Labar was 20th with 209.

22*nd July*.—203-km. Triangle via Le Mans and Saumur. Cu started at 8 a.m.; summits at 5,000 m. by 10 a.m. Rain at 11.20. Alto-cu brought stability at 15.00 hrs. Lift irregular. Again no one completed the course. Henry won with 852 points; Böttcher of Germany was 2nd, Labar 17th.

24*th July*.—202-km. Triangle via La Suze and Fontevrault. Cu started at 7 a.m. in an unstable layer between 500 and 1,000 m. Thermals began about 9.30, but strato-cu appeared at 10, with alto-cu and cirrus above. Lift irregular and difficult to circle in. Overcast on last leg Seiler won again, with Böttcher 2nd, and Henry and Penaud tied for 3rd place. 16 completed the course.

Leading final results:

Pilot	*Glider*	*Pts.*
Labar (Fra)	Edelweiss	4492
Gavillet (Fra)	Edelweiss	4365
Böttcher (Ger)	Ka-10	4276
Penaud (Fra)	Edelweiss	4233
Seiler (Switz)	Elfe Std.	4120
Girard (Fra)	Breg. 901	4083
Mattern (Fra)	Edelweiss	3914
Henry (Fra)	Edelweiss	3895
Keim (Ger)	Zugv. 3B	3619
Ragot (Fra)	Edelweiss	3592

Aviasport

A NEW CHOUCAS.—The Choucas II (type Breguet 906B) high-performance two-seater incorporates various improvements on the original Choucas of 1958 (described in SAILPLANE & GLIDING for April, 1961, p. 91, by Roger Neaves of B.E.A. Club). The chief changes are:

A new fuselage, refined, with integrated canopy (following the fuselage contour), and constructed entirely of wood with sandwich casing, instead of mixed structure with steel tubes; wings are given a very small incidence; new ailerons without any slits; a new wing-section; modifications to tail. The prototype is expected to fly in early 1966. Span 18 metres; weight empty, 290 kg. (639 lb.); all-up, 520 kg. (1,146 lb.); max wing loading, 30.4 kg/sq.m. Best gliding ratio 31-32 at 90 km/h.; min. sink 0.7 m/s at about 72 km/h.

Air et Cosmos

HOLLAND

OWING to poor weather only a few noteworthy flights have been made this summer. However, on 25th July a new Dutch two-seater record was set up by Jaap van Steinfoorn and Igor van Aperen; they flew 368 km. in a Ka-7 from Terlet to Ratzeburg, Germany, and landed only 10 km. short of their goal at Blankensee.

The same day Otto Foelkel, who tried to fly a Sagitta to Aveno, Denmark, allowed himself to be sucked into the same cu-nim that had urged van Steinfoorn to land; after a lot of trouble, having no blind-flying instruments, he tried to abandon ship, but owing to high *g* forces was unsuccessful in getting out; he finally landed in Eastern Germany. After spending the night in a police station he was put across the border the following day, but it took another three weeks to get the glider released and that only after a lot of formalities and intervention by the Foreign Office. Disciplinary action has been taken.

Other long flights were A. K. Szabo, 312 km. on 1st August, and G. J. Koppenhagen 314 km. on 29th August.

The students of the Eindhoven Tech-

Photo on opposite page: This striking picture by Reesinck of Zutphen, Holland, appeared on the cover of "Thermiek", the Dutch gliding magazine.

nical High School have acquired a site near Helmond and have applied for full membership of the Royal Aero Club (Gliding Section). Other clubs about to be formed are situated in Friesland, Drente and Texel Island.

During October a technical conference was held for Inspectors and workshop staff.

J. Th. v.E.

IRELAND (Dublin)

THE biggest item of news this time is that we finally got permission to use our tug at Baldonnel. All of our solo pupils, and quite a few of the ab-initios, have now sampled the delights (?) and benefits of aero-tow, as opposed to our pulley-launch system. But the price difference (25s. aero-tow, 9s. pulley) occasionally leaves the tug standing idle, particularly since our old Kite, lacking a nose-hook, is not generally approved for aero-tow.

Our new radios are having some teething troubles in installation, principally from static generated by the tow-car. Our inventive genius, John Byrne, is currently working on a hush-hush buzzer system, operated via the launch cable, to enable the pilot to maintain full control of the launch, independent of any radios or static.

The tow-car has had a new engine professionally installed, and now suffers from chronic installation troubles! However, some on-the-spot modifications have eliminated most of them.

The wave season is with us again, but only once coincided with our flying days, so far. Dave Hooper, Michael Slazenger and Tom Evans got a couple of hours each, before the wind dropped and the system collapsed.

Recently, Jim O'Connor and C. Curley went solo on the Bergfalke, whereupon Graham Liddy, Peter Jones, Jerry Tierney, and Louis Treacy promptly converted to the Kite. Padraig O'Siocain and Ray Treacy soloed on the Ka-7, and Ray has since converted to the Ka-8. Two new Instructors, Dave Hooper and Peter Kilkelly, have been coerced into service. Dave recently found himself airborne in the Bergfalke with his wife Joan as pupil, and is now rumoured to be seeking a 5-seater to get his whole family up at once!

Both our two-seaters are again in service, and it is rumoured that Tom Evans's Ka-6 will soon be syndicated. The Olympia 1 syndicate are putting in lots of practice, and the Petrel syndicate are reputedly seeking new fields and mounts. Martin Mulhall, of the Clonmel Club, remains a frequent visitor.

It's gratifying to see other clubs successfully adopting our pulley-launch system. John Byrne will be pleased!

"C. GARR".

ISRAEL

APPLICATIONS for recognition of two national records have been made: both are by Menahem Bar, flying an HP-11 from Odessa, Texas:—speed round a 500-km. triangle, 50 m.p.h., 10th Aug.; speed round a 300-km. triangle, 55 m.p.h., 12th Aug.

Soaring

ITALY

IN our last issue (p. 474) we gave the final results of the National Championships, but the Italian Aero Club had not stated what sailplane types were flown in League 1. These are now published by *Volo a Vela*, and the leading 10 types were: 1, Edelweiss (Penaud, France); 2, M-100s (W. Vergani); 3, M-100s (F. Piludu); 4, Skylark 4 (Adele Orsi); 5, Skylark 3F (G. A. Ferrari); 6, not stated (U. Bertoli); 7, Skylark 3F (G. Orsi); 8, M-100s (F. Lamera); 9, M-100s (G. Giusti); 10, Ka-6 (G. Perotti).

NATIONAL RECORD.—Sergio Nordio, an engineer from Trieste, has raised the national record for 100-km. triangle to 78 km/h over the course Rieti-Piedipaterno-Sangmini-Rieti, flying an M-100s. Previous record, 74.66 km/h by W. Vergani in an M-100s.

Nordio flew his Gold C height with 3,450 meteres gain on 4th July and Diamond height with 7,200 m. gain on 5th July, both at Rieti.

A NEW M-200.—The M-200-02, a modification of the M-200 two-seater described in Overseas News for Aug., 1964, p. 337, has been built at Moulins (France) and had its first flights. Flown alongside an M-100, it has a definitely better gliding angle than the latter, except that the M-100 has a slight advantage at over 120 km/h.

Air et Cosmos

NEW ZEALAND

NEW ZEALAND glider pilots are now allowed to fly in cloud under new regulations recently announced. The new regulations come after lengthy negotiations by the New Zealand Gliding Association with the Department of Civil Aviation. Up until now, gliders have been officially looked on as a light aircraft and so have (officially) had to comply with regulations written for powered aircraft.

Under the new regulations gliders are now recognised as such. They may enter and fly through controlled airspace under VMC without informing Air Traffic Control, except for the control zones of the four major airports and when it is intended to land at, or pass within 5 miles of, any controlled airfield. In the latter case a phone call before starting or a radio call from the air will be sufficient to inform Air Traffic Control. No flight plan is now required for a flight into controlled airspace.

Cloud flying will be permitted in uncontrolled air-space if the glider is fitted with raido, although certain areas may be announced as glider cloud-flying areas where radio will not be required. It is expected that these areas will be around recognised gliding centres such as the Wairarapa. Elsewhere, however, Air Traffic Control must be contacted by radio before entering cloud and every 15 minutes while in the cloud.

ROSS MACINTYRE

Hansells G.C., at Hood Aerodrome, have a father and son, Hank and Jim Courtenay, who did their Silver C cross-countries in formation and then spent five hours together in a wave.

AIR TRAINING CORPS.—Auckland G.C., after its annual camp, spent a further week giving instruction to about 70 members of A.T.C. squadrons from areas ranging from Kaitaia to Rotorua, each cadet receiving between one and two hours' flying. Wanganui G.C. has had a group of A.T.C. cadets each Saturday, their Parents' Committee having agreed to sponsor a flight for each of the three dozen or so lads and their instructors. South Canterbury G.C. have organized an A.T.C. gliding camp at Level's Airport for South Island's squadrons, using their Capstan, a Ka-7 from Wigram G.C., a Bergfalke from North Otago G.C., and a Tiger from each of the three clubs. Each of the 48 cadets had about an hour's dual instruction; they slept under canvas. The camp is expected to be an annual event.

Gliding Kiwi

CENTRAL DISTRICTS CHAMPIONSHIP.—Eleven entries came from the area centred on Wellington for the first competition of the new soaring season at Masterton in the Wairarapa during four days in October. The modified Wallington scoring system was used.

1st day: 85-mile triangular race via Featherston and Ekatahuna. Very weak thermals and a cold front arriving at 12.30 put competitors on the ground early in the afternoon. Longest distance was by Heginbotham (Ka-6CR) and Wood (Olympia 463), who landed together at Mt. Bruce (50 miles).

2nd day: Free distance after a control point at Martinborough. Heginbotham got away early in light thermals, leaving the rest of the field behind, and landed near Ekatahuna after 60 miles. The heavy overcast which brought him down caught the rest of the field near the turning point.

3rd day: Again very weak thermals for distance around a 32-mile triangle via Delafield and Longbush. No one completed the triangle and only four scored. Heginbotham was first again, just past the second turning point.

4th day: With every indication of wave, a race to Lake Ferry and return was set. After everyone had been launched, the wind increased and it became very rough; so, after hearing reports from the pilots, the tasksetter recalled all the competitors.

Final Placings, Open Class

1. Peter Heginbotham (Ka-6CR) 3199
2. Ron Wood (Olympia 463) ... 2199
3. Edmundson & Hardy (Ka-7) 2120

Final Placings, Standard Class

1. P. Heginbotham 2709
2. R. Wood 1931
3. Upton & Edmundson/Hardy 1806

ROSS MACINTYRE

POLAND

FOR the 1967 World Championships a new Foka is to be produced, the Foka 5. It will have a T-shaped tail, the cockpit is to be broadened by 5 cm. and heightened by 8 cm., and the wheel is to be 20 cm. further forward. The T-tail and reduced wing-loading are expected to produce a notable improvement in its spinning behaviour.

Another new Polish type with a T-tail is a standard club machine, the SZD-30 ("Sowa"), now in an advanced stage of construction. The wing is in three parts as in the Skylark.

Volo a Vela

SOUTH AFRICA

THE building-up of a new gliding centre at Heidelberg (Transvaal) is proving difficult through shortage of funds; the dilemma is whether to build a hangar or acquire a third glider. The club has a Bergfalke and a Kirby Kite, and towing is done by an Auster and a Benoni-Brakpan belonging to the directors. A tow to 3,000 ft. over Heidelberg takes 20 minutes with the Benoni.

Aviasport

Preparations for our Championships in Kimberley are now in progress. We expect about eight gliders from Germany, including four Phoebuses. Dates: 26th Dec.-15th Jan. TED RUDNICK

SOVIET UNION

The following news is compiled from translations by Christopher Wills from "Krilya Rodiny", journal of the national physical culture organization.

BEFORE competing in the Final of the Third National Spartakiad (a two-year national sporting drive), pilots took part in the final contests in the various Republics.

RUSSIAN FEDERATION. — Teams from Moscow, Orel, Ivanovsk, Orenburg, Stavropol, Altai and Mariisk gathered at Orel to compete for the right to fly in the Spartakiad Final. With them were also teams from Armenia, Grusil and the Ministry of Aircraft Production. In all, 58 machines competed. Bad weather did not allow the pre-arranged tasks to be set.

A. Kurilo, instructor of the Orel region central club, who later won the Spartakiad, won the first task for 100-km. speed, and Moscow pilots won the team competition. The next task, 113-km. goal flight, was won by V. Gromov from Ivanovsk. Kurilo became Champion of the Russian Federation, with Lyakin (Moscow) 2nd and Nikolin (Ivanovsk) 3rd. Orel won the team prize. —K. EGOROV.

UKRAINE.—The 12th Republican Gliding Meeting was held at Kharkov simultaneously with the Spartakiad Final. Teams from Kiev, Lvov, Kharkov, Simferopol, Donets, Ravyensk and Odessa regions flew 32 machines of A-11 and Blanik types. The complex weather situation only allowed 3 tasks to be set. Winner of the first, a 100-km. triangle, was L. Yerishko, an electrical fitter from Dnepropetrovsk, at 58 km./h. The undersigned (a professional singer and ex-World Champion pilot from Kiev — ED.) took 15 seconds longer. Third was E. Rudensky, aeronautical student. Weather was better for the 2nd task, twice round a 100-km. triangle; 22 completed it, and Yerishko won at 68 km./h. Then came perhaps the hardest task, a 300-km. triangle. I crossed the finish line after 5 hrs. 21 mins. Rudenski came 2nd and electrician L. Pilipchuk 3rd, and only 5 others completed it. In the result, I was lucky to become once again Champion of the Ukraine, but by a margin of only 10 points. Among the teams, Kharkov was 1st, Lvov 2nd and Kiev Republican Aviation Sports Club 3rd.—V. GONCHARENKO.

LITHUANIA.—The eliminating contest for the Spartakiad was held on Kaunas airfield; 30 competitors took part with 6 teams—two each from Vilnus and Kaunas, one from the Lithuanian Ministry of National Economy, and others from various towns. Only 3 tasks could be set. Speed twice round a 100-km. triangle was won by V. Czukas, Kaunas Polytechnic student. He also won the next task, a 100-km. triangle. Then a 100-km. out-and-return was won by V. Cheponis. A. Berzinskas, an engineer designer from a Kaunas factory, became Lithuanian Champion: Czukas was 2nd and Cheponis 3rd. Of the women, R. Garmutye was first. Of the teams, the Ministry team was first. — A. KILNA.

LATVIA.—In an eliminating contest for

the Spartakiad, five teams took part — two from Riga Aviation Sport Club and one each from Liepaya, Bauska and Yelgava. Tasks were speed round a 100-km. triangle, 200-km. out-and-return, and twice round a 100-km. triangle. Winner was I. Kadikis, a building mechanization electrician; E. Stentslavs was 2nd and V. Vesminsh 3rd; all were from Liepaya Club, which also won the club contest. Best woman pilot was T. Sukhareva, from Riga.

Third National Spartakiad

Teams came to Orel in early July from the Republics, Moscow, Leningrad and the Ministry of Aircraft Production. Each team consisted of two men and one woman; 70 pilots competed, flying A-11's and Blaniks, and 30 Yak 12's did the towing. Chief task-setter was Hero of the Soviet Union S. Anokhim. But stable capricious weather — often rain, storms, strong winds, absence of thermals — made a normal conclusive ending to the last lap of the Spartakiad impossible.

Only on the 5th day after the opening ceremony could one of the set tasks be held — even then, the easiest of them, speed to a goal 113 km. down wind. Y. Malyutin, of Orel, won in 1 hr. 32 mins. A. Kurilo, of Orelo, took 3 minutes longer, and D. Golovko, of White Russia, was 3rd. Best woman was I. Gorokhova, from Moscow, and best team the Russian Federation.

On the 10th day, 18th July, the second task was set — a 100-km. triangle; of 69 starters, only 5 completed it — Verietennikov, Durnov, Yarushevichus, Chuvikov and a Lithuanian woman pilot, Garmutye. The first two crossed the start line almost together and they helped each other along the course. While one remained in a thermal, the other would explore ahead. If he found a thermal, his comrade would join him. Like this, they went 4/5 of the distance. The aerodrome then appeared. The pilots for the last time rose together beneath a cloud, gaining sufficient height to reach the finish. Now each of them strove to be the first across the line. Their height was identical, the gliders' performances the same. However, Verietenikov was first home. His help, it seemed, was his own weight; he is 30 kg. heavier than Durnov, so his time was 2 hours 2 seconds, while Durnov took 18 seconds longer.

The ministry's team was now leading, and its captain, E. Africanov, was individual leader.

Next day, an out-and-return of 150 km. was set in the expectation of a crosswind on the first leg and a following wind on the second. But the forecast, as usual, was wrong and the wind blew 90° to the course the whole time, with cumulus disintegrating and thermals never better than 1½-2 m./sec. Only Kurilo and Malyutin, of Orel, completed it. Their success was mainly due to Durnov, who often went ahead to find good thermals and advised his comrades over the radio, only to land short of the finish himself.

Thus, after a total of three contest days, the winners of the Spartakiad and Absolute Champions of the Soviet Union were Anatoli Kurilo (2,393 points) and Isabella Gorokhova. Y. Malyutin was 2nd and Kuznetsov (Moscow) 3rd. Of the women, R. Garmuty (Lithuania) was 2nd. Among the teams, the Central Russian Federation was 1st, Moscow 2nd and Lithuania 3rd.

WOMEN'S CONTEST.—A training camp for women pilots (for the final of the Spartakiad and the Russian Nationals) took place from 10th-30th May, with 25 competitors from 25 Republics. On the 22nd, when cumulus began as early as 10 a.m., growing to 5-6,000 metres with 3 m./s. lift, Ekaterina Anakhova, in a Blanik, completed a 100-km. triangle at 76 km./h., beating the previous feminine national record by 4 km./h. She started gliding in 1957 and set up a two-seater goal record of 403 km. in 1963. — *Krilya Rodiny*.

NATIONAL RECORD. — During the Ukrainian contest, Boris Strelnikov set up a national two-seater out-and-return record of 470 km. — *Aerosport*.

SWITZERLAND

IN the decentralised national contest, Rudolf Seiler was leading in mid-August with 74,080 pts. and Kurt Baumgartner was second with 44,003 pts. By that time the 82 competitors had totalled 12,156 km. in 83 distance flights,

5,357 km. in 23 out-and-returns and 3,127 km. in 14 triangular flights: total 20,640 km. (12,828 miles). Of this total, 5,802 km. were flown in July.

Ruldi Fausch, of the Obwalden gliding group, while flying a Mucha 100A at the Sachsler Berg on 11th July, collided with a transport cable and lost his life in the resulting crash.

The Obwalden group held a joint camp with the Zurich and Bülach groups at Saanen in the Bernese Alps from 1st to 21st August. Excellent weather allowed thermal flights to 4,000 m. (13,000 ft.) a.s.l. and cloud flights to 6,000 m. (20,000 ft.); actual height gains were 2,000-3,500 m. Zurich flew 547 hrs. from 313 launches with 11 aircraft; corresponding figures for Bülach were 123, 121, 5; and for Obwalden 62, 25, 1.

Swiss Aero Revue

UNITED STATES

MINDEN, Nevada, will be the site of the National Soaring Championships for 1966, to be held at Douglas County Airport, 40 miles south of Reno. Tentative dates are 28th June to 7th July. Sponsors are the Nevada Soaring Association, who organized the Western Regional Championships at the same site last August. Entrants must have the Silver C and distance leg of the Gold C. *The Thermal* (S. Calif. S.A.) states that offers were also received from Marfa, Texas, and Almagordo, New Mexico.

NATIONAL RECORD. — A National Multi-seater Record for Speed round a 100-km. Triangle has been claimed by W. Ross Briegleb, of Adelanto, Calif., who averaged 60 m.p.h. in a Schweizer 2-32 on 9th August with David M. Nees, of Arcadia, Calif., as passenger. The course was El Mirage–Wrightwood–Littlerock (Calif.) and back. Previous record: 54.28 m.p.h. by Harland C. Ross in a Ross R-6 on 14th July, 1958, from Odessa, Texas. World record, held in Poland, is 66.97 m.p.h.—S.S.A.

DIAMOND DISTANCES.—Hannes Linke completed Diamond Badge with 318 mi. from Marfa in a Zugvogel 3A in 8 hr. 5 min. on 25th July. Marion Griffith, Jnr., 324 miles from Rockwall, Texas, in Standard Austria in 6 hr. 55 min. An attempt by Helmut Kanter on 26th, from Marfa, ended after 295 miles at a place called Truth or Consequences, N.M.

Flights in August: 3rd, from Minden, 341 mi. in 6 hr. 59 mins. by A. L. Leffler in LM-1, and 312 mi. by J. D. Morris in Ka-6CR. 21st, from El Mirage, 330 miles by Bud Mears in Prue Standard and same by Alan Cameron, of New Zealand, who thereby set up National Distance and Goal records.

WESTERN REGIONALS. — These were held at Minden, Nevada, from 1st to 7th August, with 19 competitors whose average age was 40. William S. Ivans, with a Sisu 1A, won the 1st task, a 195-mile out-and-return, at 51.4 m.p.h.; also the 2nd, a 163-mile triangle, at 50 m.p.h., beating Hal Bonney's Prue Super-Standard by 33 seconds; also the 5th, a 211-mile out-and-return, at 51.5 m.p.h.

The Free Distance day was won by Al Leffler in the LM-1 (which has Laister-Kaufman wings) with 341 miles; Bob Klemmedson in Skylark 3D and Bob Moore in 1-21 were close behind with 330 miles; over north-central Nevada, average speeds were 60 to 80 m.p.h. under cloud bases from 16,000 to 18,000 ft., but over-development cut most flights short, though average distances were 216 miles and aggregate distance 4,124 miles. Klemmedson won an out-and-return-plus with 295 miles, and Bob Moore the final task, a 111-mile triangle either way round, at 42 m.p.h.

The overall winner, Bruce Beebe, with a Foka 24C, did not win a single daily task. Leading totals:—

B. Beebe	Foka	5537
E. D. McClanahan	1-23H	5534
R. L. Klemmedson	Skylark 3D	5428
W. S. Ivans	Sisu 1A	5283
A. L. Leffler	LM-1	5121

Soaring

WEST GERMANY

WASSERKUPPE CONTEST.—The second Junior Gliding Competition was held on the historic Wasserkuppe site from 17th-27th June (the first was in 1963). Entrants were limited to 25 and had to have the Silver C and 50 hours. Dr. A. Lippisch (designer of many gliders which flew there in the 1920's) was a visitor. There were 7 contest days

— 3 triangles, 2 out-and-returns, goal race and distance. 24 pilots came from 8 Regions; half of them flew the Ka-6 or 6CR types.

Helmut Reichmann, a student from Saarbrücken, aged 24, reached the overall lead on the 6th day and won the contest with 2,636 points, flying an SF-26. Bernd Knudsen, of Lübeck, who led for the first 5 days, finished 2nd with 2,410 points, flying a Ka-10. K.-P. Helmetag, with a Ka-6, was 3rd with 2,303 points. These three become eligible for the next National Championships. The previous winner, K. M. Heim, finished 9th. The youngest pilot, T. Rossle, aged 19, finished 5th with an L-Spatz-55. — *Der Adler, Flug Revue and Aerokurier.*

H-301 LIBELLE. — This glass-fibre machine (first described in SAILPLANE & GLIDING, 1964, Feb. p. 25 and June p. 228), has received its airworthiness certificate from the German Air Ministry and is now in production. No. 11 was test-flown in September and Nos. 12 and 13 are crossing the "Pond" (there are 24 orders from America). The list of standard extras now includes a jettisonable braking parachute, installed in the rudder; it can also be installed in machines already sold. The airbrakes have been altered to be more effective when out and less disturbing to the airstream when in, so wind-tunnel tests show. Please let the manufacturer know beforehand if you want fittings for radio and oxygen in the fuselage.—EUGEN HANLE.

LINK WITH LILIENTHAL.—Paul Beylich, who acted as Otto Lilienthal's rigger in the 1890's, and whom we reported last April (p. 177) to be still alive at the age of 90, is now reported to have died on 9th June in Berlin. In 1962 he built a replica of Lilienthal's monoplane glider for a memorial exhibition in Berlin-Lichterfelde.—*Der Adler.*

PAUL KREKEL

WE regret to learn of the death of Paul Krekel on 3rd September, aged 62. He had been active in German gliding since 1922, and we remember him in the 1930's as a lively figure much in evidence on the Wasserkuppe. In post-war years he had become a notably more serious character, still working hard in the cause. In 1951, when gliding restarted in Germany, he became Chairman of the Gliding Commission and joined the Technical Committee of the German Aero Club. He obtained his Gold C with 327 km. in 1957 and 3,000 m. climb in 1960.

Krekel was present as technical advisor at four recent World Championships, including South Cerney. Last year he visited Dunstable, called on the Editor, and was shown the records in *Flugsport* of his participation in German Nationals, starting with 1928, the year he got his C. — A. E. S.

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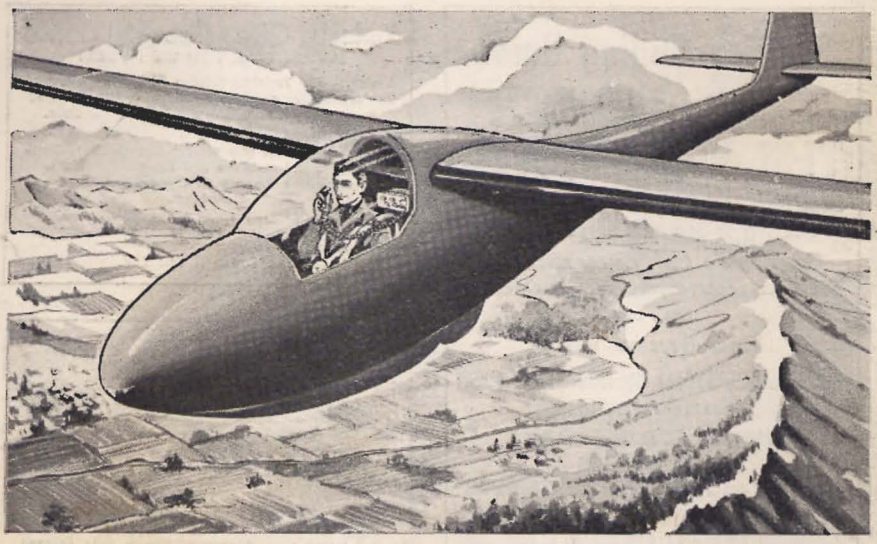
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The Secretary, Lasham Gliding Centre, Nr. Alton, Hants
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