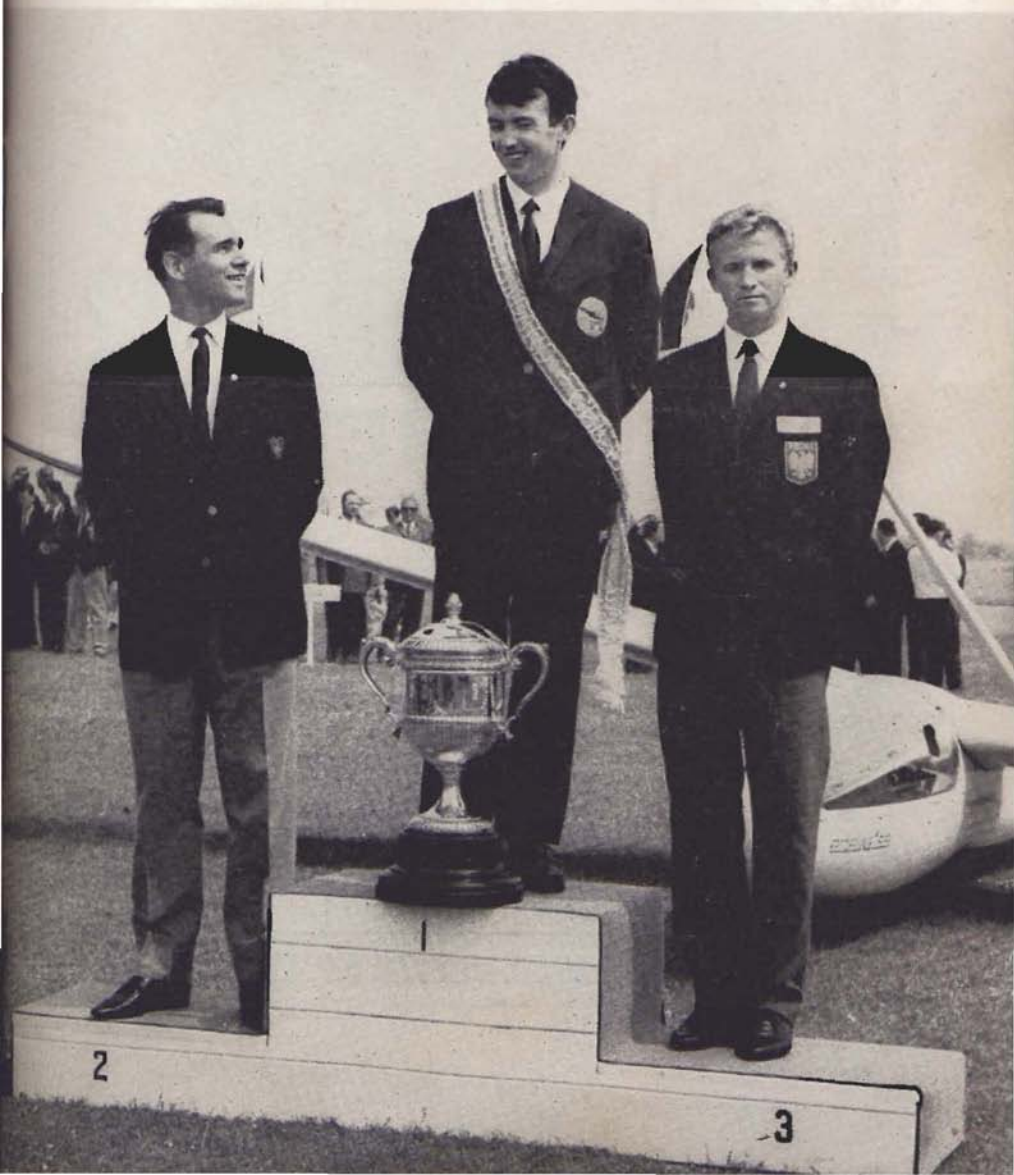


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Front Cover Photo — No. 1, Standard Class Champion, F. Henry; No. 2, M. Ritz; No. 3, F. Kepke.
Back Cover Photo — Centre, Open Class Champion, J. Wroblewski; No. 2, R. Späting; No. 3, R. Kuntz.

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LES CHAMPIONNATS

By FRANCOIS LOUIS HENRY

(Translated by Anita Schmidt)

I feel as if the Argentinian Championships took place only yesterday.

For two years they have seemed very close. Perhaps, now, they will fade away. Since that time, my mind has been focused on the next Championships. The main thing would be to qualify again. The selection was to be made at the "Huit jours d'Angers". I won this contest, but only just, and since then I don't seem to have done a single really good flight, which explains why I did not feel very hopeful when I arrived at South Cerney.

But it is, thank God, a competition between *ensembles* — of crew + car + trailer + glider + pilot — and, the morale of the latter excepted, all was ready before the contest. My crew was made up of Noël Loridan and Hervé Josse; but during the first week we also had Jean Paul Lartigny, a glider pilot with much competition experience. What I appreciated most was their quiet efficiency and their warm-hearted understanding of the very un-British "self-uncontrol" of their pilot. I herewith offer them my humblest apologies, but I cannot guarantee that I won't start all over again!

The trailer had been designed by Lacheney, and is as pretty as it is practical. I am almost sorry not to have made some idiotic *vache* 10 km. away to give us a chance to appreciate all its advantages.

The car was brand new and terribly clean at the beginning of the Championships, but my glider pilot's soul prefers it in its present "after the struggle" state; especially with that powerful odour of the remains of packed lunches accumulating at the back . . .

As for the glider, I don't know if it is really better than the others, but I love it, and there exists between us a mutual understanding, begun during the Military Championships in 1964 and deepened during the competition at Angers that year.

I would also like to quote Monsieur

Lamort, our Team Manager. "And now", he told us at the start of the contest, "you are old enough to know what to do". Those words were spoken at the right place and at the right time.

During our training in France we flew under every sort of condition; I kept searching desperately for some sign on which to base my hopes, the ten *vaches* (field-landings) I succeeded in making, all of them quite involuntary, did little to encourage me. "*Heureusement, y a les copains . . .*" (French pop song: "Luckily there's always a Pal . . .")

We arrived in England on the 21st May and our first meal was not what is known as "English cooking" in France. Nor had our reception at Lasham any of the British reserve we had been led to expect (thank you for that beer, Lefty!). In short, we were utterly confused by the time we fell



Photo by David Scallon.

*François Henry
watches Jacky
Lacheney at work.
Courtesy of "Flight"*



asleep in the bunkhouse discovered for us by Anita.

We were still confused the next day when Cartry and I got lost on a local flight round the airfield and only succeeded in pin-pointing ourselves over Newbury. Those weak English thermals fortunately reached 4 m/sec. that day.

The following day we began to practise at South Cerney. Or rather, we did a little soaring and a lot of close formation flying, to try and convince ourselves that the other machines were not after all better than ours. The results garnered by our four team pilots could never, incidentally, be made to agree. I myself managed yet again to land out — near Swindon! — and that at a time when "locomotives would have stayed up".

One practice task had taught me what to expect. I had been forced to go *back* along track for 20 or 25 kms. to stay airborne; such a thing had never before happened to me in a race!

And then, at last, the first contest task was on. I was extremely worried about being last to be launched, and when halfway through the launching period top cover spread in and hid the sun over the airfield, this did nothing to reassure me. I think that I was very lucky that day, since my race in pursuit of the sunny patch led me on to a slope when I was down to 50 m.; and since, before finding another thermal, I had already announced my landing to my crew. Two minutes after I had landed near Kidderminster a reporter appeared, armed

with an enormous camera. My bad English did not enable me to ask him whence he had sprung, and this is a question I shall puzzle over for a long time.

The main characteristic of the second task was the "fog" and I will permit no one to say that there are no "Auto-routes" in England: I remained vertically above one for a large part of the way — I couldn't see anything else! It was also the first time in my life that I have had to change the compass reading 50° to get my bearings during the final glide.

I had been so afraid of collisions during this task that I much preferred not to follow the other gliders on the next task. As the Gods were with me, I found the better thermals and made the better time; but what can I say when I am being congratulated?

Two observations on the fourth task, Free Distance. The first, a criticism: there are a great deal too many railways east of Manchester! The second: a heartfelt "thank you" for English hospitality; I had hardly touched down when a car stopped next to my field — a Mr. and Mrs. Wilson, returning from the seaside and on their way to Shipley (Yorkshire) about 20 miles away, took me then and there into their kind charge. After having telephoned for me they invited me to dinner at a nearby hotel and insisted on enduring my broken English until the arrival of my crew at 9 o'clock that evening.

The race to Spitalgate caused me

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all about the organization of the World Gliding Championships were the eyes of its Director.

I had already crewed for Henry during last year's "Huit jours d'Angers". His invitation to do so again in the World Championships did not come unexpectedly therefore, but gave me the keenest pleasure. During the 12 years that I have been gliding I have made rather more of a name for myself as ground engineer than as pilot . . . and to be crewing for Henry constituted a unique distinction and honour.

I needed no special preparation with our equipment; what was required was a stoic resolve to put up with his temper which would, I was sure, be quite appalling for three weeks.

On the whole, all went well. Today at last I take leave of the competitor and rediscover my friend — we are back on equal terms!

And two years from now, should this be possible, I shall be quite ready to do battle again.

N. LORRIDAN

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CANADA, ANYONE?

Despite the close ties that exist, this is not a satellite of America, as you may have thought. Neither is it a "back-woods" — Canadian glider pilots are regularly competing in World Contests, with quite creditable performances. And yet, a lot of the equipment is bought from American dealers — or it used to be until now. Of course this means delays, high cost, difficulty with service, and the feeling of being the "small brother".

Now at last the Canadian pilot can avoid all these disadvantages. There is now a sailplane supply dealer in their own country, handling as wide a range of supplies as possible. Manufacturers of glider instruments, oxygen and radio installations, accessories, and complete sailplanes who wish to have their products represented in Canada are invited to contact the Ontaero Co., P.O. Box 26, Stn. D, Toronto 9, Ontario, Canada.

Keep 'em flying!

great uneasiness. More than ever I remembered the Argentine, and how, in the second week, I had lost all the lead I had gained during the first. I forced myself to the utmost prudence, and only came down once to 800 m., and took an enormous safety margin to brave the only difficulty on the way, a sea-breeze front — I only realized what it was on thinking back long after having flown through it. I recall being at 1,300 m. 22 km. from the finishing line. With the wind behind me, this made yet one more arrival strictly *not* in accordance with orthodoxy.

After several days which were hardly flyable we finally had the last task. This led us, following a crafty detour, into Somerset. The final glide was in fact much more frightening than the previous one, because of the tiny fields. Here then we had the well-known *exiguity* (littleness) of English fields, and I think that the Organizers had just not had the time to enlarge our eventual landing places, as they had so obligingly done all around South Cerney.

That day the task had in reality been a closed circuit race. The last leg, done by car, brought us all back at high speed to the results board, where the landing places had been pinned on. Once more, the Gods had been with me during the task, on the road and on arrival.

It remains for me to face the hardest of all tasks [the author was thinking of his journalistic labours] and this is far from finished. Fortunately I have had 3 weeks' holiday in England before I had to brave this.

In conclusion, I am sure that I speak for all my comrades of the French team when I say that what we liked best of

EX-DIRECTORY AFTERTHOUGHTS

By ANN WELCH

AFTER the long months of preparation, it does not seem possible that, quite suddenly, the Championships have come and gone, that South Cerney is looking like an R.A.F. station again, and that almost everyone is back home once more. From my own point of view, the least good part of the meeting was that I did not have time to do what I most of all wanted — to sit and talk to everyone.

The preparations were a combined effort of voluntary gliding club members and the R.A.F., and before I go further with this article, I would like to say that we could not have had better help and co-operation than from Grp. Capt. Peter Ottewill and everyone else at South Cerney, and from A. V. M. Chacksfield and Son, Ldr. Young at

M.o.D. in London. Nothing was too much trouble, no demands too difficult, and no chore too tedious for the R.A.F. It was wonderful to have such generous and understanding help.

It would take much too much space to thank all the club helpers who gave up their holidays to work; I only hope they enjoyed themselves. However, thanks are specially due to Derbyshire and Lancashire who ran the gliding shop, the Bristol Club who took on barographs, the Yorkshire Club for Information, Lasham for lots of things including being a transit camp and an almost permanent committee room, the Kent Club for looking after arrivals, the London Club for the public enclosure, and, not least, all the clubs which gave up all their key members to help in the middle



*Mike Lann
reproduces a map
with Thermo-Fax
Photo Sally
Thompson.*

of their own busy season. Our helpers did not come only from England; in the exceptionally busy last days before the start, four people from the other side of the world swam into the orbit of the organization — and never stopped working from then on. If Australia wants to run a Championship, can I recommend Judy Blacket, Jenny Joyce, Laurel Anthony and Carmen Suter, with our grateful thanks. In the interpreting field special thanks to Enid Paget from Paris, and Barbera Franken-Scharge from Germany.

The Championships could not have been successful without the generous loan of expensive equipment such as projectors, copiers, calculators, cars, scooters, bicycles and the donation of money and prizes, nor without the wonderful way in which Cirencester town, and people who live near South Cerney, welcomed us all.

There are two people who I would particularly like to thank; the deputy director Frank Irving, and trouble-shooter and task-setter Bryan Jefferson. It would have been impossible to find two more able people, as easy to work with, and as quick and sensible about dealing with any unexpected matter which arose.

It is always interesting to see what can be learnt from Championships. Although in preparation one naturally tries to foresee all possibilities, and to use the experience of others, some things turn out better, and of course some worse, than expected. An example of the former was the Early Thermal Warning System. For many years there has been discussion over getting gliders into the air at the best time. The argument for pilot choice is that the pilot should retain the responsibility, to a large extent in case the organizers get the time wrong. The argument for designated start is that all gliders can be off rapidly into the same bit of air. The weakness of this in the past has been the absence of real information on the best time to start. If just too early, the first glider cannot stay up, and may suffer by having to wait for another launch; and if too late, the last ones off may have to cope with declining conditions. The E.T.W.S. we used at South Cerney took all the guess out of



Photo by A. D. C. Turner.

the selection of start time. We used two gliders, a single-seater and a two-seater with a met. man aboard. The task-setters at the launch point were linked with these two aircraft, and with the Met. Office (for temperature readings, etc.) by radio. By directing the exploration of the gliders and correlating all their, and the ground, met. information, it was possible to say go at the earliest time that it was possible for everyone to stay in the air. Except for the day that never did become soarable, the re-light rate was only about

2%. Linked with the moment of start there is the problem in a big competition of deciding how many gliders can be put in the local air at a time. If conditions are strong and likely to last all day, there is no problem, but in more transient and weak conditions too many gliders simply reduce the chances of everyone to get away, quite apart from increasing the collision hazard. If two Classes are flying with different tasks, these can be selected so that an appreciable interval can exist between them. If it is desired, as it is in World Championships, to give both Classes the same task, they must either take off at the same time, or the second Class must be delayed until local congestion is reduced. In our Nationals we have usually given different tasks (deliberately, since the groups are of different standards), but at South Cerney we found that a slight delay in sending off the second group did not appear to be a disadvantage either in carrying out the flight or making a performance comparison. There is no doubt, however, that the opportunity for short out-and-returns in moderate or weak weather is reduced in large competitions, owing to opposed traffic congestion near the turning-point. If the race is over 200 kms. long, aircraft will be better separated; but if only 100 km., the collision risk becomes a serious task-setting consideration. It is in this respect that it is hoped that C.V.S.M. will re-instate the broken leg with two turning-points. In many countries, Championships also provide the opportunity to gain national records or qualify for Gold C's. Because a failed triangle no longer counts, although a failed out-and-return does, there will be a temptation to set out-and-returns instead of triangles.

Pictorial briefing provides a simple answer to the language problem, as was shown by the absence of questions. This was particularly true with the personal met. information. Even with this, however, some information in words on trends and possible changes needs to be provided by the meteorologist, which can raise a big interpreter problem owing to the specialised and imprecise nature of the subject. This problem was solved for us at South Cerney by the kindness of the visiting met. men from

France and Germany. Future organisers may well find their lives simplified by putting such co-operation on an official basis.

In recent World Championships the pilot and his glider have been backed up by increasingly sophisticated ground organization. The start of all this was a sensible and practical radio link between the glider and the car. The object was competition between individual pilots, and the radio link helped this by reducing time and energy spent on retrievers. Since then, two developments have taken place. Pilots have learnt to assist each other by flying in pairs, teams or combined teams, and the simple radio link has changed into a complex



Aids and controls.

system of aids and controls. These include D.F., numerous outstations giving weather data, calculations and other help, with big base stations able to control not only the outstations but the strategy and tactics of the pilots themselves. This adds up quite simply to one thing: Championships will no longer be contests between individual pilots. This may be what is wanted, it may be the natural future of the sport, but if we feel that championships gliding is essentially the individual pilot using his machine to achieve the best flight of which he is capable, then before the next World Championships the whole matter of external aid and control must be discussed by C.V.S.M. and action taken. It is in this sort of matter that C.V.S.M. is especially important, as it



Sophisticated ground stations.

is in a position to condense world-wide thought.

This year it was noticeable how the average age of the top pilots had gone down; further, that in the Open Class the winner, Wroblewski, and in the Standard, Kepka, had never flown in World Championships before. The average age of the top eight pilots was 30.6 years. For any country to have such pilots means that not only its training methods for competition flying must be good, but to have got through their basic training, and acquired sufficient background experience in the few years since they started, shows the existence of excellent opportunities for young pilots to get on. It is incorrect to say that it is not possible without extensive subsidy, although this helps. Much more important is the realisation that good advanced training for young pilots is essential for the future of gliding in any country. Even if we could financially assist those in Britain, we have at present no adequate machinery for doing the job.

The 1965 Championships again showed a triumph for the Standard Class conception. The Open Class gliders on balance seemed to have surprisingly little advantage even in moderate conditions compared to new and refined Standard aircraft. Even if the fifteen metres now sprout 17 and 18 metre wings, this can never take away the design stimulus that the Standard Class

has given to soaring.

At the end of the Championships, while the winners were choosing their prizes, we talked about the possibility of European Championships, to take place in intervening years between World events. There is no doubt that World Championships have become large, expensive and complicated. This is not unnatural, but it reduces the number of countries who will be willing and able to run them, which in turn means that many fine places will be lost to international competition gliding. We felt that there was now a need for some championships which would be run much more as a camp. The cost should be kept low, accommodation in tents, with briefing in the open air. The number of gliders should be limited to 40-50, and the purpose, good competition without complication. There would be many European countries who could run such a meeting, including Holland, Rumania, Switzerland, Austria, Sweden, Denmark and Hungary. With about 17 countries to choose from, and Championships only every second or third year, it would be necessary for the holding country to frustrate its own Nationals only about once every 30 years! International gliding has always been fun, but 2-3 weeks in two years is so little. European Championships run on simple lines could provide a great opportunity not only for more international flying, but for trying out new and different ideas.

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FROM LESZNO BY PHONE

Impressions of South Cerney

*Translated by J. K. PRZEWLOCKI,
Polish A.F.A. Gliding Club*

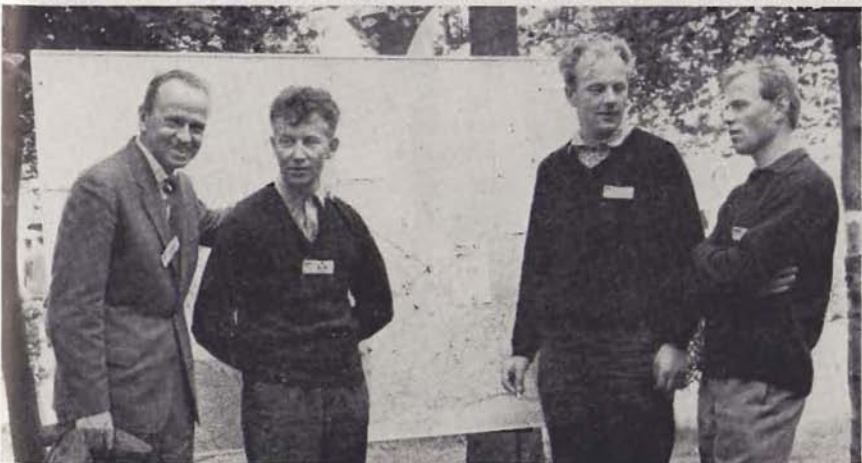
JAN WROBLEWSKI *Open Class Champion 1965*

WELL, I am very happy to have made it, but thrill No. 1 came earlier when I was selected for the team. I was very apprehensive about the famous English conditions one heard so much about from friends who had visited Albion before. Luckily, as the competitions went on I forgot what I had heard. Conditions proved better than I feared; in particular the cloud base was higher than what we were lead to believe. I was, of course, worried about navigation, too, but the numerous aerodromes took care of this worry. Constant anticipation of much-feared sea breezes was fairly killing and my sympathy goes out to Wally Wallington in his job of forecasting. In perspective the whole competitions were great fun, largely due to the excellent organisation. It was my first trip abroad, but with all the local Polish gliding types around I thought I was really flying at home.

EDWARD MAKULA *Open Class Champion, 1963*

I approached the Competitions with great apprehension of English conditions. However, I found them good; but, of course, the cloud base was lower than at home. Navigation also was no problem. Organisation was first-class and the English people much friendlier and warmer than is commonly believed outside. The general atmosphere among the competing pilots was very sporting; also the fullest marks to the tug pilots. Among the pilots I rated highest were Wroblewski, the two German pilots and the host team. On reflection, I am sorry we did not bring our hot Open Class machines, as at times when conditions were strong the Fokas did not allow us to compete on equal terms with some of the super ships. On the whole, judging from the points spread around me, I cannot say I was out of luck. The possibility of freak results following freak conditions was my main concern, but there was none of that.

In conclusion, I am satisfied with my result and I congratulate the organisers for making it a real World Class event.



L. to r., T. Rejniak (Team Manager), E. Makula, J. Dankowski, J. Wroblewski.

AVIATION ART AT SOUTH CERNEY

By PETER SCOTT

THE Kronfeld Club's Art Exhibition at South Cerney seemed to me to have a character of its own almost in the way that a one-man exhibition has a character. It is manifestly no good trying to explain this by saying that the pictures were mostly painted by gliding types who all have the same sort of character. It would be hard to find a more diverse group of individuals in any field of human endeavour, so it can't be that. Was the secret perhaps in the eye of the beholder? It has been said that "To succeed in painting a picture, the artist must have something to say and the beholder must be able to hear it". Most of us who saw the exhibition were half-way to meet the painters when we walked in. We shared with them the enthusiasm which brought their paintings into existence. We recognised the heartbreak of the pilot standing beside his glider as his opponents thermalled above him, the exhilara-

tion of skimming over a finishing line at 100 knots, the promise of distant gliders circling ahead as one emerges from a belt of grey clag. These and many like them struck an answering chord. The artists had said something which we as gliding types could hear and understand. By definition the pictures had succeeded.

Within what I regarded as a generally rather high standard of technical competence there was a great range of styles from the frankly photographic to the uncomprisingly abstract, and perhaps this too accentuated the character of the exhibition. Personally I could have done with more "impressionism" and more abstractions, but, of course, there were those who said they could have done with less. Either way the exhibition caught to a remarkable degree the atmosphere of the atmosphere and of our particular business in it. Its success was reflected in the fact that of the 158 pictures on show no less than 83 were sold and fetched a total of £1,244. Yvonne Bonham, Margaret Kahn and the Kronfeld Club are to be greatly congratulated on having organised a first-class accompanying feature to the World Championships — Margaret as



Ann Welch explains her "Thermal" painting to Peter Scott. Photo Sally Thompson.

well on having herself painted some exquisite cloudscapes.

NOTE.—The next exhibition and competition will be held from the 3rd-27th November, 1965, at the Kronfeld Club. If you wish to enter, write for further details to Mrs. Yvonne Bonham, 14 Little Brownings, London, S.E.23.

H. C. G. BUCKINGHAM

As we go to Press, we have learned with great regret of the sudden death of Mr. Horace Buckingham, head of the firm of Elliotts, of Newbury, producers of the famous Olympia series of sailplanes. An obituary notice will appear in our next issue.

GLIDING CERTIFICATES

DIAMOND FOR HEIGHT

No.	Name	Club	1965
3/42	R. A. Mann	Scottish	14.2
3/43	K. V. Newholm	Laarbruch	17.1
3/44	D. D. Twigg	Phoenix	17.1

DIAMOND FOR GOAL

No.	Name	Club	1964
2/174	V. C. Carr	Leicestershire	22.8
2/175	A. S. H. Fisher	London	4.7

GOLD C COMPLETE

No.	Name	Club	1965
134	K. V. Newholm	Laarbruch	17.1

GOLD C HEIGHT LEGS

Name	Club	1964
C. S. Lister	Doncaster	30.5
L. Muncaster	Four Counties	9.8
J. B. Goldborough	Yorkshire	8.8
J. Adams	Oxford	20.6
		1965
K. V. Newholm	Laarbruch	17.1
H. Orme	Laarbruch	15.1
I. A. Dandie	Scottish	14.2
D. D. Twigg	Phoenix	17.1
S. J. Warwick-Fleming	Scottish	14.2

GOLD C DISTANCE LEG

Name	Club	1964
A. S. H. Fisher	London	4.7

SILVER C CERTIFICATES

No.	Name	Club	1964
1571	D. W. Paton	East Anglian	27.9
1572	B. Fitchett	Leicestershire	22.8
			1965
1568	W. H. Maltby	Chilterns	13.2
1569	E. Higgins	Scottish	3.1
1570	A. O. Boyle	Southdown	31.1

1573	D. R. C. Mackay	Scottish	14.2
1574	R. Butler	Bristol	14.2
1575	Valerie Wyles	Scottish	15.2
1576	B. W. Brighton	Newcastle	14.4
1577	F. K. Birkett	Derby & Lanes.	27.3
1578	J. G. Smith	Ouse	11.4
1579	A. J. Burton	Surrey	16.4
1580	G. Jones	B.E.A. Silver Wing	24.4
1581	M. D. Collins	Surrey	13.4
1582	B. F. Dobson	East Midlands	24.4
1583	J. Harris	Devon & Somerset	29.4
1584	D. N. Jesty	Heron	29.4
1585	R. J. M. Clement	Scottish G.U.	4.4
1586	R. A. Foot	Heron	30.4
1587	A. Morris	Derby & Lanes.	24.4
1588	J. A. Martin	Mendips	27.4
1589	L. Bellamy	Ouse	28.6
1590	R. A. Bremner	Devon & Somerset	29.4
1591	J. N. Young	641 G.S.	24.4
1592	D. R. Owen	Bristol	9.5
1593	T. G. Bobbin	Cleveland	9.5
1594	I. G. Smith	Four Counties	15.5
1595	D. W. H. Roberts	Oxford	9.5
1596	B. R. Beale	Surrey	2.5
1597	C. E. Twiston-Davies	Bristol	18.5
1598	G. J. W. Burchell	Bicester R.A.F.	19.5
1599	A. M. Rose	Ouse	20.5
1600	J. P. B. Mason	Surrey	20.5
1601	P. Kevan	Bicester R.A.F.	20.5
1602	R. M. Johnston	Moonrakers	22.5
1603	D. A. Cameron	Bristol	5.6
1604	J. P. Whitehead	Scottish G.U.	19.5

U.S.A. NATIONALS

ON 29th June the 32nd National Soaring Contest was opened at Adrian, Michigan, in the presence of the State Governor, George Romney.

Launching of the 69 competitors began at 11.15 for a three-legged task: 77 miles south to Lime, Ohio, then back to Adrian, then distance along a line south-westwards through Bryan, Ohio.

After the passage of a weak slowing-up cold front, thermals were rather weak; and those who came back for a second launch after 3 p.m., including Schreder (who had gone 28 miles), found a useless overcast sky. George Moffatt, in a Standard Austria SH-1, made the best distance of 130 miles, and Wally Scott was second with 114 miles. A visitor from Canada, John Firth (formerly of the Cambridge Club in England), was 5th.

Two machines were damaged on landing and one on the road.

WEDNESDAY, 30TH JUNE.—Eight tugs launched 66 competitors in 67 minutes under a sky in which broken cumulus had replaced stratus. All but 5 or 6 competitors got away from their first launch on a Free Distance task.

Winner, with 273 miles in a Sisu 1A, was Dale May, who had been in 58th place the day before, though Moffatt was still leading with 1,915 points. Ben Greene was 2nd and John Firth 3rd both in the daily and overall scores. So three Standard Austrias led the field.

Aggregate distance, 10,675 miles.

SATURDAY, 3RD JULY.—After a rest day with good dry thermals and then a day of warm-front weather, a Goal-and-Return race was set to Van Wert airport, Ohio, 74.8 miles to the S.W., and back. Cumulus started early and Schreder was first off at 11 a.m. in his HP-12, into a W. by N. wind of 20 kt. Watchers at base saw a white haze gradually replacing the cumulus to the S.W. but were relieved when the German visitor, Hans-Werner Grosse, was first in of the 15 who made it. Schreder won the day at 35.15 m.p.h., Paul Bikle was 2nd in a Prue Standard with 33.96 m.p.h., and Grosse 3rd in his Ka-6E at 33.87.

Moffatt still led overall with 2,851 pts., with Grosse, 2,737, in 2nd place. Firth

did not finish and sank to 11th overall through not realising that weak thermals were the only ones left on the last leg.

SUNDAY, 4TH JULY.—With a 10-knot west wind, a 144-mile triangular race was set, with the 1st leg going S.W. and the second N.W. Dean Svec in a Sisu 1A made the best speed, 44.28 m.p.h. Moffatt was second best and kept his overall lead. Chuck Hauke zoomed up before reaching the finish line (cf. Baeké at South Cerney) but crossed it in the subsequent landing.

MONDAY, 5TH JULY.—The task was Goal-and-Return to Van Wert (74.8 miles), back to Adrian, and then free distance. Towering cumulus were added to by a cold front, and as Firth was the only one to manage even the out-and-return, he won the day with 1,000 points for 178 miles, reaching 4th place overall.

TUESDAY, 6TH JULY.—Moffatt won a 93-mile triangular race at 33.3 m.p.h. "Weak, progressing to miserable thermals" were predicted, with an inversion at 4,000 ft., and only half the pilots (33) completed the triangle.

THURSDAY, 8TH JULY.—Following a rainy day, today dawned bright with a prospect of moderate thermals and scattered cumulus. It was the last contest day, and the task was a 161-mile triangle plus free distance for those who completed it, who actually numbered 25 out of the 64 who flew. Rain at the second turning point brought down the later starters or the slower fliers.

Grosse not only won the day with 284 miles but displaced Moffatt from the lead, and Svec overtook him too. Firth made 2nd best distance with 282 miles (121 beyond the triangle) and held on to 4th place overall.

We are indebted to Roy R. Winn, editor of the Contest newsletters, for sending a complete set from which this account has been compiled.

THE JACK EMMOTT PRIZE

Mr. Jack Emmott, whose £50 Aerobatic Prize is no longer competed for, has generously offered the same amount to be divided equally between the winners of the five Regional Contests.

FINAL RESULTS

Final Place	Pilot	Sailplane	June 29th	June 30th	July 3rd	July 4th	July 5th	July 6th	July 8th	Total
1	H. W. Grosse (Germany)	Ka-6 E	829	940	968	888	804	829	1000	6,258
2	D. Svec	Sisu 1A	821	904	960	1000	720	915	921	6,241
3	G. B. Moffat	Std. Austria	1000	915	936	927	757	1000	697	6,232
4	J. Firth (Canada)	Std. Austria	830	944	356	924	1000	804	992	5,850
5	P. B. Kiz	Prue Std.	754	817	969	771	709	743	839	5,602
6	R. W. Mozer	Ka-6 E	848	882	816	580	635	813	891	5,465
7	C. G. Ray	Ka-6 CR	730	917	723	854	663	603	726	5,216
8	B. Greene	Std. Austria	862	980	434	368	764	875	845	5,128
9	R. E. Schreder	HP-12	255	420	1000	893	720	826	976	5,090
10	W. Scott	Ka-6 CR	876	364	436	851	663	917	911	5,018
11	K. Gerstan	Ka-6 CR	589	925	725	746	674	808	412	4,879
12	R. Semans	1-23H	720	786	812	717	770	292	712	4,809
13	J. M. Karlovich	Skylark 4	589	824	435	681	610	784	859	4,782
14	W. H. Mullen	Ka-6 CR	626	907	338	711	708	651	731	4,672
15	C. Mears	Prue Std.	342	776	313	749	647	891	894	4,612
16	J. Bieren	Ka-5	752	878	148	754	666	698	635	4,531
17	W. C. Holbrook	Std. Austria	489	370	815	859	522	766	703	4,524
18	C. Derujinski	Sisu 1A	195	804	903	812	712	406	656	4,488
19	J. D. Ryan	Sisu 1A	589	666	429	887	662	822	408	4,463
20	D. S. May	Sisu 1A	169	1000	843	901	757	82	566	4,318
21	B. M. Carris	2-32	237	708	435	776	672	816	648	4,292
22	J. Randall	Ka-6 CR	589	707	299	699	610	814	566	4,284
23	R. F. Hupe	Ka-6 CR	328	249	736	775	650	870	648	4,256
24	S. Eckert	Ka-6 CR	564	923	338	674	610	436	684	4,229
25	C. D. Herold	Ka-6 CR	253	850	422	666	672	439	756	4,088
26	G. A. Wheeler	BG-12C	508	880	0	760	644	863	414	4,069
27	E. F. Byars	Std. Austria	180	327	435	753	695	819	768	3,977
28	S. W. Smith	1-21	615	307	315	722	663	672	641	3,935
29	R. Briggles	BG-12B	535	362	334	769	666	730	500	3,896
30	N. Ridenour	Prue Sup.	293	344	366	722	752	803	524	3,804
31	D. Zauter	Ka-6 CR	554	838	834	368	610	264	334	3,802
32	B. Beebe	Foka	373	287	800	719	649	434	383	3,645
33	C. K. Hauke	Ka-6 CR	589	371	445	755	640	787	49	3,637
34	P. A. Schweizer	2-32	562	320	335	756	674	439	535	3,621
35	B. F. Sparks	1-23H	251	798	393	626	666	393	340	3,467
36	T. W. Smith	1-29	395	600	346	417	680	599	419	3,456
37	J. G. Kuhn	Ka-6 BR	589	463	340	774	650	71	563	3,450
38	L. A. Phillips	Ka-8	558	353	183	611	621	702	404	3,432
39	J. M. Robertson	Ka-6 CR	108	730	442	719	662	317	373	3,351
40	S. J. Bennis	1-23H	535	532	299	292	610	678	398	3,344
41	H. P. Bovenkerk	1-23	462	608	225	368	467	769	399	3,298
42	J. C. Wright	Sisu 1A	133	859	355	861	663	80	346	3,297
43	J. W. Leland	Ka-6 VR	133	849	296	398	610	371	586	3,243
44	S. V. Starr	1-23 mod.	178	776	115	755	361	377	628	3,190
45	J. C. Slack	Lo-150	523	806	354	425	660	141	280	3,189
46	L. P. Hunter	1-23C	182	639	794	360	610	621	404	3,110
47	R. A. Chase	Std. Austria	178	391	325	365	689	646	383	2,977
48	P. Palmer	Prue Sup.	374	658	109	616	610	155	364	2,927
49	R. N. Sisley	Ka-8 B	479	192	157	597	507	624	300	2,856
50	J. F. Emons	HP-11	130	243	287	756	610	438	383	2,847
51	V. Peres	HP-11	242	677	345	399	657	127	351	2,808
52	G. F. Squillario	Ka-6 CR	186	78	263	591	610	432	411	2,571
53	V. W. Oldershaw	Olympia 2	506	0	156	701	651	154	394	2,562
54	R. T. Coapman	Ka-6 CR	92	694	119	579	562	127	350	2,523
55	W. B. Cannon	1-23H	215	337	225	378	641	174	516	2,486
56	R. W. Jackson	1-23H	100	725	155	157	602	229	342	2,310
57	L. R. Rehr	2-32	518	281	134	292	610	141	325	2,301
58	G. Gianelloni	Skylark 4	175	588	299	201	579	127	325	2,294
59	J. J. Hill	Ka-6 CR	254	136	261	245	592	280	383	2,151
60	L. Gehrlein	1-26 mod.	509	613	72	0	252	171	364	1,981
61	E. A. Steinhoff	Ka-6 CR	242	354	137	245	420	62	267	1,727
62	W. H. Coverdale, Jr.	HP-11	157	153	334	273	228	237	219	1,601
63	D. Anderson	Ka-6 CR	495	538	421	0	0	0	0	1,454
64	R. D. Stouffer	1-76	0	476	63	265	228	127	149	1,308
65	W. J. Smith	BG-12A	232	414	38	221	383	0	0	1,288
66	W. K. Herman	Ka-8	0	0	72	445	470	150	0	1,038
67	M. C. Cruse	Prue 215A	82	0	151	128	168	127	156	815
68=	E. H. Seymour	Ka-6 CR	578	0	0	0	0	0	0	578
68=	S. Dupont	HP-10	98	84	137	112	50	51	46	578

SOUTH CERNEY: A CRITICAL LOOK AT THE SCORES

By P. G. BURGESS, *British Team Manager*

IT was becoming obvious towards the end at South Cerney that whilst our pilots could equal the field on the distance days, they were being consistently outflown on the race days. An analysis of the speeds achieved on competition race days numbers 2, 3 and 5 confirms that either our pilots or our glider manufacturers (more likely both) have still something to learn if we are to equal even Standard Class Fokas and Edelweisses flown by Poles and Frenchmen. The relevant average speeds for the days mentioned (i.e., ignoring Competition Day One) were:

	k.p.h.
Average speed of day winners (both classes) - - - -	73.1
Average speed of the two World Champions - - - -	68.1
Average speed of the four British Pilots - - - -	60.2

The lower speed gives losses of 23 and 35 minutes on the higher speeds for a 3-hour, 200-km. task, or between 140 and 190 points on a 600 speed point day. (The average speed of the four British Pilots was 66.8 k.p.h.)

There were some at South Cerney who suggested that future British Teams should take a leaf out of the Polish book by giving a good deal more serious attention to pair flying and pair flying training than hitherto. On the other hand, the performance of Henry in the Standard Class and the fact that the French Team were *not* pair flying, except casually, indicates that the lone wolf can still win through. In fact, in the British camp pair flying was used whenever convenient and whenever two or more pilots of the British/Irish entry were close to each other. (Ghastly thought, was it ethical to pair-fly with the Irish?) What was missing compared with the Poles, whose team had three weeks' practice together before South Cerney, was the previous practising of definite techniques of pair

flying by our pilots. The only explanation of the quite superior performance of the whole Polish team would appear to be an ability to search out stronger thermals more quickly than most. There has been no suggestion that the Polish Fokas consistently outclimbed others in the same thermals, nor has it been suggested that the Foka 4 has a noticeably superior glide angle.

To get all this into perspective, it is necessary to quote aggregate scores of pilots when marked on a combined Class basis. Table 1 shows the aggregate scores of the four leading countries and Table 2 shows the place and score of the first 14 pilots when marked on a common basis (recomputed throughout as a one-class competition to slide rule accuracy only).

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TABLE 1. Aggregate Scores of Leading Countries, South Cerney, 1965

Country	Aggregate Score	Aggregate of Class Placings
1. Poland ...	19,445	12
2. West Germany ...	18,324	27
3. Gt. Britain ...	18,069	27
4. France ...	17,961	26

TABLE 2. Combined Class Marking, South Cerney, 1965

Pilot	Country	Pilot Class	Glider Class	Score
1. Wroblewski ...	Poland ...	O	S	5040
2. Spänig ...	W. Germany ...	O	O	4965
3. Kuntz ...	W. Germany ...	O	O	4870
4. Makula ...	Poland ...	O	S	4795
5. Kriznar ...	Yugoslavia ...	O	O	4790
=6. Henry ...	France ...	S	S	4630
=6. Williamson ...	Gt. Britain ...	O	O	4630
8. Goodhart ...	Gt. Britain ...	O	O	4515
9. Ritzi ...	Switzerland ...	S	S	4480
10. Cartry ...	France ...	O	S	4380
11. Popiel ...	Poland ...	S	S	4285
=12. Kepka ...	Poland ...	S	S	4235
=12. Burton ...	Gt. Britain ...	S	S	4235
=12. Yeates ...	Canada ...	O	O	4235

It will be noted from these tables that Poland are out in front on aggregate, that they are the only country with all four pilots in the first 12 (or 14 if you wish) on the combined list, and that Henry of France has dropped from first in the Standard Class to equal 6th on the combined list.

The conclusion which one is forced to draw (and not necessarily reluctantly) is that carefully practised pair flying techniques pay off handsomely. In the three World Championships from 1960, Poland have earned two first places, 2 seconds, 3 thirds, 2 fourths, and 1 twelfth place. They also won the first Standard Class World Championship on home ground in 1958. No other country has anything like such consistently high placings.

Five years ago, after Butzweiler, Ann Welch (SAILPLANE AND GLIDING, August, 1960) wrote of her conviction of the necessity for carrying out intelligent and properly organised research into pair flying in view of the undoubted success of the Polish pair flying in the 1960 World Championships. The only reservations held on the subject concerned the possible danger of pilots grinding each other into the ground. These fears appear unfounded and, in fact, the reverse seems to be the case.

Other thoughts which come easily to mind at the end of three weeks at South Cerney (excluding comments on the weather and the general excellence of the organisation) include: that wasted rest day after the free distance (will we ever be rid of this task?) . . . the unfortunate choice of task on the last day which probably robbed Spänig of a win in the Open Class . . . that magnificent score board which was occasionally photographed but seldom looked at . . . the difficulties of presenting start time, etc., information to base teams and spectators . . . over-lengthy opening and closing ceremonies which consume two days of competition flying . . . waiting for more pilots to pass 2X on 10th June . . . the tremendous success of the Pye radio equipment and the spectator/base team interest it provided . . . British Team skirmishes with Organisers, Stewards, International Juries . . . the Met. man who said "No, that patch of cloud will be of no significance to this task—it's not there according to our charts" . . . Letskiss (or the—er beggars' shuffle as Brenning James christened it) . . . and so on.

Otherwise, on behalf of the British Entry, many thanks to all who had anything at all to do with making South Cerney the success it was.

SOUTH CERNEY IN A NUTSHELL

By RICHARD MILLER

... from the time of the Chipmunk ascent at 0600, a round and a revel, rounded with revelations, revealed in the round of faces passing interminably, the interminable circuit of breakfast and briefing, rigging and regulating, from the flight line to operations, to the bar, to the mess, to the press room, to the NAAFI, to the competitors' club.

'Chutes, like cumulus, stories as endless as the faces; about retrieving a whale from Wales, towing behind an a/c carrier, about Slingsby's Soaring Simians, about a map of operational nudist camps and swimming pools...

Church notices, queueing for the post twice a day, Met sheets and task sheets to read at briefing each morning, a signal and the cartridges of two dozen Chipmunks fire like the crackle of gunfire in a Western emitting puffs of smoke; the low moan of sailplanes overhead, solo early in the morning during the OSTIV testing (and waking Wally Scott), in a chorus later in the day, 33 or 34 together in a single thermal; songs of all the nations on the P.A. system and the Letchkiss, the anthem of the Internationals; Huth hopelessly down the list after two bad days but undismayed and in undiminished spirits; Gupta, dark and taciturn, willing to pay whatever fine is required for decapitating white women with a Ka-6 wing; Spänig watchful and watching, Burton quiet and ticking, Wallington met briefing with an appropriate umbrella, the search for 600 w/d sandpaper for wing smoothing which compromised, in the end, on some government issue toilet paper; a thousand foul remarks about the weather; trips around the perimeter track by day and trips around the perimeter track by night; Dick Johnson's conviction that nothing, but nothing, will outclimb his Skylark 4; Schreder scratching his head over a newspaper headline proclaiming "HP Buyers Face Squeeze"; the coveted 10-gallon hat of Brittinham (and how he almost lost it); the girl who wanted that hat (and how she almost

lost it); Cardinal Pym at Nymphsfield and those who joined his crew; the bare poles one morning where the flags had been and the other morning when the Director's car was on the stage dais during briefing (and other assorted mayhem); two Yorkshire lasses, one who dwelt in airy palaces and danced to fairy tunes, one pagan and primitive; Doc Slater's *Eine kleine Nachtmusik*, a tour de force and the most appreciated performance of the lot; Capstans, the Blanik, the Ka-7's and the T-21 on constant circuits; Red Wright explaining how to get a chaw of chewing tobacco out of the port window of a DC-3 by aiming it at the compass; ladies at the bar with their bitter in the morning; the good strong handshake of the English women; a mad trio, discussing *con brio*, sailing battens foot launching, inflatable surfaces; the Pepto Bismol pudding in No. 2 Mess; Peter Scott, landbound, identifying a baby blue Titmouse fallen out of the hangar rafters; church notices, Batman (trying for an M.B.E.) christening the D-36 "Gummiflugel" and the H-301 "Lillybelle"; the "Ovaltine" and "Longline" trailers; the feeling of being worn out from doing nothing; the exchange-barter of books for ties, ties for lapel pins, pins for cuff-links and anything of value for the thing you most wanted; Dommissie, rich-voiced, explaining his latest scoring scheme; the party the Irish threw and other forms of self-mutilation; visits to the Roman ruins and the barbecue at Lord Bathurst's; comments on the use of omni and homing-gear, musical crew members; cowboy in his cups... behind and above it all the unflagging administration.

SOARING YEARBOOK, 1965

Richard Miller's excellent and entertaining Yearbook, which was sold out at the B.G.A. stall at South Cerney, is now once more obtainable from the B.G.A. office; price 17s. 6d., or 18s. 6d. including postage.

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METEOROLOGY AT SOUTH CERNEY

By C. E. WALLINGTON

ON many days during the World Championships at South Cerney we were very unlucky with the weather. The situations were complicated and often only a very slight change would have been needed to transform the dull days into excellent contest days with good thermal conditions. But although we were not able to show our visitors English weather at its best, at least we managed to get six exciting and fair contest days. The first contest day, the race to Cosford was set on the basis of a forecast chance that conditions would improve just long enough for a designated start. This came off, but without the "thermal sniffing", the met, reconnaissance flight and the launching system, we would not have been able to take advantage of the situation.

Two new aids for World Championship briefing were used. Every pilot and

team manager was issued with a copy of the local and route forecasts during briefing. Special symbols were used, and keys were issued in English, French and German.

Valuable assistance was also provided by Norbert Gerbier of France and Dr. Walter Schulte of Germany who did the met, briefings in French and German. Interpreting a gliding forecast is very difficult for a normal interpreter; the jargon is strange, and so much depends on conveying the right shades of meaning and the right stresses on the elements of a forecast. Gliding forecasters who understand each other and their audience are necessary for the job.

Two other forecasters, Peter Wickham and Brian Hunt, also deserve some thanks for their work behind the scenes. In a Championships of this size and complexity the Chief Meteorologist tends

to be more of a spokesman for the met. team rather than an individual forecaster; while he is discussing the weather situation at task-setting, at briefing and at the launching point he needs the backing of expert forecasters to keep him supplied with the relevant up-to-date data.

[Mr. Wallington's weather notes on the individual days are included, in italics, in the general account of the Championships.—Ed.]

PRACTICE PERIOD

SOUTH CERNEY was open to visiting teams from Saturday, 22nd May; but for many of them that was not the beginning of soaring practice over England, for they had already been doing it at Lasham for a week or so. Nor was even this the beginning of practice "in English conditions", for the Poles had been doing cross-countries under an imposed "English" height limit of 5,000 ft., as well as driving trailers on the left at night when the roads around Leszno were deserted. The Germans, on the other hand, had practised landing in English-type fields in their own country — and their foresight brought its reward in safe landings.

While the Lasham week provided good practice for navigation over the English countryside, it supplied the most un-English thermals for the purpose. Ian Strachan broke the U.K. 100-km. Triangle record, and six Lasham locals flew 300-km. triangles. The Poles got in more navigational practice per flight by flying quadrilaterals instead. Dommissie took his BJ-2 round a 300-km. triangle at 80 km./h., but without an official barograph, and unfortunately this was to be its last encounter with African-type thermals in England.

At least six arrivals at South Cerney on Saturday, 22nd were by air. All four Americans soared from Lasham, Dick Johnson covering the 52 miles in 52 minutes; thermal strength were $3\frac{1}{2}$, 4 and 5 metres a second — some said even 6. The American Air Force had originally flown them to Mildenhall and brought their equipment in a cargo "plane. Jim Harrold, of Rhodesia, and Gerald Westenra, of New Zealand, also



Grandstand view of the aerobatic display from the British radio van.

soared from Lasham, the latter taking 55 minutes in his Skylark 3G.

Another helpful Air Force was the Italian, which transported its country's team and equipment to Lyncham. The Belgian team arrived in a similar manner.

The Russians arrived without their gliders, which were held up by a fire in Dover Customs house (but not burnt — they were all-metal anyway), and the Belgian machines arrived without their pilots.

Sunday, 23rd May

Under an overcast sky everyone converged on the Briefing Hall, to be greeted there by Ann Welch with a "welcome to our English weather". Some of the leading officials were introduced — Joe Croshaw, Ken Fitzroy and Margaret Gunston — and Peter Wickham got down to the first met. briefing, explaining his inability to translate it into other languages by saying: "The weather is only intelligible in English."

Cumulo-nimbus clouds were promised and they duly turned up, taking John Williamson to 8,500 ft., Nicholas Goodhart to 10,000, and Tony Deane-Drummond to 11,000, where a piece of ice

flew off and made a hole in his rudder. John Willie averaged 28 m.p.h. round an attempted 200-km. triangle which he did not quite complete.

Louis Rotter had come from the Long Mynd to look after the Hungarians (his father had the first Hungarian Silver C), and escorted them from ground level as they tried for Newbury out-and-return, Petroczy succeeding and Thuri coming down at Brize Norton. Other cross-countries were by Arber to Moreton-in-Marsh, Jackson to Moreton Valence, Harrold to Wroughton, Reid to Faringdon, Clifford to Tetbury, and Domnisse to Swindon in one glide.

Monday, 24th May

At the unearthly hour of 6 a.m. the first of a series of early-morning tests began of Standard Class machines entered for the OSTIV prize, starting today with the Phoebus and Boomerang. A small cosmopolitan gathering of experts stood shivering around, and no doubt were equally cold on subsequent mornings when we were not there. It had been Ray Stafford Allen's job to inspect all the entries beforehand to see that they qualified. He found the span of one Boomerang to be 5 millimetres too wide, so the offending excess was duly sawn

off. But Dick Schreder's HP-12 posed a problem: at the rear of each wing were two movable surfaces looking suspiciously like flaps. But Dick was able to satisfy Ray that, whenever one moved down, the other moved up, so they were really air brakes, as they couldn't be operated independently.

At briefing, Ann Welch asked everyone not to smoke near the fuel store, as "we want the Championships to continue". For the first time, weather charts were handed out to all pilots, accompanied by interpretations of the symbols used, which were available in three languages so that anybody could understand them. Later, two sheets were handed out daily, one for the local forecast and the other for weather along the route of the task.

Another "first" this day was the appearance of the "Championships Journal", edited by Mike Bird and later by George Locke and Gordon Camp, with a devoted band of lady helpers; when the time came to include the contest scores, they had to work far into the night. Apart from the issue of scores, nothing like this has been produced at an international contest since the first one in 1937, when the Swiss team brought out a light-hearted sheet called "Gummihund" (Bungy-hound).



*Jan Vermeer
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AP745

Tuesday, 25th May

The first practice task was set: a triangle race of 172 km. (107 miles) via Shillingford Bridge (on the Thames) and Dauntsey School (south of Devizes). Direction of legs: E., S.W. and N. Wind westerly, 18-20 kt. at flying height.

The course was a mixture of difficult and comparatively easy conditions, and their distribution varied with time. Good lift, when found, was 1½-2 m./sec. below cumulus and 3 m./sec. inside, taking some pilots to 9,000 ft. Some, such as Georgeson (N.Z.) found the thermals very weak and difficult on the first leg, though Scott (U.S.A.) covered it in one glide from a cloud climb at South Cerney. The second leg was good at first — Goodhart used a cloud street for eight miles, but then the cumulus spread out.

Cartry (France), one of the only two to get round the triangle, came back on his track along the second leg, after turning at Dauntsey, to regain the good lift. Spänig, who also completed the course, flew about an hour later, and did not find conditions difficult — for his D-36, though he was down to 400 m. (1,300 ft.) just before the second turning-point. Huth came down on the third leg after being reduced to hill-soaring; nevertheless, he went furthest in the Standard Class.

So, after this first opportunity to judge the comparative merits of the 86 entries, it looked as though the favourites would be Spänig for the Open Class and Huth (yet again) for the Standard.

Wednesday, 26th May

Opportunity was taken at the 9 a.m. briefing to tell everybody about Airways regulations, since the weather was too uncertain for setting a task until later. So Nicholas Goodhart was introduced, in English as Chairman of the Airways Committee, and in French (by brother Tony) as "mon petit frère". He went through it all in great detail, and his words were clearly translated into French and German. It was also explained to the audience that in Britain (unlike some other countries) gliding is left unfettered to a considerable degree by the authorities *because* they trust us to obey these and other regulations, and we wanted to keep our liberty. Whether this appeal was heeded by all the pilots

may be judged from the fact that, during the contests, repeated warnings had to be issued that anyone caught disobeying the airways rules risked disqualification.

At 11 a.m. a task was set: 34 km. east to Grove airfield and then distance along a line through Church Lawford, 85 km. to the north. But the weather failed to improve.

Peter Scott opened the Art Exhibition in the evening; promoted and organised by the Kronfeld Club, it comprised 158 pictures by 34 artists.

Thursday, 27th May

A 112-km. triangle, via Chipping Norton and Grove airfield, was set, with legs of almost equal length. But the weather failed to co-operate sufficiently; as Tony Deane-Drummond said, you could go at least somewhere, but not in a prescribed direction. The thermals were not strong enough for going upwind.

In the evening, Cirencester District Council laid on a civic reception in the Abbey grounds for Team Managers — or other representatives of each country — with wives.

A Trade Exhibition was opened today.

Friday, 28th May

"The first thing I can say is the weather is worse in Europe." Such were Wally Wallington's opening words at the met. briefing, and with cloud base at 1,500 ft., no task was set, and a later briefing was cancelled. Ann Welch reported that yesterday a car and trailer had drawn into a cornfield in which a glider had landed, and "the farmer is very angry".

Lord and Lady Bathurst, it was announced, had invited everyone to a barbecue in the evening in their park the other side of Cirencester. Wives, provided they were genuine wives, were invited too; this was translated "richtige Frauen" in German, but the French interpreter seemed at a loss for a suitable term.

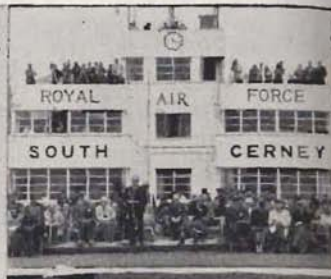
The barbecue was duly held, with quantities of steak, hot dogs and liquid refreshment, to the great enjoyment of all. Music by a local group was later supplemented by the voices of many visiting teams. It provided a lively end to a frustrating Practice Week.



**WORLD
GLIDING 1965
CHAMPIONSHIPS**
Great Britain

29 May
to
13 June

By A.E. SLATER
and
Rika HARWOOD



AT 11 a.m. on Saturday, 29th May, the moment arrived for which a vast number of gliding people had worked — some since 1963 and all at increasingly high pressure as the great day drew near. The opening ceremony began as a large concourse of people before, around, in and on the control tower looked out at the 28 nations arrayed in two long lines receding into the distance, each with its national flag above and one of its sailplanes alongside.

"Pirat" Gehriger, chairman of the F.A.I. Motorless Flight Commission and also manager of the Swiss team, spoke of soaring as "flying's noblest branch" and commented on the English weather, which for this occasion had laid on a bitingly cold wind under an overcast sky. He referred to the "gentle sex" being in charge of this event for the first time, but Ann Welch had the misfortune to be unwell on this day of days and could not be present.

Philip Wills, chairman of the B.G.A., gave a welcome on its behalf to "all our friends from all the world".

Then the Minister of Aviation, the Rt. Hon. Roy H. Jenkins, declared the Championships open, expressing his confidence that the weather was more likely to get better than worse. He went up and down the line of shivering teams at a smart pace, both for their benefit and his, and was held up only at the halfway mark where the Irish Team Manager offered him a tot of whisky out of a paper cup. Thus fortified, he proceeded on his way, to be held up once more by a crowd of pressmen intent on photographing him in conversation with the Russians.

There followed a reception in the big bar for teams and helpers, and then an official lunch to which all team managers were invited.

In the afternoon several circling groups climbed slowly in weak thermals.

A film show in the evening in No. 2 Mess included colour films of the previous Championships at Junin and one, brought by Richard Miller, showing the antics of an air-inflated rubber glider on its first trials.

Sunday, 30th May

30TH AND 31ST MAY.—A cool N.N.E.'ly airstream covered the British Isles. Thick layer cloud covered most of the country on the 30th. The cloud broke up, but too late in the day to allow a task to be set. On the 31st the air was unstable and there were showers, but again the cloud cover did not break until too late in the day.

Wallington promised "a definite risk of thermals this afternoon", but at a second briefing the prospects were still not good enough for setting a task.

Monday, 31st May

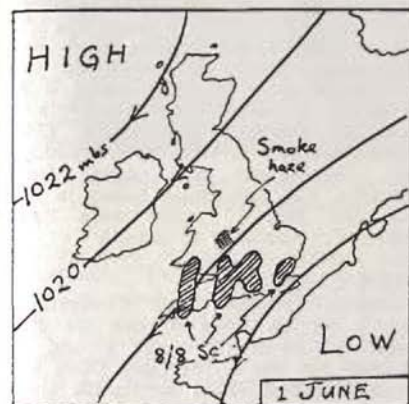
A three-legged task of "Z" shape was set, with corners at Grove and Upavon and the finish at Lasham. But it had to be cancelled eventually, for the Open Class at 2 p.m. and the Standard at 2.50.

Most of briefing was taken up with detailing the programme of the expected visit of H.R.H. Prince Philip, Duke of Edinburgh, who had just returned from the Royal Tour of Germany.

The Duke arrived by helicopter at 10.50 a.m. and was soon off to the starting grid, where he talked to many of

the competitors, asking them about their jobs, and had specially long talks with the Indians and Russians. He picked out unerringly the most technically interesting sailplanes, such as the BJ-2 Sisu, and the all-metal machines. By pretending to use one of these as a shaving mirror, he induced the Russians to relax — they had been standing rigidly to attention.

Tuesday, 1st June



1st JUNE.—The meteorological situation was again very complicated. In the E.N.E. airstream which covered the southern half of England and Wales there was a complex pattern of cloudy areas and narrow brighter regions moving across the country. One of the bright regions passed South Cerney between 08.30 and 09.30, but after that it became overcast.

The forecast was that there would be a chance of having a spell of brighter weather in the afternoon long enough to allow a fair designated start.

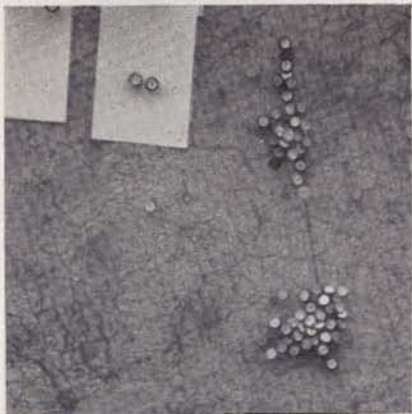
Fortunately this brighter period materialised and allowed the start to take place soon after 14.00. Thermals were mostly weak, but some were moderate and there were a few cloud streets. Progress on the route was not easy in the wind of about 080°, 15 knots, at flight levels, and thick smoke haze west of Birmingham added to the difficulties; but apart from a few poor patches en route, thermal conditions tended to improve northwards away from South Cerney. In fact, the sky over South Cerney be-

came overcast again after 15.00—to the discovery of pilots who did not get away promptly from the locality.

Task for both Classes: Goal Race to Cosford airfield, 108.5 km. (67.5 miles). Open Class launched first. Designated start.

For just one hour, from 14.00 to 15.00, South Cerney lay in a gap between sheets of overcast, and during the first 45 minutes of this period everyone was launched. This was a piece of luck, for at the 9 a.m. briefing "Wally" Wallington had given only a 30% chance of it happening. It provided practically the only chance of getting well away, for everybody who came back for re-lights failed to score, with the single exception of Dommissie.

When the landing-point pins came to be stuck on the big map at South Cerney, a remarkable distribution came to light: more than half the Open Class,



and two-thirds of the Standard, were crowded together in the first 15 miles from South Cerney to Cheltenham, along the high ground of the Cotswolds. Then came a big, bare gap of 25 damp miles of Severn valley from Cheltenham to Droitwich, along which nobody came down at all.

Then, as likewise forecast, the "improvement to the north" began to give way to industrial murk blown across the track by the easterly wind from Birmingham and the surrounding "Black Country", and the landing pins were

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more or less evenly scattered along a narrow belt all the way to Cosford, which only two pilots reached. To make things worse, the air in this region contained not only smoke but strato-cumulus as well.

The two who "made it" were Spänig (Germany, D-36) and Wroblewski (Poland, Foka 4), both in the Open Class, and the fact that they crossed the starting line after everybody, including the Standard Class, had been launched shows that the order of launching did not necessarily put anyone at a disadvantage. Spänig won the day at 44.9 km/h. (27.9 m.p.h.), taking 2 h 24 m. 55 s., and Wroblewski (Poland, Foka 4) averaged 39.8 km/h. (24.7 m.p.h.), taking 2 h. 43 m. 50 s. Incidentally, Wroblewski was, apart from Schreder, the only pilot heard to say that the first 15 miles were "not difficult". And now to details.

OPEN CLASS

Makula (Poland), with Competition No. 1 on his Foka 4, had the first launch at 14 h. 00 m. 15 s. and by 14.19.49 the last of the Open Class was being launched. First across the starting line was Veretennikov (U.S.S.R., A-15) at 14.14.15, followed by Chuvikov (ditto) at 14.14.30, though he crossed again at 14.24.24. Johnson (U.S.A., Skylark 4) also crossed twice, the second time being 14.22.07. Makula (Poland, Foka 4), who had gone across at 14.40.04, came back to cross again with Wroblewski at 14.51.16. Kriznar (Yugoslavia, Meteor) and Spänig were the last Open Class competitors to cross the line, at 14.57.48, though it was Kriznar's second crossing.

A few other latish ones were A. Smith (U.S.A., Sisu 1A), Thuri (Hungary, A-15), and Nielsen (Denmark, Vasama). All three came back for a second crossing and were thereby spread over a period of 43 minutes.

Although only Spänig and Wroblewski reached Cosford, Makula had been together with Wroblewski for most of the way — in fact, Makula had been quite a bit higher than Spänig in the last thermal they shared; but Makula then took a calculated risk and started his final glide about 30 km. out (19 miles), relying on getting another 900 ft.



An inevitable visitor, Betsy Woodward (right), with Rika Harwood.

on the way, in order to make a really good time. Unfortunately for him, this did not come off and he had to land about 6 km. short of Cosford. Part of the trouble was, he says, that he could only see bright patches in the haze and could not really orientate himself accurately.

Spänig, who kept slightly west of track, got low over Worcester — 500 ft. — but later climbed to 4,200 ft. about 20 miles from Cosford, which enabled him to get in comfortably. John Williamson crossed the starting line at 14.24.47, about 10 minutes after take-off, and risked a straight glide to a cloud he saw about 7 miles ahead; but, as he could not quite reach it, he had to ridge-soar for a while in order to get away again.

Of the 12 Open Class pilots who needed second launches (7 of them were launched three times), only Dommissie (S. Africa, BJ-2) made scoring distance. Launched at 15.43.49, he followed a zig-zag belt of lift under a cloud street leading to Peter Scott's Wildfowl Trust in the Severn estuary, over which he was able to climb to 8,000 ft., so that a glide from there took him beyond "2 X", which was a few miles short of Droitwich.

The latest landings in the Open Class were: Goodhart, 18.15; Dommissie, 18.25; Nielson, 18.30; Stouffs (Belgium, Ka-6CR), 18.55 (near Kidderminster,

4 h. 46 m. after launch). Nick Goodhart (Dart 17), who had crossed the line at 14.25, found that he had first to fly 10 miles west to Stroud, and thereafter kept west of track, making only one cloud climb to 4,200 ft. Thermals, he said, were confined to the Severn valley and were of strength 1-3 knots. He began his last glide from 7 miles west of Worcester.

Arber (Israel) did not fly, as his Skylark 4 was still under repair at Lasham.

Open Class Scores, 1st Day

Spänig ...	750	Penaud ...	443
Wroblewski ...	718	Svoboda ...	436
Kriznar ...	596	Goodhart ...	398
Makula ...	551	Reid ...	398
Johnson ...	512	Stouffs ...	386
Williamson ...	505	Nietlispach ...	371
Cartry ...	497	Kearon ...	348
Kuntz ...	497	Nielsen ...	321
Yeates ...	497	Dommissie ...	290
Hossinger ...	474		

The rest failed to score.

STANDARD CLASS

An interval of 8 minutes, before launching began for this Class, gave time for a few gaggles to disappear. The pilots seemed to be concerned to get away quickly, perhaps because high cloud was approaching from the south, and 13 of them set off without waiting to cross the starting line. Among these were Huth (Germany, Ka-6E), Burton (Dart 15), Deane-Drummond (Olympia 465), Henry (France, Edelweiss), and Ritzi (Switzerland, Standard Elfe). Yet during the period when they left, 14.28 to 14.55, no less than 17 Open Class pilots were still not too impatient to cross the line before trying to get away.

Huth had the misfortune not only to fall into the group which came down in the first 15 miles, but to land further away than all the rest of the group and consequently to take long to return for a re-light. He did not get it till 17.53, too late to be any use. He admitted to the mistake of keeping east of track instead of west.

Kepka was troubled by another pilot keeping so close as to prevent him entering cloud to get enough height for a glide to Cosford, and had to land at Halfpenny Green, 9 miles short. George Burton's only good climb was 6,000 ft.,



Watching the proceedings: (l. to r.) Peter Wickham, Ken Fitzroy and Ann Welch. Courtesy of "Flight".

6 miles south of Worcester. Tony Deane-Drummond arrived over Halfpenny Green at 200 ft., as did John Williamson; he put down on the airfield, but John Willy continued to the next field.

Dick Schreder reported that the only time he found it difficult was in the Pershore area where he had to sit for about 45 minutes to get enough height for what became his final glide. Nevertheless he was never lower than 2,000 ft., and he thought that the HP-12 was the ideal glider for our conditions.

The general feeling of the pilots seemed quite favourable towards the devaluation system for the scores (Maximum this day: Open, 750; Standard, 378). This, of course, is not surprising, and it was probably a good thing that it was used on the first contest day. In most other Championships a task would probably not have been set at all, as the timing of the clearance had to be quite accurate.

Suslov (U.S.S.R.) damaged his all-metal KAI-14, breaking off the tail end when landing in crops. It was taken to R.A.F. Bicester, where members of No. 71 Maintenance Unit and of the R.A.F. G.S.A. Centre volunteered to work on it day and night for 48 hours and had it ready for flying again on 4th June. The work was organized at short notice by Air Cdre. Peter Cleaver and Sqn. Ldr. E. S. Robertson of the R.A.F. staff at South Cerney.

Sports Minister's Visit

While all this was going on, the Under-Secretary of State for Education and Science, Mr. Denis Howell, visited the Championships and announced a change of policy on the part of his Sports Council. Hitherto they had only

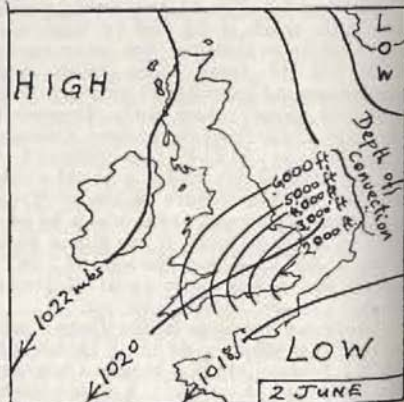
approved grants for British teams attending sporting events overseas, but in future they would assist similar events at home, and he announced a government contribution of £1,500 towards the administrative expenses of the Gliding Championships. There would also be grants for hospitality to overseas competitors, though that change had come too late to benefit the present Championships.

Standard Class Scores, 1st Day

D-Drummond	378	Horma	...	268
Kepka	...	Ritzi	...	265
Schreder	...	Burton	...	259
Scott	...	Bloch	...	250
Henry	...	Popiel	...	189
Pronzati	...	Braes	...	137
Cameron	...	Mortensen	...	55
Lacheny	...			276

The rest failed to score.

Wednesday, 2nd June



2ND JUNE.—A ridge of high pressure covered the British Isles; winds were much lighter than yesterday and came from a N.E. to N.N.E.'ly direction.

Low stratus during the morning burnt off by 11.00 to give a really sunny afternoon with temperatures reaching 18°C (64° F).

The forecast was that there would be moderate thermals, traces of shallow cumulus in southern parts of the route, and a little more cloud and smoke haze around the second turning-point. Things seem to have gone very much as forecast; the tops of thermals appeared to be limited to about 4,300 feet. The smoke haze near the second turning-point was quite thick.

Task for both Classes: 171-km. Triangle (106.25 miles) via Caradoc Farm (near Ross-on-Wye) and Long Marston R.E. depot sheds (near Stratford-on-Avon). Designated start.

At briefing, Ann Welch inaugurated the pleasant ceremony of presenting Daily Prizes for the previous day's winners — in this case Rolf Spänig of Germany and Francisek Kepka of Poland.

Pilots were told (and had to be reminded again and again subsequently) to report to Control the moment they got back to South Cerney, so as not to keep the Control Room staff on duty for long unnecessary hours. And Frank Irving, for the first, but not the last, time, informed the seven countries using 122.6 Mc/s. that they had been overdoing it, bringing complaints of radio interference from other users in this country.

As usual, a Capstan with John Everitt and a Dart with John Fielden were repeatedly launched to test the thermals — if any — and Joe Croshaw took his walkie-talkie in to lunch so as not to miss a word of what they had to say. They said thermals were present but weak; but within an hour they became more hopeful and launches began at 13.20, the Standard Class going first.

Around 5 p.m. the finishing-line observers suddenly had to get busy. Kuntz (Germany, SHK-1) not only was first back but made the fastest speed, 56.7 km/h (41.4 m.p.h.). Almost at once others began to come in thick and fast — mostly lower and faster than Kuntz,

but some low and not so fast. All had to cross the busy Cirencester-Swindon main road, and Cartry in his Edelweiss just trickled over the traffic to a down-wind landing. The nearest "near misses" were Johannesson (Norway), 5 km. short, and Horma (Finland), 5½ km.

In the Standard Class Markus Ritzki was fastest with 62.5 km/h (38.8 m.p.h.), beating all but the Open Class winner. In this Class, 24 out of 44 starters completed the course. In the Open Class, 23 out of 40 completed it, so there was little difference.

However, there was a marked difference in average speeds, the Open Class being 11% faster than the Standard. The *Championships Journal*, calling attention to this, quoted Godfrey Lee's calculation that, for thermal strengths of 3 knots, 18-metre sailplanes should be about 30% faster than the equivalent 15-metre variety. This disparity between the theoretical and actual excess might, at first sight, be attributed to the large number of 15-metre machines in the Open Class; but such an explanation won't do. Of the four fastest Open Class



Brigitte Baechler copes with the landing pins.



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competitors, all but the winner flew Standard Class machines, and there was no tendency for 15-metre types to collect at the lower end of the speed range.

STANDARD CLASS

Launches began with Reparón of Holland at 13.20.15 and 43 had been done by 13.38.37, which was not bad going. A 44th, Tom Evans of Ireland, who started later at 15.02 because of repairs to his glider, was the only one to return for a re-light before going away, so soaring conditions were obviously reasonable. But there was a tendency to hang around waiting for the expected improvement in the weather, so the observers again had their time cut out watching everyone over the start-line between 13.32 and 14.22.

Ritzi (Switzerland, Std. Elfe), who won the day, left at 14.16 and found that it took him exactly 1 hour each to the 1st and 2nd turning-points. But visibility around the 2nd turning-point was extremely poor and he ran into some navigational trouble. However, this did not delay him very much, and at about 45 km. from base he took 4,300 ft. to start his final glide; but he got cold feet on the way and stopped off near Chedworth, 15 km. from the finish, to get some more height — in fact, he had 900 ft. in hand when he arrived back. He felt the first two legs were not much of a race because everyone "gaggled" along together at the same rate. Only on the last leg could gliders "go it alone".



Frank Irving (with radio on back) inspects minor damage.

"Wally" Scott (U.S.A., Ka-6) left South Cerney rather early at 13.37 and found he had to use some rather weak lift for the first 35 minutes or so. After that, things were easy, and he thought he might have cut half-an-hour off his time by starting half-an-hour later. He felt that the weather had turned out better than forecast.

Huth (Germany, Ka-6), who had made the fastest time up to the 2nd turning-point (14.22 — 16.21), was half-way back on the last leg when he ran into a big gap and never found another tremor, so had to land out, 11½ km. short. He felt really disappointed as there was absolutely nothing he could have done about it.

George Burton (Dart 15) had trouble getting to the 2nd turning-point, and this seems to have happened to the majority of pilots, most of whom complained of the very bad visibility. Van Bree and Reparón both used a bit of cloud street between the 1st and 2nd turning-points near the motorway, but van Bree found it very heavy going to the 2nd turning-point and Reparón overtook him, starting his final glide from 4,200 ft., about 40 km. (25 miles) from South Cerney.

Schreder (U.S.A., HP-12), who was first round the 2nd turning-point at 16.20, found the task straightforward, apart from visibility, and did not encounter any serious difficulties along the route. Yet of the seven who rounded the same point at 16.21, three — Huth, Horma and Johannessen — came to grief a few miles short of the end, while Kepka, Fritz, Deane-Drummond and Scott completed the course (at 57, 54, 53 and 51 km/h. respectively) and so, in the Open Class, did Spänig, who also rounded it at 16.21, and Kuntz, who was 3 minutes earlier.

Another Russian KAI-14, that flown by Jarushevichus, was damaged today, landing near Pershore on the 2nd leg. It also was taken to R.A.F. Bicester, but there it was found to need a major repair which would have taken about a week, so it was reluctantly taken out of the contest.

Another metal machine, the Delfin of Stepanovic, was damaged landing near Stratford, but Ken Fripp's organization had it flying again by Friday the 4th.

Standard Class : Fastest Speeds

Pilot	Sailplane	Km/h
Ritzi ...	Std. Elfe	62.5
Lindner ...	Phoebus	61
Schreder ...	HP-12	60
Henry ...	Edelweiss	57.5
Popiel ...	Foka 4	57.5
Wiitanen ...	Vasama	57.5
Kepka ...	Foka 4	57
Burton ...	Dart 15	55
Fritz ...	Std. Austria	54
D-Drummond ...	Olympia 465	53

Leading Totals, 2 Days

Schreder ...	1318	Henry ...	1212
Kepka ...	1289	Scott ...	1150
Ritzi ...	1265	Burton ...	1136
D-Drummond ...	1230	Popiel ...	1110
		Lacheny ...	1082

Maximum possible: 1,378.

OPEN CLASS

Thermals, said "Wally" Wallington at briefing, "will be fairly easy to use but difficult to find." So, after the last of the Standard Class pilots had been launched, they were staying up in such quantities in the few thermals they could find, that it was another 15 minutes before they had dispersed sufficiently to allow room for the Open Class, who began to be launched at 13.54.02. It took exactly 17 minutes, to 14.11.02, to get them into the air, and only George-son came down for a re-light before going away. Soon both Classes were mingling as they crossed the start line, the first Open Class pilot to do so being Frene (Argentina) at 14.10.20.

A tremendous show of pair-flying was laid on by Makula and Wroblewski, who crossed the starting line together and came back still flying nose-to-tail. The scorers gave Makula one extra point for being timed in 11 seconds before his partner.

Rolf Kuntz, who had left at 14.20.21, rounded the 1st turning-point at 15.10 and the 2nd at 16.18. This was even earlier than Schreder, and only he and Wally Scott were back at South Cerney before 17.00 hrs.

Spänig was last to cross the starting line, both the first and second time. His first crossing, at 14.26.36, was beyond the end of the line, so he was recalled and crossed again at 13.45.08.

Hossinger (Argentina) felt he was flying well that day (he finished 4th) and

said he had every confidence in his Standard Austria even in British conditions.

Dick Johnson related that in one of the gaggles he stayed on for "one more circle" after the others had left, and found himself going up at $2\frac{1}{2}$ m/sec. so stayed in it and reached his greatest height of 6,200 ft. This was 15 minutes after the first turning-point. It suggests that thermals can get overloaded, but a more likely explanation may be that, in a gaggle, nobody can centre on the lift properly. Johnson says he started his final glide from 5 miles past the 2nd turning-point: but anyway he was never below 2,500 ft.

Nicholas Goodhart also had some trouble to start with. His final glide, starting from Broadway at 3,700 ft., took him into more trouble 5 miles out, but he made the finishing line after all.

John Williamson only once got as high as 4,000 ft., and two or three times was down to 1,000 ft., which for him appears to be a good operating height. The murk on the second leg was so bad that, when a shining Hungarian A-15 flew away from him, it disappeared from view at only 300 yards.

Most of the pilots spoken to seem to have enjoyed this task, though the worst enemy was poor visibility downwind of the Birmingham area.

Hämäläinen (Finland) had the misfortune to hit a post when landing near Chipping Campden, putting his hired Skylark 4 out of action for the rest of the Championships.

Open Class : Fastest Speeds

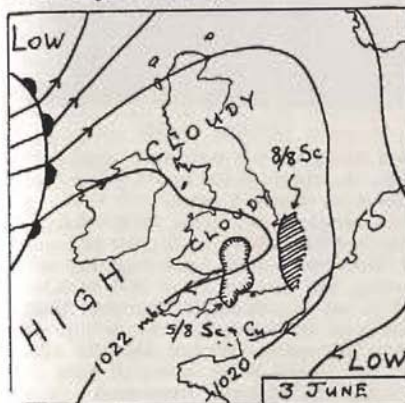
Pilot	Sailplane	Km/h
Kuntz ...	SHK-1	66.7
Makula ...	Foka 4	62.2
Wroblewski ...	Foka 4	62.2
Hossinger ...	Std. Austria	61.1
Johnson ...	Skylark 4	61.0
Chuvikov ...	A-15	60.8
Spänig ...	D-36	60.5
Cartry ...	Edelweiss	60.3
Petroczy ...	A-15	60.1
Stouffs ...	Ka-6CR	59.1
Kriznar ...	Meteor	59.1
Thuri ...	A-15	58.4
Vergani ...	Skylark 4	58.9
Williamson ...	Olympia 419	57.1
Yeates ...	Skylark 4	56.9
Goodhart ...	Dart 17	55.6

Leading Totals : 2 Days

Späng ...	1651	Williamson	1355
Wroblewski	1646	Yeates ...	1345
Kuntz ...	1497	Stouffs ...	1267
Makula ...	1480	Goodhart	1228
Kriznar ...	1476	Penaud ...	1168
Johnson ...	1422	Nietlispach	1104
Cartry ...	1396	Kearon ...	1102
Hossinger	1385	Chuvikov	905

Maximum possible: 1,750.

Thursday, 3rd June



3RD JUNE.—A ridge of high pressure extended eastwards across England. Wind was very light; the wind direction was mainly from the N.E., though it was often rather variable.

A large area of strato-cumulus at 6,500 ft. covered central England at first, but this cloud was broken enough to let through the sunshine.

In the afternoon, thermals and small cumulus developed up to 6,500 to 7,500 feet, but smoke haze weakened the sunshine and made navigation difficult.

The first leg was difficult, although Spänig set up an incredibly fast time. The long second leg was easy going with a 6-8 knots tailwind, but on the last leg visibility deteriorated and many pilots admitted that they got lost.

Thermals weakened after Bath; many pilots were committed to long final glides, but some large Cu between Wells and Bath allowed some pilots to climb to 8,000 ft. before gliding home comfortably.

Task for both Classes: 173.5-km.

Triangle (108 miles) via Marlborough White Horse and Wells Cathedral. Designated start.

Frank Irving opened the briefing once more with a few sharp reminders. First: you must go to the launch point in the bus, not your own vehicle. Second: a glider, whose number was noted, was seen doing right-hand circles within 5 kilometres of South Cerney. Third: the Station Commander insists that, no matter how few clothes you are wearing, you must wear your plastic badge.

Ann Welch, after presenting yesterday's Daily Prizes to Rolf Kuntz and Markus Ritzi, announced that some beautiful new turning-point markers, shining with "Day-glo", had been acquired. They were indeed necessary at the 2nd turning-point, as it turned out. Here, and on the last leg, "Wally" Wallington warned, there was a risk of incursion of sea air, and pilots should avoid it by coming to the inside of the triangle rather than outside.

This morning the usual multilingual countdown for the time-check — "forty — dreizig — vignt — fünfzehn — dix — five, four, three . . ." etc., was enlivened by a gong which quite drowned Frank Irving's usual "bang" at zero point.

We had some trouble explaining to a foreign correspondent what kind of a horse would serve as a turning-point. Apparently, prehistoric tribes on the Continent preferred to depict their animals on the walls of caves rather than the flanks of chalk downs.

Each of this day's winners, Wroblewski in the Open and Henry in the Standard, reached top place overall in his Class and stayed there till the end.

In the Open Class 26 completed the course, and in the Standard Class 17.

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World Championships 1965

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OPEN CLASS

Launches continued to go well — 40 gliders between 13.22.01 and 13.40.30, and although during this period some strato-cumulus came over and hid the sun, everyone seemed to be doing well except Domnisse, who came down after 20 minutes for a re-light with both parachutes trailing.

Gaggles were less in evidence than usual, as clouds marked the thermals and pilots could cross the starting-line higher than in the previous two days.

Penaud and Cartry (France) were first across the start-line at 13.34.50/59, followed by Kuntz (Germany), Williamson and Goodhart, though the last two came back for another crossing.

Spänig (Germany), who left at 13.40.17, took only 22 minutes over the 21 miles to the first turning-point, which was nearly twice as fast as anybody else in this Class (about 94 km/h), and is reported to have done it without circling. But he lost this advantage on the second leg, whose 42 miles took him 1 hr. 35 min., as he had to search for Wells Cathedral and had to come down to 400 m. (1,300 ft.) before he could discern it through the haze. However, he covered the last and longest leg, 48 miles, in 56 minutes.

Makula, who reached the 2nd turning-point 47 minutes after Spänig, appears to have found the haze less troublesome there; he saw the Cathedral from 1,100 m. (3,600 ft.), having already seen the ground sign from 5 km. away. Visibility had varied, he said, from 1 to 8 km., averaging 5 km. Cloud base varied: 3,300 ft. at first, then 5,000 ft., then 4,300 ft. Thermals averaged 2 m/s., with a maximum of 4 m/s. in the clear and 5 m/sec. in the only cloud he entered, which took him to 7,900 ft. on the second leg.

Wroblewski accompanied Makula to the second turning-point and they got a thermal 5 minutes later. Then they deviated, Wroblewski keeping more to the right and finding better thermals, which got him home 10 minutes sooner. Makula, keeping more to the left, found himself in the company of Schreder on the last glide of 20 km. from a starting height of 600 m.

Nietlispach met such thick haze on the last leg that, he said, he could never



Getting ready.

have navigated his way back without the radio bearings given him by the Swiss station at South Cerney.

Hossinger (Argentina, Std. Austria), who had been doing well until just south of Bath and had been together with Spänig, left him at about 900 m. (3,000 ft.) to set course again. Another glider, who kept bothering him, made him give up a half-metre thermal with the result that he landed 7 km. short of base.

John Williamson reported strong thermals along the 2nd leg, but after Bath the weather deteriorated and visibility became so bad that a number of pilots got temporarily lost. Nicholas Goodhart started his final glide from Hullavington, and "Paddy" Kearon thought that those who made it were committed to long final glides.

Speeds in the Open Class varied from 69.6 km/h. (43.25 m.p.h.) by Wroblewski to 42.8 km/h. (26.59 m.p.h.) by Ordelman (Holland, Sagitta 1), who was last in and only just made it, being talked in by radio as he could not see the site till the last moment.

Veretennikov damaged his A-15 on landing and was out of action for the next contest day.

Open Class : Fastest Speeds

Pilot	Sailplane	km/h.
Wroblewski	... Foka 4	69.6
Makula ...	... Foka 4	65.0
A. Smith ...	... Sisu 1A	61.5
Goodhart ...	... Dart 17	61.2
Spänig ...	... D-36	60.2
Williamson	... Olympia 419	59.6
Kriznar ...	... Meteor	59.3

Vergani ...	Skylark 4	58.2
Petroczy ...	A-15	58.1
Thuri ...	A-15	57.7

Leading Totals, 3 Days

Wroblewski 2646	Cartry ...	2158
Spänig ...	Williamson	2183
Makula ...	Goodhart	2082
Kriznar ...	Yeates ...	2066
Kuntz ...	Stouffs ...	1968

Maximum possible: 2750.

STANDARD CLASS

Speeds in this Class were greater than in the Open at both ends of the range. Henry (France, Edelweiss) averaged 72.2 km/h. (44.86 m.p.h.) and the slowest speed was 49.9 km/h. (27.90 m.p.h.).

Launching began after an interval of just under 13 mins., and 15 min. 14 sec. later all 42 were airborne and no re-lights were necessary. Schreder, the first to be launched at 13.53.30, was first across the line at 14.01.38, followed by Picchio (Argentina, Ka-6) and Wally Scott (U.S.A.).

After two unsuccessful days, Huth showed that there was plenty of fight left in him and put up a good performance with 4th best speed (62.3 km/h.), raising his overall position from 29th to 21st.

George Burton ran into strato-cumulus on the second leg; it was an unexpected tongue of cloud which had crossed South Cerney after the original strato-cum had burnt off.

Henry put up an astonishingly fast time, and, like Spänig, covered the first



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leg of 21 miles in 22 minutes.

Schreder, who started his final glide in company with Makula, as already related, unfortunately aligned himself on the wrong reservoir near South Cerney, and only realized his mistake when he was down to 600 ft. and out of reach of the airfield.

One excitement at the finishing line was when Baeké (Belgium, Ka-6CR), who came in with plenty of height and speed, pulled up well before the finishing line, turned and landed without crossing it at all. So he could only be allowed distance marks, 595, in accordance with the rules.

Van Bree (Holland, Ka-6) had a fairly easy time and did not go into cloud until after the 2nd turning-point. He came out of it at 6,000 ft., then started his final glide 43 km. out (last leg was 73 km.).

Korpar (Yugoslavia) damaged his Libis 18 on landing and missed the next contest day.

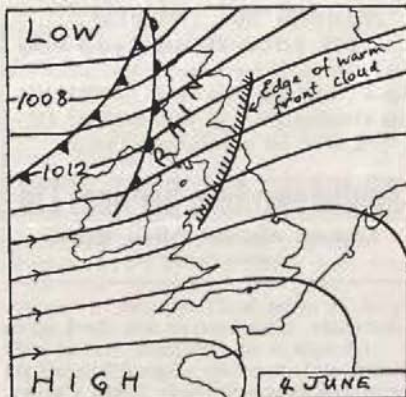
Standard Class: Fastest Speeds

Pilot	Sailplane	Km/h.
Henry ...	Edelweiss	72.2
Popiel ...	Foka 4 ...	66.5
Lindner ...	Phoebus ...	62.4
Huth ...	Ka-6E ...	62.3
Ritzi ...	Std. Elfe ...	59.2
Persson ...	Vasama ...	58.6
Lacheny ...	Edelweiss	58.5
Sejstrup ...	Ka-6CR ...	58.4
Fritz ...	Std. Austria	56.7
Rodling ...	Vasama ...	56.7

Leading totals: 3 Days

Henry ...	2212	Lindner ...	1871
Ritzi ...	2133	Kepka ...	1791
Popiel ...	2049	D-Drum-	
Burton ...	1951	mond	1763
Lacheny ...	1943	Fritz ...	1708
Schreder	1888		

Friday, 4th June



4TH JUNE.—The ridge of high pressure which had covered the country for the past few days was lying over Southern England. North of the line from South Cerney to the Wash, the winds were south-westerly and fronts from the Atlantic were approaching Scotland and Ireland. Over Southern England there was little or no cloud in the morning, but visibility was poor with a mixture of early morning fog and smoke haze.

The forecast was for rather weak conditions at South Cerney, with smoke haze and weak thermals to 2,000 ft. by midday. Persistent smoke haze in the Midlands was expected to be offset by stronger and deeper thermals to give quite good flying conditions in this region. Further on, there was the possibility of contacting sea-breeze fronts along the east coast or lee-waves in the northern Pennines. Towards evening it was expected that upper cloud from the approaching fronts would cut off thermal activity north of Yorkshire.

As it turned out, the most notable aspect of the day's weather for most pilots was the thick smoke-haze. Thermals were plentiful and moderately strong, but the very poor visibility made navigation and the identification of active cumulus clouds very difficult. A weak lee-wave was contacted at 3,000 ft. in the southern Pennines, and later in the evening well-marked waves were observed close to the Pennines in North Yorkshire. A sea breeze front was observed very close to the east coast.

Task for both Classes: Free Distance. Pilot-selected start.

After presenting Daily Prizes to Wroblewski and Henry, Ann Welch had another presentation to make: a distinguished visitor, Al Parker, first sailplane pilot in the world to exceed 1,000 kilometres, was presented with "something which has so far only been given to Prince Philip" — viz. a special Championship tie.

Free distance, the last of the compulsory tasks needed to make this a Championship, was the obvious choice. It was announced that next day would be a rest day if anyone exceeded 300 kilometres. This is not normally done in British Championships, where it is more usual to delay the next day's briefing till 12 or 1 o'clock. But the forecast for the next day was not all that good, though when it came, it had all the appearance of an excellent soaring day. Whereupon several pilots gave the impression that they would have preferred a short task after a delayed briefing; but, when asked why they had not queried the rest day announcement at the time, all replied that they had expected to go 400 or 500 kilometres.

Pilots were soon busy over their maps, and some asked the "locals" for advice. Nearly all elected to go north to avoid running out of land, though two got into East Anglia, evidently looking on the Norfolk coast as the limit of what they expected to achieve. There was a rumour that a Northern pilot, after covering no more than a few miles in the direction of his homeland, came back in disgust for a re-light and set off for Cornwall instead. The Devon and Cornwall sheet was, in fact, attached to the big map where landing pins were being stuck in, but no pins appeared on this south-westward extension and it was eventually removed.

Possible distances were, in fact, 262 km. (163 miles) to Norfolk coast, 320 km. (199 miles) to Land's End, 777 km. (483 miles) to John O'Groats. In the event the longest distance was 336 km. northwards by Kriznar to Ferryhill. Furthest into East Anglia was Ulbing (Austria Ka-6) with 221 km. The only other pilot to go that way was George-son (New Zealand), with 204.5 km.

Both Classes were launched together

from separate grids. R. Smith (Rhodesia) was first off at 11.42, followed at 11.47 by Reid (Australia). Wally Scott (U.S.A.) started the Standard Class at 11.48. At first launches were at intervals of 2 to 5 minutes, but from 12.20 to 12.49 everybody took off in quick succession, the last being Suslov in his repaired KAI-14. Only a few pilots needed re-lights, and soon the airfield was devoid of gliders and trailers and everything went unusually quiet (but for the music blaring away over the tannoy).

OPEN CLASS

At about 2 o'clock one lonely pin appeared on the map by the Control Room: Domnisse (BJ-2) had landed about 15 miles out. He was rushed back and became airborne again at 15.32.

After a scratchy start for the first 20 miles (Wallington had said at briefing: "that's your problem, not mine"), conditions improved considerably, although a few pilots continued to scratch all the way — Blackwell (Australia) flew 89 km. in 2 hr. 40 min. and only once got to 2,500 ft. Also R. Smith (Rhodesia), who had had a second take-off at 12.38,

never got going properly; he spent half-an-hour in a very weak thermal at Nottingham and drifted right across the town, then at 400 ft. he chose his field only to find that Harrold, his team mate, had already landed there.

Frene (Argentina) had been down to 1,300 ft. east of Birmingham, and again near Derby he had to use some particularly dirty and nauseating smoke from a chimney, but stuck it long enough to get away again.

That smokes differ in offensiveness was also found by John Williamson (Olympia 419), who was getting only 2 m/sec. from some steelworks near Nottingham when a mass of sulphurous smoke joined in and all the various smokes then combined into one mighty thermal — whoosh! John Willy, launched at 11.57, had found conditions "jolly good" at South Cerney at first. He kept company with Goodhart at first and George Burton joined them. The other two got a little ahead of him, but eventually all three climbed to 7,000 or 8,000 ft. in a cloud near Sheffield and collected a layer of black, greasy industrial dirt on their wings, like many another glider which had left South Cerney spotlessly clean. Later, Williamson picked up a weak wave between Harrogate and Ripon and soared along it with Burton. He thinks he made a mistake in not sticking to it. Two or three hours later, at supper beside the A1, he saw many wave clouds developing.

Goodhart, who broke off several climbs to avoid the airways, was eventually able to make four more, all to 8,000 ft. He flew on instruments for over an hour by dead reckoning without seeing the ground. His last climb over Dishforth brought him to his final glide to a field near West Hartlepool which was, unfortunately, rather ridged, and his tail skid came off. He had not encountered any wave.

Penaud (France), one of the latest to land, found good lift most of the way after a scratchy start; he found no real wave, though he ran into a very bumpy narrow band of lift just before landing. Spänig, on the other hand, had to land his D-36 as early as 16.40 east of Selby; nevertheless, his average speed was high at over 59 km/h. — perhaps he reached



Aircraft recognition.

the area too soon. This was his worst day.

Nielsen (Denmark) had to land in Leeds City Park after some foundry chimneys failed to contribute to his upkeep; the park ranger ascertained that he had done this without prior permission. The police were fetched — to keep the crowd of children under control. According to a report, a riotous time was had by all, and the pilot was bound over in the sum of three 7 lb. rolls of Danish bacon.

The Poles, as usual, kept in close contact and all landed together near Thirsk but Popiel, who had come down 50 km. earlier.

Landing times reported by pilots were not always exact; nevertheless it would be interesting to give examples of how average speeds compare with distance in some flights mentioned in the text, bearing in mind that these speeds too, are not necessarily exact. A remarkable example of how a big difference in speeds can lead to the same performance is shown by the fact that Hossinger

(Std. Austria) and Reparon (Ka-6) both had to land at Dishforth, yet Reparon's landing at 18.45 was 1 hour 13 min. later than Hossinger's at 17.32.

Open Class: Longest Distances with Speeds

Pilot	Km/h.	Km.
Kriznar ...	56.78	336.5
Goodhart ...	56.93	334
Webb ...	47.08	327
Svoboda ...	55.89	316
Jackson ...	40.60	309
Kuntz ...	62.65	307
Vergani ...	57.03	304.5
Makula ...	60.20	299
Wroblewski ...	61.00	299
Williamson ...	52.15	298.5
Hossinger ...	53.57	275
Spänig ...	59.25	237

Thirty pilots exceeded 200 km.

Leading Totals: 4 Days

Wroblewski	3525	Goodhart	3077
Kriznar ...	3298	Williamson	3060
Makula ...	3278	Cartry ...	2875
Kuntz ...	3195	Stouffs ...	2792
Spänig ...	3077	Yeates ...	2785

Maximum possible: 3,750 pts.

STANDARD CLASS

Rowe (Australia, Boomerang) never got above 3,000 ft., and was down to 150 ft. near Stratford-on-Avon without having to land.

Mortensen (Canada, Olympia 463) was slow in getting going, and in his haste to catch up with the others he crossed a blue patch but did not quite make it, having to land as early as 15.15.

Deane-Drummond was a bit behind the rest of the British team and was bothered by very bad visibility; he tried the same cloud as the others had used near Sheffield, but it was already decaying and only gave him 5,000 ft.

George Burton, while in this cloud, had been exchanging height readings with Nick Goodhart by radio so that they could "maintain separation"; he then prolonged his glide down from it by using the same wave as John Williamson, but bad visibility made the wave direction difficult to locate and he eventually left it and glided to his landing.

Henry (France) found there was less haze to the west, and never sank below 2,000 ft., but was afraid to go too far





Gallery of turning-points. There was a choice of 48.

west because of approaching cirrus. He therefore turned N.E. again, and his last climb, before his final glide, was somewhere east of Leeds.

Wally Scott kept a north-westerly course most of the way in order to stay over the higher ground; he enjoyed his flying immensely and had no particular difficulties. He was the day's winner in the Standard Class; but, knowing there was a rest day to follow, he took his time returning to base, unaware that he had kept the scorers waiting, as the day's points were based on this distance. He was extremely unhappy on learning about this, but, being of such a pleasing personality, the scorers forgave him at once.

Standard Class: Longest Distances with Speeds

Pilot	Km/h.	Km.
Scott ...	61.30	329.5
Burton ...	55.97	306.5
Henry ...	57.18	303
Kepka ...	56.00	299
Ritzi ...	58.02	291
Horma ...	62.15	288.5
Rodling ...	49.17	282.5
Huth ...	56.75	280
Réparon ...	36.80	275
D-Drummond ...	54.41	273

Leading Totals, 4 Days

Henry ...	3125	Schreder ...	2654
Ritzi ...	3004	D-Drummond ...	2574
Burton ...	2874	Lindner ...	2559
Popiel ...	2782	Lacheney ...	2536
Kepka ...	2689		
Scott ...	2685		

Maximum possible: 3,378 pts.

STAYING AIRBORNE. — It has been asserted that "hot ships", in whose design high speed takes precedence over low sink, should be the first to descend to earth as the thermals gradually weaken towards evening. Here is a list of the latest landings (after 18.00 hrs.) on this day, by 7 Open and 3 Standard pilots, with their placings in their Class (mostly fairly high except the two who went to East Anglia).

Place	Pilot	Sailplane	Landed
O. 5	Jackson	Oly. 419	... 19.10
O. 11	Penaud	Edelweiss	... 19.00
O. 3	Webb	Dart 17	... 18.58
O. 25	Ulbing	Ka-6	... 18.52
S. 9	Réparon	Ka-6	... 18.45
O. 17	Ordelman	Sagitta	... 18.40
O. 29	Georgeson	Skyl. 4	... 18.30
S. 7	Rodling	Vasama	... 18.22
S. 37	Cameron	Oly. 465	... 18.15
O. 1	Kriznar	Meteor	... 18.10

O.S.T.I.V. Opening

An important event this day was the opening of the 10th OSTIV Congress in the Station Cinema at South Cerney. Prof. A. D. Baxter, Vice-President of the Royal Aeronautical Society, in an opening speech described OSTIV as a perfect example of the way sporting interests have engendered scientific research. Philip Wills, welcoming the delegates from all over the world on behalf of the B.G.A., declared: "Here we have in this room the eggheads of gliding"; the holding of the congress during the Championships enabled "the red and blue blood of gliding" to mix.

The Chairman of Cirencester District

Council, after confessing that his knowledge of aerodynamics was nil, revealed to everyone's surprise that he learned to fly during the first world war — on a Caudron with no ailerons. Another revelation was that, in Roman times, his town was the second largest in the country.

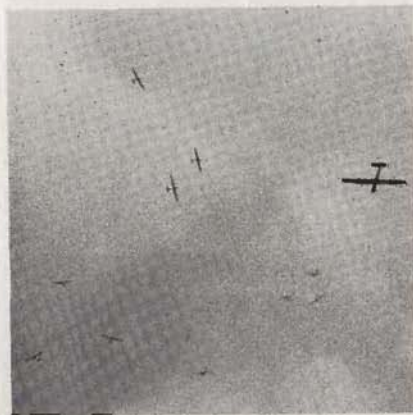
Mr. L. A. de Lange, President of OSTIV, then outlined its history and, after asking all to stand in memory of Dr. W. B. Klemperer, declared the Congress open.

Then came the announcement of awards. These are announced elsewhere, but here we might mention that the Standard Class prize went to the Slingsby Dart, and the OSTIV plaque for scientific work to C. E. Wallington.

Saturday, 5th June

One could have guessed, when a Rest Day for today was announced at yesterday's briefing, that the weather would do something unexpected, and it did. Bright sunshine started the day, and by mid-morning copy-book cumulus covered the sky.

The approaching warm front, which was raining on Ireland and Northern Britain yesterday, failed to materialize. But nothing could be done about this now, though pilots who wanted to fly were allowed to do so, and many did.



One of the smaller "gaggles": this photograph was taken on 3rd June.

A first-class aerobatic display was laid on for the afternoon, and one of its highlights was without doubt the free-fall parachuting demonstration by six experts. Sgt. Sherman and Staff Sgt. Turner jumped from a Rapide at 10,000 ft., then linked up in mid-air and stayed together until just before opening their 'chutes at about 2,000 ft. with a tremendous roar, then their gaily-coloured 'chutes made their way into wind instead of drifting the other way as expected.

Meanwhile a second lot of jumpers were somewhere overhead, above the cumulus clouds which had increased by then. They opened their parachutes somewhat higher than the first lot, and again the same fascinating noise filled the air as if they were being torn to shreds. One appeared to have caught a thermal, as he came down a good deal slower than the others. Two managed to land in an upright position and won loud applause from the many spectators.

Doug Bridson, National Gliding Aerobatic Champion, put the Dart 15 through its paces and included a fully inverted 360° turn. Andy Gough flew the Blanik and performed a well-executed barrel roll. The Capstan, the cross-Channel Gull 1, and a couple of aeroplanes also joined in the display.

Many pilots and crews from overseas took the opportunity to see the local sights and visit their "hosts". These hosts were local people who had each generously offered to provide a home where visitors from a particular nation would be welcome whenever they felt the need of relief from the strenuous round of Championships activities.

In the evening the Bristol Gliding Club laid on a barbecue at Nympsfield, 20 miles away. All the club-rooms, plus a big marquee, plus the ground between where sausages were being grilled, were packed tight with people, and everyone from South Cerney seemed to be there; yet there were enough left behind to fill the big hangar and dance the popular "letch kiss".

Sunday, 6th June

6TH JUNE.—A weak cold front crossed South Cerney at breakfast time. To the west there was still a lot of cloud, but a task was planned to take advantage of

rather more broken cloud conditions persisting in our area and to the east of the Welsh hills. However, cumulus development in this region of broken cloud served only to reinforce the sheet of strato-cu and fill up the gaps. Meteorological reconnaissance flights in various aircraft indicated that there was lift about, but that it was in rather restricted areas and surrounded by wide regions of dead air. Later in the afternoon conditions at South Cerney improved, but over most of the proposed route conditions remained cloudy all the afternoon.

Task for both Classes: Dog-leg Race via Grove Airfield (34.9 km. E.S.E.) to Halfpenny Green (116.7 km. N. by W.); total 151.6 km. (93.2 miles). Designated start.

"Will somebody turn off that disgusting noise?" asked Frank Irving as he opened the briefing, and then, after the offending Tannoy had been silenced, he reminded pilots once again that they must obey Airways rules, otherwise they would risk disqualification from the Championships.

Briefing had already been postponed to 11 a.m., and as the weather still failed to oblige, the Open Class was cancelled at 2.30 p.m. and the Standard Class somewhat later. Almost at once the weather picked up, and several pilots who decided to do some local soaring could be seen by 3.15 p.m. sharing thermals.

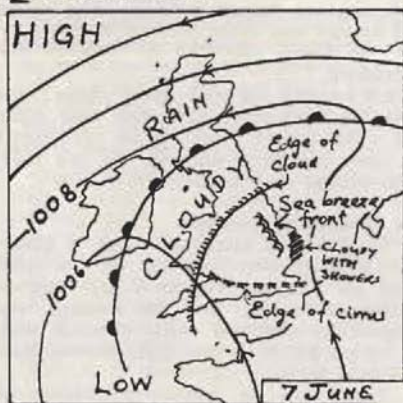
An aerobatic display was again proposed to keep the public amused, but, before it could start, Very lights had to be sent up in quick succession from the control tower to fetch the gliders down. However, their pilots took little notice, so a Chipmunk was sent after them. The result was a spectacle reminiscent of sheepdog trials, which kept the crowds roaring with laughter — in fact, some of them took this to be part of the display.

When the official display was nearing its end, Ed van Bree of Holland, who had been watching all this from about 8,000 ft., saw the area clear and could not resist the temptation, so he proceeded to give one of the most polished displays of the afternoon in his yellow Ka-6. A few minutes after landing, he was called before O.C. Flying and was

told: "We loved your aerobatics but please don't do them again without permission." He was later invited to do them again at the closing ceremony.

In the evening the Russians threw a lively and enjoyable party in No. 2 Mess.

Monday, 7th June



7TH JUNE.—Radiation fog burnt off rapidly, and well before midday the sky was liberally sprinkled with developing cumulus. Capstan and Dart "snifters" had a couple of launches each before reporting conditions fit for the designated start—this took place much earlier than on previous contest days.

Most pilots lost no time in crossing the start line, having been warned of over-convection and spread of cloud in the afternoon. This didn't materialise until the late afternoon at South Cerney but, as the chart shows, other parts of the country were less fortunate. Thunderstorms developed in many districts later in the day. One notable feature today was the good visibility — at last the pilots could actually see where they were going.

Task for both Classes: Race to Spitalgate (3 miles S.E. of Grantham), 162 km. (100.7 miles). Designated start.

The track crossed an airway, so competitors were warned that there would be an observer in Coventry Tower and he would be in radio contact with a patrolling aeroplane. Ann Welch also warned that there would be a balloon

"on a string" at 500 metres at Melton Mowbray.

In each Class 38 pilots reached the goal (Ordelman by only 10 feet), and of the few who did not, all but one were only a few miles short. Spänig, in the Open Class, took only 1 hr. 47½ min., which was 15 min. less than anyone else, and Henry maintained his lead by winning the Standard Class. The range of speeds was from 90.4 to 46.3 km/h. in the Open and 77.1 to 44.8 in the Standard.

On nearing the goal, many pilots from the big continents had their first sight of a sea-breeze front. Most recognised it (they had been warned), but few took the plunge and used it.

A Chapter of Incidents

Even before launches began, a glider minding its own business on the grid had its wing-tip run over by another competitor's car. But the damage was superficial and was easily covered with a fablon patch. A test flight showed that all was well.

Then, just as launching started at 11.53.48 with Deane-Drummond, he hit two runway markers which made holes in his leading edge, so he had to cast off. The British team manager then obtained permission for him to fly instead the Dart which had been brought for the OSTIV prize competition. The flight would be "without prejudice", i.e., subject to a later decision as to its validity.

But hold! The machine was not insured for competition flying. An insurance broker well known in the British Gliding movement (whose name, according to Insurance etiquette, may not be published in this connection, though he can get as much publicity as

he likes for his gliding achievements) had gone off on a retrieve, but he could still be contacted by radio. So this was done; he gave permission for the B.G.A. to prepare the necessary documentation, and Tony Deane-Drummond was in the air again within 18 minutes of the rest of his Class being launched.

But "incidents" were not yet done with. As the last pilots were preparing to cross the starting-line, a report came that an Italian had seen a collision between two other competitors. This was confirmed when Jean-Pierre Cartry came (metaphorically) limping back to South Cerney with part of the starboard wing of his Edelweiss missing. He said he had collided with one of the Hungarian all-metal A-15's, and thought the pilot was Thuri. But as both Hungarians flew on to the goal, and neither could be contacted by radio because of the language snag, it was not till they landed that Petroczy was revealed as the pilot. His machine had suffered no more than a few scratches, so he had flown on to make the sixth best speed in the Open Class.

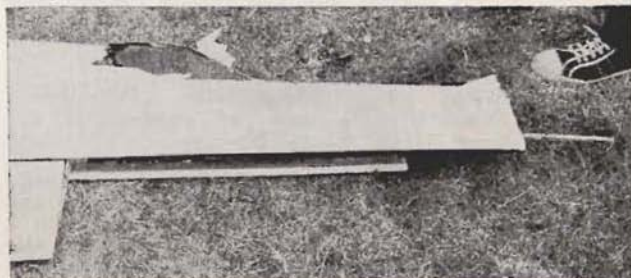
STANDARD CLASS

Soon after 12.10 the first competitors came across the starting line, but a number of them returned for a later crossing.

The weather was improving quickly and was quite a bit better than forecast, with pilots reporting 8-10 knot thermals. Also, for the first time, they could really see where they were going, as visibility had never been better.

Some had a little difficulty to start with — mainly those who had left on the early side.

Persson (Sweden, Vasama), who crossed at 12.30.49, was one of them;



After the collision: Cartry's abbreviated Edelweiss wing. Courtesy of "Flight".

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he flew about 20 km. east of track in order to reach the clouds, and lost time in doing so. Kepka, however, after crossing at 12.30.34 came back again for a crossing with Popiel at 13.23, and both returned once more to cross with the other two Fokas at 13.34.

Henry had already decided, before take-off, that he would not start before 1 o'clock, and after crossing the line at 13.06.25 he made the best time of the day in the Standard Class. He saw the sea-breeze front lying across track, but as it was the first time he had seen one, and was not quite certain how it would work, he decided to take enough height for a final glide without having to use it. Huth also encountered it and took 300 ft. in it before finishing his final glide.

Wally Scott took a bit longer to realize the weather was better than forecast, but, he said, after 45 minutes he had cottoned on. His times across the start-line were 12.27.28, 12.37.10 and 12.55.14.

Some of the pilots did not actually recognize the front as a sea breeze, in-

cluding Schreder, who got into heavy sink near it and had to land 5 km. short of the finish. He warned his fellow-countrymen what had happened, so they all took enough height for a straight glide in.

Malcolm Jinks used the sea breeze to 5,000 ft. and glided in from 15 miles out at 140 knots.

In the opinion of Mortensen (Canada, Olympia 463), soaring conditions this day were far better than average conditions in Canada. He was one of the few who did not use radio much, as the Canadian pilots were loaned army sets with a range of only 20 miles.

Deane-Drummond in his substitute Dart found his variometer was not working properly, but nevertheless did quite well, at 63.3 km/h., by using other gliders to help him to centre in lift.

Burton left just after 1 o'clock with Williamson and Goodhart; they had a bit of a scrape for the first 20 km., and this lowered their average speed.

Korpar (Yugoslavia) flew his repaired Libis 18 again.

Standard Class: Fastest Speeds

Pilot	Sailplane	Km/h.
Henry ...	Edelweiss	77.1
Ritzi ...	Std. Elf	74.6
Wittanen ...	Vasama	74.5
Kepka ...	Foka 4	74.1
Huth ...	Ka-6E	73.3
Popiel ...	Foka 4	72.3
Fritz ...	Std. Austria	70.0
Scott ...	Ka-6CR	69.0
Lacheny ...	Edelweiss	68.7
Lindner ...	Phoebus	68.4
Burton (18th) averaged 65.15 and		
Deane-Drummond (21st) 63.3 km/h.		

Leading Totals, 5 Days

Henry ...	4125	Lindner ...	3402
Ritzi ...	3951	Lacheny	3385
Popiel ...	3687	D-Drum-	
Burton ...	3670	mond	3340
Kepka ...	3627	Fritz ...	3277
Scott ...	3539		

Maximum possible: 4,378

OPEN CLASS

Wroblewski and Makula, who had left with the Standard Class Poles at 13.34, were followed the whole way by another glider who only left them to fly ahead at the final stages of the flight.

They found the sea-breeze front lying across the track about 12 miles south of the goal, but glided straight through it as they had sufficient height.

Rolf Spänig, one of the last four to leave South Cerney, beat the whole field easily with 90.4 km/h. (56.2 m.p.h.), well ahead of Thuri's 79.1 km/h., the next best, and Henry's 77.1 km/h. (47.9 m.p.h.) in the Standard Class. This was the second of three daily wins by a highly accomplished pilot in a remarkable sailplane.

The Russian team were buoyed up after their initial misfortunes by Chuvikov taking third place with 77.2 km/h. in his A-15. After their first repair at R.A.F. Bicester had been followed by two more, they were so impressed and grateful that a certain Squadron Leader is estimated to have received more kisses from them than from all his girl friends in his courting days.

Only two pilots in the Open Class did not make Spitalgate. Slazenger (Ireland) got lost near Leicester. He could not get his crew by radio, nor could he hear another crew who gave him his position, or he could have made the finish easily.

The same trouble befell Georgeson (New Zealand), who was not certain of his whereabouts and asked for "a heading — any heading — quick!". He reached Spitalgate.

Open Class : Fastest Speeds

Pilot	Sailplane	Km/h.
Spänig	... D-36	90.4
Thuri ...	... A-15	79.1
Chuvikov	... A-15	77.2
Kriznar	... Meteor	76.4
Kuntz ...	... SHK-1	76.3
Petroczy	... A-15	76.1
Wroblewski	... Foka 4	74.0
Johnson	... Skylark 4	73.5
Makula	... Foka 4	72.8
Svoboda	... Spartak	71.2
Williamson	... Olympia 419	71.1
Cartry ...	... Edelweiss	70.7

Goodhart (16th) averaged 67.7.

Leading Totals, 5 Days

Wroblewski	4295	Williamson	3793
Spänig	4164	Goodhart	3768
Kriznar	4098	Cartry	3604
Makula	4032	Yeates	3482
Kuntz	3994	Stouffs	3395

Tuesday, 8th June

8TH AND 9TH JUNE.—*Broad rainbelts across the southern half of the country moved too slowly from the east. Met. reconnaissance flights were made in very poor conditions to see if there was any hope of locating and using a temporary improvement in the rain and cloud patterns, but there were no usable opportunities for a task to be set.*

Briefing opened with a presentation to Malcolm Jinks of a birthday cake with 21 lighted candles combining to produce the only good thermal of the day. It was surprising how many foreign teams knew the words and music of "Happy birthday to you". He said what he would really like for a birthday present was to be allowed by the Standard Class to win on one day.

Malcolm, from Australia, was to have been the youngest competitor, but Weiss, of France, had been unable to come and was replaced by Jean Claude Penaud, still aged 20 and ahead of 30 older competitors than himself in the Open Class.

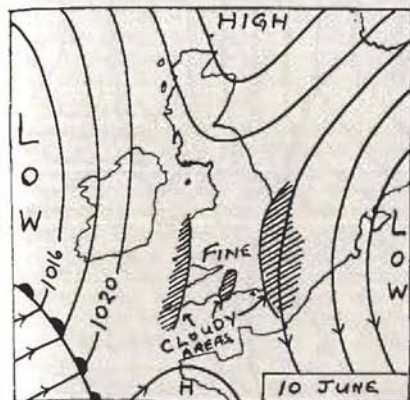
The reason for there being no task was obvious as soon as "Wally" Wallington used an umbrella instead of a pointer on the weather chart. This then served in turn as a *parapluie* and a *Regenschirm* as Monsieur Gerbier borrowed it for his French interpretation and then Dr. Walter Schulte, whose opening words were: "Es regnet".

The big event of the day—or rather, the night—was the Swiss party in the briefing hall, to which everyone was invited and nearly everyone came. Excellent colour films were shown of three previous Championships—Samedan in 1948, Camphill in 1954 and Junin in 1963, and then performers from many nations were inveigled on to the stage to do their stuff, and to receive prizes at midnight from an "International Jury" of fair maidens.

Wednesday, 9th June

Another dud day. Briefing was postponed and then cancelled. The Czechoslovaks and the Yugoslavs jointly threw a lively party in No. 2 Mess which started in the evening and could be heard still going strong in the early hours of next morning.

Thursday, 10th June



10TH JUNE.—By now we were in a col between low pressure west of Ireland and a depression over Germany. During the early morning high stratocumulus covered most of England, but the cloudy area was predicted to contract sufficiently to allow the sun's heating to produce strong thermals. All went according to plan until 11.45 B.S.T., but then the isolated but large patch of strato-cumulus that remained over South Cerny became just too thick to let enough heat through. Again the margin between poor and excellent soaring conditions was small, and we were extremely unlucky not to have a good 288-km. race. A sea-breeze front with cumulus to over 8,500 ft. was almost along the second (Lasham to Sherborne) leg of the proposed course.

Task for both classes: 288-km. Triangle race (179 miles) via Lasham and Convent School west of Sherborne. Legs: 83.2, 108.6 and 96.2 km. Designated start.

"A big triangle—maybe too big," said Ann Welch, and so it proved. Since a sea-breeze front was expected to come in from the south, and might reach Sherborne or even cross to the north of that town, special attention was given to it at briefing.

Right at the beginning of the practice period, a set of diagrams of the sea-breeze front had been put up in the briefing room, as the British did not want to keep it as a "secret weapon";

but apparently somebody did, as it had been stolen. So Wallington had to draw it again on the blackboard. It is a pity that so few pilots reached the front, for it was a powerful specimen, giving lift to over 8,000 ft.

By coincidence a Tiros weather satellite passed over at noon and showed almost the whole of Great Britain to be free from cloud except for an area of strato-cumulus over the South Midlands and another over Cornwall. It shows why, although sunshine could be seen far away to the south even from Swindon, the going on the first leg was so slow and difficult that although it improved somewhat towards Lasham, nobody reached that turning-point till over six hours after launches began, and even then only three did so.

OPEN CLASS

After a long wait on the grid from 10.30 onwards, this Class began taking to the air at 12.22. It was soon apparent that it was going to be difficult in the extreme. Bunches of gliders were hanging between 500 and 700 feet. Nicholas Goodhart, having found something at 700 ft., was mobbed by at least a dozen others who joined him between 300 and 600 ft. At one time there were 28 sharing a thermal, and others were coming down for re-lights. Obviously there was no room for the Standard Class as well, so at 13.30 it was cancelled.

Nearly all took the precaution of crossing the starting line, usually below 1,000 ft. Blakewell Farm, 6 km. to the S.W., was used for out-landings in quick succession by Williamson and Goodhart, and Dommissé, Slazenger and Kearon landed just outside. All were soon back for another start. In fact, the whole of the Open Class had eventually to be re-launched.

The second take-off session started with Thuri (Hungary) at 14.15, and others were launched at intervals over the next hour-and-a-quarter. This time the gaggles tended to be slightly higher and there were more of them. But, in spite of the improvement, many did not bother to cross the starting line again, evidently thinking it unlikely that anyone would complete the course to make it a race day.

The British and Irish teams, and

"Bomber" Jackson of South Africa, now adopted the tactic of going due south in order to reach the better weather and perhaps also the sea-breeze front, which might provide a devious but more reliable route to Lasham. How some of them were successful and others nearly so, will be described in a later issue by "Paddy" Kearon. Spänig and Kuntz apparently had the same idea, and Spänig managed 68 km. to Chilbolton, but his high speed made him too early to catch the sea breeze and his distance, being off course, counted for less than 2X.

The rest of the field struggled more or less along the direct route but found hardly anything useful after Swindon. Ordelman and Makula, who were together at 3,000 ft. there, both landed at High Clere Castle, 53 km. out, within a minute of each other. Dick Johnson landed just past 2X (60.5 km.) at 16.59 and Cartry near Basingstoke at 17.50, both too early to catch the sea-breeze.

Back at base, tension mounted in the area between the control room and the big map with the landing pins on it. There were not enough pins beyond 2X, and 8 (i.e. 20 percent) were wanted to make it a contest day. As news came of the three who had turned Lasham, and later of their landing, and that Paddy Kearon would have won the contest if there was one, there were still only 6 pins beyond 2X for certain, plus one doubtful. In the end, the official number was only six, so there was no contest. "How like the Irish," somebody said, "to win on a no-contest day!"

Here are the six, with what would have been their scoring distances (scoring distance to Lasham was 53 km., actual distance 83.2 km.), and the turning-point times of those who rounded Lasham. It was, at least, a great day for the Olympia 419's, the only ones to get round the first turning-point. David Webb (Canada) damaged his Dart 17 by a ground loop on landing, and was out of action next day.

Open Class: Scoring Distances

Pilot	Sailplane	km.	Lasham
Kearon	Oly. 419	106.5	18.37
Williamson	Oly. 419	100.0	18.49
Jackson	Oly. 419	97.5	18.54
Cartry	Edelweiss	38.0	—
Stouffs	Ka-6cr	33.5	—
Johnson	Skylark 4	40.5	—

Friday, 11th June



11TH JUNE.—A warm front approached from the southwest, and at breakfast time it looked as though there would be too much layer cloud for a contest. But met. reconnaissance flights confirmed a suspicion that the cloud overhead would be followed by a wide gap in the pre-frontal cloud. In the cleaner areas thermals were often strong and cumulus with tops between 6,000 and 8,000 ft. developed.

Task for both classes: Distance along a line through Perranporth via Long Marston Sheds (nr. Stratford-on-Avon) and Thame. Pilot selected start.

The route was 49.7 km. to the N.E., then 68.7 km. S.E., then approximately S.W. by W., against the wind, passing a few miles north of Land's End. It was carefully explained in three languages that you didn't have to stop at Perranporth. (When such a task was first set, in France in 1956, Paul MacCready won the day because he had read the rules and carried on past St. Auban.)

Paddy Kearon received a Daily Prize which, on being unwrapped, proved to be a stainless steel spade. It was "for scratching".

Nick Goodhart and John Williamson were first off in the Open Class as early as 10.49.38/55, evidently hoping to make Cornwall before the high cloud did so, coming from the opposite direction. George Burton started the Standard Class launches at 11.00, but through some confusion about his take-off time he was recalled by his Team Manager

and was launched again at 11.44. Other pilots who chose an early launch a few minutes after 11.00 were Kearon, Johnson, Ordelman and Yeates in the Open and Braes, Sejstrup, Popiel, Kepka and Evans in the Standard.

Later there came an "incident". Just after Markus Ritzi had left the ground at 11.36 his Standard Elfe suddenly rose high above the towing Chipmunk and pulled up its tail; a few seconds later the Chipmunk hit the ground and broke its back. Luckily the pilot, B. B. Sharman, was unhurt; nor was Ritzi, incommoded, as he landed back and was soon pulled off again by another willing tug, this time maintaining a normal attitude.

The early start of Goodhart and John Willy did not, after all, give them any advantage, as thermals were still weak for the first half-hour or so. Most competitors took well over an hour to reach the first turning-point, Goodhart reaching it at 13.15 and Williamson at 13.16. Among those who made it in under an hour were the three Russians, Suslov's time of 50 minutes being beaten only by Cartigny with 49 minutes. Lindner took 51, Huth and Ritzi 52. Most of these were among the later starters.

Spänig, though he took just over an hour on the first leg, was easily fastest on the longer second leg, covering the 68.7 km. in only 59 minutes. The two



Germans in the Standard Class were also very fast, Lindner taking 1 hr. 6 min. and Huth 1 hr. 9 min. At Thame, after the first arrival by Spänig at 13.17, the next to be observed there were Goodhart at 13.24 and Williamson at 13.26. Only one pilot came down short of Thame and three landed there; all the rest got well past it, though Jackson was stuck over it for 45 minutes.

Some bigger clouds had now developed along the last leg, and climbs varying from 7,000 to 9,500 ft. were achieved by a number of pilots, only to find that the sky ahead of them looked dead and prospects of getting much further looked slimmer. Paddy Kearon took 8,000 ft. near Devizes and flew to the Mendips escarpment, only to arrive there below hill-top height, and he had to land soon after.

One of the earliest landing reports was



The broken back: a picture presented to Markus Ritzi by the tug pilot.

from Spänig who had come down near Bridgewater at 16.20, having covered 157 km. from Thame in 183 min. He could see "absolutely nothing" ahead. No one beat his distance, but Kuntz, who came down just a kilometre short of him, did not land till 17.15, so the warm-front clamp could not have been moving east very fast. Wroblewski and Kepka (best of the Standard Class) were only 6½ and 7 km. short of Spänig, yet they did not land till 17.40.

In view of Spänig's high speed, and the route leading towards an approaching warm front, there was widespread expression of opinion that this day's task should have been a race. As it was, Spänig's speed did him little good, as many slower pilots were nearly able to catch up with him. As this is being written, the argument is still going strong.

A few pilots who had gone rather north of track on the last leg were able to make good climbs in the Bristol Channel area. These included John Willy, who had been trying to use a weak sea-breeze front but failed to contact it. Ed van Bree, however, managed to climb to 10,000 ft., the highest reported this day; he even mentioned over the radio the breath-taking view he saw, looking down on a sea of clouds. Had he made his final glide south-westerly from there, back on to track, he could have added perhaps another 20 km.; but instead he went south in the hope of more lift, but the whole system had collapsed by the time he reached it and he landed west of Radstock at 17.50.

A number of pilots really enjoyed this day, like Georgeson, who felt that, if you were not high on the list, you had time to enjoy it all; and Gerald Westenra, who was having the time of his life and would not have missed it for anything.

For Wally Scott things did not go so well, and he thought this was his worst flight. First, he fumbled for nearly an hour near the second turning-point, then he went south to Andover and only once climbed to 5,500 ft.; thereafter it took him ages to finish up near Bath, doing slight damage to his glider. A. J. Smith had the misfortune to ground-loop his Sisu in tall grass, and could not have flown next day. Makula also had damage to his Foka which required night work to repair.

Open Class : Longest Distances

Pilot	Sailplane	km.
Spänig	D-36	275.5
Kuntz	SHK-1	274.5
Wroblewski	Foka 4	269.0
Williamson	Olympia 419	266.5
Kearon	Olympia 419	262.5
Makula	Foka 4	260.5
Hossinger	Std. Austria	257.5
Penaud	Edelweiss	257.5
Cartry	Edelweiss	249.0
Svoboda	Spartak	246.5

Standard Class : Longest Distances

Pilot	Sailplane	km.
Kepka	Foka 4	268.5
Wödl	Ka-6	264.0
Mestan	Standart M-25	262.0
Schreder	HP-12	262.0
van Bree	Ka-6CR	245.0
Persson	Vasama	245.0
Johannessen	Vasama	244.0
Popiel	Foka 4	242.5

Since this was the last Contest Day, the overall placings were as shown in the table of final results.

Saturday, 12th June

12TH JUNE.—*The warm front on the chart for the 10th June was now east of England, but the cold front was linked back to another warm front over Ireland. The weather was generally overcast with low stratus over much of south and west England. Met. reconnaissance flights confirmed that no improvement could be expected until very late in the afternoon.*

Participants arrived in the briefing hall to find the Director's transport vehicle on exhibition. Two other objects, it was announced, had also been removed from their usual position—the F.A.I. flag and the Championships flag. An appeal was made for their restoration, but in the end a substitute F.A.I. flag was hurriedly made from a bed sheet, which Ann Welch later handed ceremoniously to Peter Ottewill as one item which had been "stolen" by the organisation.

With nimbo-stratus covering the sky outside, no task was announced, but anyone could do local flying in the afternoon. Another announcement was of a party from 8.30 p.m. with dancing, songs and music. The dancing was duly laid on, but everyone capable of organising songs and music seemed to be away at

the OSTIV dinner in the town. This was a most entertaining affair at which the guests outnumbered the OSTIV. It was made possible by the generosity of three firms.

Sunday, 13th June

A thrilling acrobatic display preceded the Closing Ceremony. First, Ed van Bree showed what his yellow Ka-6 could do—with official permission this time: then Popiel gave a polished display in his Foka 4; and finally Doug Bridson in a Dart ended an exciting exhibition by disappearing from sight between two hangars below roof-top level.

Closing Ceremony

Promptly at 1 p.m. Mr. Mauricio Obregon, president of the Fédération Aéronautique Internationale, began his speech, alleging that it had taken him just as long to come from South America as to get through the traffic at Reading. He pointed out that, but for yesterday's weather, these Championships would have provided a record number of contest days (it would have equalled the previous record). His speech was full

of witty asides: commenting on the "magnificent good fellowship" between the nations, he added: "You know what I mean—you cut off my wing, I cut off yours." He concluded with a "thank you" in seven languages, adding "etc." to cover the rest.

Hilda Lady Brabazon then presented the prizes, saying that in front of 28 nations she felt like "a sort of U Thant".

Mr. Ware of W. D. & H. O. Wills, who had generously subsidised the Championships to the extent of £100 per team and thus made such a large entry possible, ceremonially handed "two bits of paper" to Philip Wills, one a further contribution to the World Championship expenses, and the other to a Scholarships fund.

Philip Wills, as B.G.A. Chairman, wound up the ceremony, starting with statistics—86 pilots flew 48,500 miles from 2,507 launches and the public had paid to watch to the number of 10,376 adults and 2,627 children. He added: "We have shown that we are not a cold-hearted island race living most of the time in a thick fog—we are a warm-hearted island race living most of the



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FINAL RESULTS OPEN CLASS

Place	Pilot Comp. No.	Country	Sailplane	Daily score and dates June, 1956						Total Score	
				1st 1*	2nd 2	3rd 3	4th 4	7th 5	11th 6		
1	2	Wroblewski	Poland	Foka 4	718	928	1000	879	770	974	5,269
2	29	Spänig	Germany	D-36	750	901	837	676	1000	1000	5,164
3	30	Kuntz	Germany	SHK-1	497	1000	793	905	799	996	4,990
4	1	Makula	Poland	Foka 4	551	929	919	879	754	939	4,971
5	14	Kriznar	Yugoslavia	Meteor	596	880	822	1000	800	839	4,937
6	31	Williamson	Great Britain	Olympia 419	505	850	828	877	733	963	4,756
7	32	Goodhart	Great Britain	Dart 17	398	830	854	995	691	849	4,617
8	27	Cartry	France	Edelweiss	497	899	762	717	729	892	4,496
9	21	Yeates	Canada	Skylark 4	497	848	721	719	697	839	4,321
10	28	Penaud	France	Edelweiss	443	725	686	859	617	927	4,257
11	20	Stouffs	Belgium	Ka-6 CR	386	881	701	824	603	782	4,177
12	15	Hossinger	Argentina	Std. Austria SH	474	911	329	801	682	927	4,124
13	33	Thuri	Hungary	A-15	—	870	797	773	838	831	4,109
14	35	Kearon	Ireland	Olympia 419	348	754	678	691	666	947	4,084
15	23	Svoboda	Czechoslovakia	L-21 Spartak	436	308	785	935	735	822	4,081
16	39	Vergani	Italy	Skylark 4	—	855	804	897	657	866	4,079
17	34	Petroczy	Hungary	A-15	—	896	803	773	796	788	4,056
18	10	Johnson	U.S.A.	Skylark 4	512	910	162	824	764	880	4,052
19	11	Smith, A. J.	U.S.A.	Sisu 1A	—	802	857	670	715	859	3,903
20	7	Nietispach	Switzerland	Skylark 4	371	733	730	319	610	866	3,629
21	19	Frene	Argentina	Std. Austria SH	—	796	669	655	654	642	3,416
22	13	Chuvikov	U.S.S.R.	A-15	—	905	295	590	810	790	3,390
23	16	Reid	Australia	Skylark 4	398	324	642	557	688	729	3,338
24	8	Jackson	South Africa	Olympia 419	—	330	772	912	512	741	3,267
25	38	Arber	Israel	Skylark 4	dnf	338	734	621	486	676	2,855
26	42	Georgeson	New Zealand	Skylark 4	—	300	684	570	534	745	2,833
27	41	Ordelman	Netherlands	Sagitta 1	—	318	596	734	592	576	2,816
28	22	Webb	Canada	Dart 17	—	719	166	971	726	dnf	2,582
29	18	Ulbing	Austria	Ka-6 CR	—	318	160	624	685	762	2,549
30	25	Nielsen	Denmark	PIK-16 C	321	167	145	675	548	668	2,524
31	43	Westenra	New Zealand	Skylark 3g	—	300	673	322	538	635	2,468
32	12	Veretennikov	U.S.S.R.	A-15	—	802	338	dnf	595	729	2,464
33	4	Harrold	Rhodesia	Skylark 4	—	325	139	466	641	613	2,184
34	5	Domisse	South Africa	BJ-2	290	319	141	8	644	737	2,139
35	6	Silesmo	Sweden	Ka-6 CR	—	162	329	508	557	582	2,138
36	3	Smith, R.	Rhodesia	Skylark 3f	—	300	160	466	525	674	2,125
37	24	Jensen	Denmark	Hütter Libelle	—	300	146	590	654	360	2,050
38	17	Blackwell	Australia	Std. Austria	—	—	650	193	597	460	1,900
39	36	Slazenger	Ireland	Olympia 419	—	154	345	278	284	642	1,703
40	40	Lamera	Italy	M-100S	—	165	284	505	290	360	1,604
41	26	Hämäläinen	Finland	Skylark 4	—	314	dnf	dnf	dnf	dnf	314

*Maximum Possible Score: 750; — = Did not score; dnf = D'd not fly.

Tasks for both Classes were the same on each day: Day 1, 1st June, Race: South Cerney—Cosford, 108.7 km.; Day 2, 2nd June, Race: South Cerney—Caradoc—South Marston—South Cerney, 171 km.; Day 3, 3rd June, Race: South Cerney—Marlborough White Horse—Wells Cathedral—South Cerney, 173.5 km.; Day 4, 4th June, Free Distance; Day 5, 7th June, Race: South Cerney—Spitalgate, 162 km.; Day 6, 11th June, Distance along broken line: South Cerney—Long Marston Sheds—Thame—Perranporth.

time in a thick fog. We have shown that you can get exciting and worthwhile flying in a sailplane in weather which, under ordinary circumstances, would cause most of us to go indoors, light the fire, and take out a good book to read."

After a fanfare, the band treated us to an intricately performed "tattoo" with alternating bagpipes and trumpets.

Farewell Banquet

One thousand people—national teams, volunteer helpers and visitors, filled the "glider hangar"—empty of gliders at

last. When the eating was over, all the teams came up in turn to receive gifts from the Station Commander. All were cheered, the loudest cheer going to the Irish and the longest to the Russians. Speeches by Ann Welch, "Pirat" Gehrig and others were scarcely audible owing to microphone trouble, but the lack of decibels was more than made up when flocks of blue and white balloons were pulled down from the ceiling and exploded. It made a suitably spectacular finale to the World Championships.

FINAL RESULTS STANDARD CLASS

Place	Comp. No.	Pilot	Country	Sailplane	Daily score and dates June, 1965						Total Score
					1st 1*	2nd 2	3rd 3	4th 4	5th 5	6th 6	
1	97	Henry	France	Edelweiss	288	924	1000	913	1000	820	4,945
2	74	Ritzi	Switzerland	Std. Elfe	265	1000	868	871	947	847	4,798
3	70	Kepka	Poland	Foka 4	378	911	502	898	938	1000	4,627
4	69	Popiel	Poland	Foka 4	189	921	939	733	905	891	4,578
5	53	Burton	Great Britain	Dart 15	259	877	815	923	796	847	4,517
6	77	Scott	U.S.A.	Ka-6 CR	334	816	535	1000	854	836	4,375
7	96	Lacheny	France	Edelweiss	276	806	861	593	849	878	4,263
8	52	Linder	Germany	Phoebus	—	973	898	688	843	847	4,249
9	54	D.-Drummond	Great Britain	Olympia 465	378	852	533	811	766	839	4,179
10	63	Van Bree	Netherlands	Ka-6 CR	—	794	840	788	821	901	4,144
11	86	Fritz	Austria	Std. Austria SH	—	862	890	656	869	853	4,130
12	85	Wödl	Austria	Ka-6 CR	—	821	856	651	783	981	4,092
13	95	Wuonenen	Finland	PIK-16 C	—	920	580	703	944	828	3,975
14	51	Huth	Germany	Ka-6 E	—	418	897	835	922	849	3,921
15	76	Schreder	U.S.A.	HP-12	366	952	570	766	286	973	3,913
16	61	Brigliadori	Italy	Uribel C	—	811	781	634	816	860	3,902
17	72	Persson	Sweden	PIK-16 C	—	703	862	529	835	901	3,830
18	92	Sejstrup	Denmark	Ka-6 CR	—	726	860	613	733	868	3,800
19	75	Bloch	Switzerland	Ka-10	250	792	502	618	771	855	3,788
20	73	Rodling	Sweden	PIK-16 C	—	416	844	843	801	866	3,770
21	64	Réparon	Netherlands	Ka-6 CR	—	819	516	818	818	790	3,761
22	62	Mestán	Czechoslovakia	Standart M-25	—	702	751	194	825	973	3,445
23	60	Pronzati	Italy	M-100S	285	342	529	731	679	715	3,281
24	94	Horma	Finland	Havukka Std.	268	437	558	863	291	801	3,218
25	88	Baeke	Belgium	Ka-6 CR	—	418	595	603	764	809	3,189
26	71	Clifford	South Africa	Ka-6 CR	—	379	551	614	813	776	3,133
27	82	Picchio	Argentina	Ka-6	—	695	498	416	669	797	3,075
28	67	Johannessen	Norway	PIK-16 C	—	439	802	222	627	897	2,987
29	84	Jinks	Australia	Schneider ES-60	—	779	315	354	718	746	2,912
30	87	Cartigny	Belgium	Ka-6 CR	—	242	808	331	731	763	2,875
31	65	Handley	New Zealand	Ka-6 CR	—	679	251	394	604	560	2,488
32	93	Braes	Denmark	Ka-6 CR	137	297	508	666	200	667	2,467
33	91	Maracek	Czechoslovakia	Standart M-25	—	340	317	439	658	713	2,467
34	80	Korpar	Yugoslavia	Libis 18	—	752	541	dnf	732	371	2,396
35	59	Evans	Ireland	Ka-6 CR	—	144	572	145	638	847	2,346
36	57	Filippusson	Iceland	PIK-16 C	—	221	452	499	610	451	2,233
37	81	Stepanovic	Yugoslavia	Delfin	—	276	dnf	733	741	474	2,224
38	68	Hölmeyr	Norway	Ka-6 CR	—	292	—	596	534	566	1,988
39	58	Gupta	India	Ka-6	—	294	506	319	632	153	1,904
40	89	Mortensen	Canada	Olympia 460	55	329	23	290	675	428	1,800
41	66	Cameron	New Zealand	Olympia 465	279	37	37	267	610	558	1,788
42	83	Rowe	Australia	Schneider ES-60	—	232	230	247	272	547	1,528
43	56	Magnusson	Iceland	Ka-6 CR	—	71	311	219	277	597	1,475
44	79	Suslov	U.S.S.R.	KAI-14	—	dnf	dnf	—	274	451	725
45	78	Jarushevichus	U.S.S.R.	KAI-14	—	229	dnf	dnf	dnf	dnf	229

*Maximum Possible Score: 378; — = Did not score; dnf = Did not fly.

GLIDERWORK

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B.G.A. VICE-CHAIRMAN

WITH great reluctance, the British Gliding Association Council has accepted the resignation of Ann Welch, who feels after the World Championships she needs to devote more time to her family and private life. She expects, however, to remain active as Chairman of the Instructors' Panel, and assisting in the organisation of Competition work.

In her place the Council have invited David Carrow to fill the position of Vice-Chairman, which he has accepted.

WORLD GLIDER CHAMPIONSHIPS 1965



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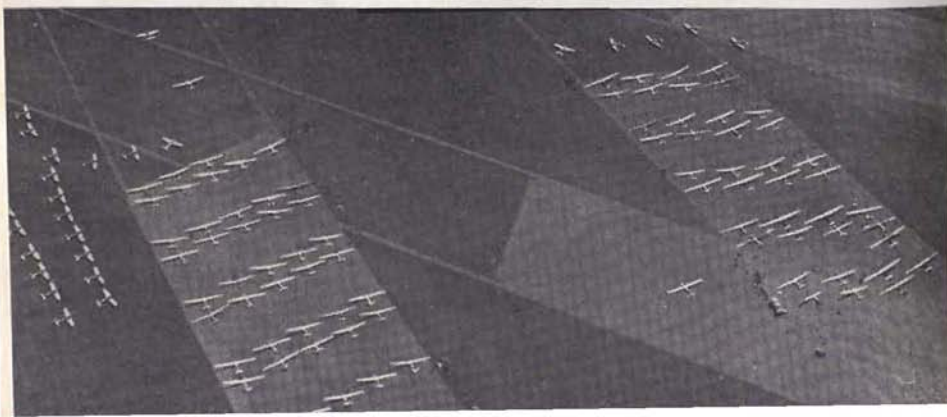


H.R.H. Prince Philip inspects the meteorological briefing set-up. In the foreground are Philip Wills and Ann Welch; on the platform, centre to right, M. Gerbier (France), Dr. Walter Schulte (Germany) and C. E. Wallington (Gt. Britain). Photo Sally Thompson



▲ Philip Wills with Lord Shackleton, Minister of Defence for Air. Photo Charles Brown.

▼ How the "grid" worked: one sailplane is taking off and three more tugs are hurrying to follow. The Open Class, with diverse spans, are on the right. Photo Sally Thompson.



► Folland Gnats give
a polished display
on the opening day.
Photo Sally
Thompson.



▼ In a biting wind
Wally Kahn, on
behalf of the Irish
team, resuscitates the
Minister of Aviation
with a tot of whisky.
Photo David Foster.





▲ Briefing in progress. Photo Thompson.

◀ Line-up on Opening Day. Charles Brown.

▶ Joe Croshaw, O/C FL Courtesy of "Flight".

▼ The Standard Class grid on first day.

▶ Refuse for disposal? Thompson photographed by Walker.





to Sally

Photo

Flying.

on the

Sally

by Jill





▲ Lady Brabazon, who presented the prizes.
Photo Sally Thompson.

► Stands at the Trade Fair.



▼ Seen on the closing day. (L. to r.): Rika Harwood, Bill Bedford, and three of the Dutch team: J. Franken, G. Ordelman, M. Manting.
Photo G. Harwood.





▲ *Finale to the Banquet. Photo Sally Thompson.*

◀ *Hugh Mettam checking heights at the starting line. Photo David Foster.*

▼ *Terrace and scoring board. Photo David Foster.*



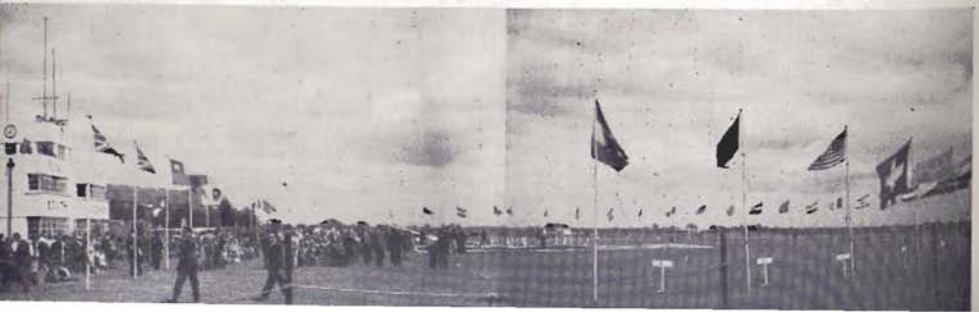


▲ *Centrepiece in the Big Bar.*
Photo A. E. Slater.



◀ *Prince Philip with the Russian team. Note reflections on the A-15's polished metal.*
Photo Sally Thompson.

▼ *National flags on the closing day.*



THE BCC 40F and AIRMED AIRLITE HEADSET

By R. BRETT-KNOWLES, B.G.A. Radio Coordinator

A YEAR ago the writer and Peter Tonbridge tested two VHF sets suitable for gliders, and this year it was hoped to compare two more. Only the British Communications Corporation kept their promise to submit a set for trial at Bicester and no comparison could be made with another type advertised as being suitable. So a report on a headset is given in lieu.

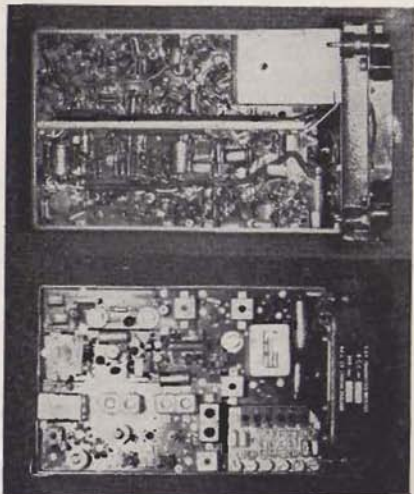
The BCC 40F at once impresses you by the robust simplicity of its exterior, which is of diecast light alloy and waterproof. On examination of its interior, this impression is not only confirmed, but strengthened. A printed circuit substrate is used, but the majority of wiring is conventional, with all but one of the components immediately accessible for test or removal. This form of layout is much easier to follow should a fault develop, and if a component needs isolating from its environs for testing, this can be done without danger of damage either to the component or associated wiring. But this should not prove necessary as the quality of components and workmanship is very high.

An intending purchaser will require to know some of the technical details.

Six crystal controlled channels are available, but they must all lie within ± 0.3 per cent of the centre if degradation of performance is not to take place. Thus 129.9 and 130.4 Mc/s can be set up, but not the ground/ground or common civil airport frequencies. This feature is common to all pack sets of today made in England, but we may some time see a Frequency Synthesiser set for gliders which removes this restriction. However, the high cost of such a set will seriously curtail its availability. The transmitter's minimum rated power is 220 mW, and to some the figure may seem low. However, at VHF, range is limited by obstructions rather than powers (provided power is above a minimum, and this is). Signal-to-noise ratio at a receiver has a logarithmic effect on the ear, and the difference between 600 mW and 200 mW is only

4.7 db., so 220 mW is not an unacceptably low power theoretically, and in practice the set gave adequate range. Of course, the owner must make certain that his 220 mW are actually radiated into the air and not absorbed by parts of the glider. (Whatever power level is used, an effective aerial is necessary to get adequate performance.) The only time that a BCC 40F owner will be embarrassed by his power is in competition with a garrulous operator of a set of much greater (probably illegally so) power. Signals were still strength 5 at 50 miles, and an air/air range of 90 miles was worked.

The receiver has as good a noise factor as can be expected from the transistor types employed, and has a very simple but effective muting circuit. The protection from cross modulation is not particularly good, and some rather peculiar noises can be heard at times. The noises due to this cause are a small proportion of the rather peculiar noises normally heard on 130.4 or 129.9 mc/s. anyway, and should not be taken as a serious dis-





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THE BCC 40F

PORTABLE VHF RADIOTELEPHONE

Fully Transistorized

Size Only 8" x 5" x 2½"

Weights Only 4½ lbs.

6 Channels

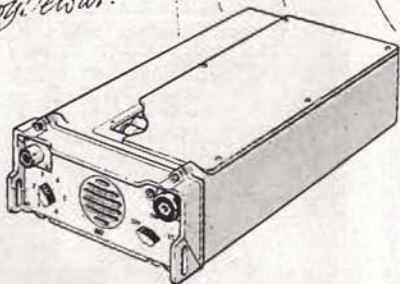
Fully Waterproof

Socket for Connection to Fuselage
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Operates from external 12V Battery,
Self Contained

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BCC

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advantage. 50 or 25 Kc/s. channelling is available.

Using the Airlite headset, the audio signal was of correct level, but if reliance is placed on the internal speakers, most people would prefer more volume. To overcome this is simple: fit a larger loudspeaker in a position nearer to the pilot's ear, which is technically easy to do.

The set may be removed after landing and used as a pack set on its internal batteries and with a whip aerial. Rechargeable DEAC cells are supplied, but a primary battery pack is available in two sizes, to be fitted internally or externally as required. The voltage is 13.2, and operation off a glider's 12-volt accumulator is not practicable. However, a chassis mounting incorporating a trickle charger for use in a 12-volt vehicle is available if required (consumption would be rather high for a glider battery). The internal DEAC cells can be charged at 45 mA without removal from the set, through the tel/mic/switch plug, if a suitable charger is available. Through this same plug run the send-receive wires and a press-to-talk could readily be installed on the control column so as to leave the pilot's hands free.

The microphone should be moving coil or electromagnetic, but not carbon. A noise-cancelling type was tried with complete success, but this is a luxury not a necessity. Automatic control of modulation is employed to cover a wide range of speakers and types of microphones. Transmission occurs immediately the send-receive switch is operated, but with a failing battery the quality suffers.

The price is higher than any set so far tested, but you are paying for a more robustly made set, which could be stood on or dropped if necessary and which will not object to rain. Simplicity and reliability are the dominating factors, and for these the greater price would appear to be quite fair.

* * *

Along with this set, an Airmed Airlite headset was tested. The features which appealed were the lightness, and lack of fatigue usually associated with headsets. The ear pads (with washable covers) allowed sufficient transmission of wind



The Airmed Airlite headset.

noise to permit using it as an aid to flying (it didn't help me much at Bicester!). A noise-cancelling boom microphone was supplied to match the BCC 40F input, and either carbon or electromagnetic microphones are available to suit any of the VHF sets ever likely to be produced.

The devotees of the loudspeakers might well find that this headset will cause them to change over. With a press-to-talk button on the control column, both hands are free for flying the glider, which might be considered an advantage especially when approaching to land. An audio variometer would be audible through the ear pads or, if preferred, could be fed in electrically to the headphones.

The noise-cancelling microphones, Types 303 (carbon) or 401 (moving coil), with which the headset can be fitted are also very suitable for car use, especially in view of the possible requirement for a microphone which is not to be held in the hand. A noise-cancelling microphone discriminates against noise coming from a distance and must therefore be placed fairly close to the speaker's mouth, or it will not respond to the desired signal either. Look inside a radio-equipped taxi for ideas on how to arrange this. To remove the noise-cancelling feature, should it be temporarily not needed, cover one side of the microphone with masking tape.

SOME THOUGHTS ON SOUTH CERNEY

By VERONICA PLATT

HERE in Italy it is almost impossible to remember the cold, the bleakness, the utter grey misery of that first week in South Cerney. Would the clouds ever lift, could the sky ever lose that covering of asphalt — above all, could we ever again be warm? Countries south of the equator had supposed May and June to be summertime in England, and certainly Gloucestershire was looking its prettiest, all a-froth with Queen Anne's Lace, horse-chestnuts and hawthorn. But team after team went sadly into Marks and Spencer's to come back with anoraks, sweaters, duffle-coats and even hot-water bottles, and that on days when they had been hoping to see England from the air.

Opening day came, and we shivered beside our flags; opening day plus one and we shivered beside our sailplanes for Prince Philip; and still the temperature fell and the sky stayed solidly grey, the spirits temporarily buoyed up by a magnificent barbecue on the Friday night sank to a new low at the thought of more evenings of tepid beer in a freezing hangar.

Then quite suddenly the weather cleared and we remembered how lucky we had been to have hot food, centrally heated bedrooms and lashings of boiling hot water. The parachutes and coloured umbrellas in the bar looked friendly, people went by at a run instead of a round-shouldered slouch, and

things got really cracking at last.

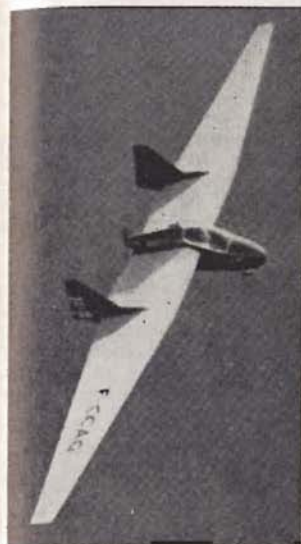
It was then that we began to appreciate just how good the organisation was. Damaged gliders had been expeditiously repaired, launchings were extremely swift, hangar space was adequate, sleeping space likewise (though it might have been better to keep pilots and their crews together). Each country had been provided with a "host" family, an excellent idea, and sporadic friendships grew up between the different nations. It was noticeable, though, that the party spirit only really began to bubble at its farewell luncheon, where pilots, crews and helpers all sat down together in one big hangar. Spreading meals over two Mess halls hundreds of yards apart meant that one saw too little of people — that was arranged better in Argentina, where we all ate together in a babel of different tongues instead of in a British self-imposed hush and an atmosphere of separate tables. But that is the only criticism and not a very serious one.

Briefings in English, French and German were very clear indeed, though perhaps a little fast for anyone whose native tongue was something else. It helped to be able to follow in two languages and thus get a repeat of points not quite clear the first time. Would it be reasonable to make a tape-recording at the time so that one could listen again if necessary?

This, of course, brings up the whole



The lounge in No. 2 mess (Photo A. E. Slater).



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question of mechanical aids, of which infinitely its greatest is the use of radio.

At present, the team without radio works at a tremendous disadvantage, and the solo competitor at a greater disadvantage still. It was a revelation to sit listening in the base tent and to realise just how much invaluable information can be passed from pilot to pilot, and how much time can be saved by retrieving crews being in direct contact with their pilots. In one case at least I was told that a retrieve crew far ahead were able to report on the weather in their vicinity and so warn the pilot of an area to avoid.

I see no reason (except an ethical one) why this should not be extended to cover a whole series of local weather reports from friends dotted about the country, but I am not at all sure that this is really in the spirit of gliding as we should like it to be. Perhaps the time has come to revise our Contests so that the bird-man as such — the natural glider pilot — could compete against other individual bird-men, while

the countries competed in teams with all possible aids and devices! That is clumsily put, but surely the division into Standard and Open Class has become out-dated? What one wants to know is how one's crack pilots can fly *personally* in other places and other conditions by their own skill alone. Firstly, who is the best individual glider pilot in the world? And secondly, which country can put up the best team, trained as a team and aided from the ground in any way they please — by their choice of suitable sailplanes, their meteorology services, their proficiency in radio, and their use of any other modern scientific skills? It has interesting possibilities — even though it might produce a kind of factory-based team as in motor-racing, and perhaps become too professional, it could be of great help to the designers. Certainly I think the individual class should remain entirely "amateur" and preferably fly without radio, or gliding becomes a different thing altogether from the sport we have known and cherished for so long.

GLIDING IN SWITZERLAND

By HUMPHRY DIMOCK

WHEN the B.G.A. asked for someone to represent Great Britain in the Swiss National Competitions I remembered a wonderful film I had once seen of gliding in that country and applied at once.

My wife was the natural nomination for crew member, John Limb, our club treasurer, came as crew chief and No. 3 was our 20-year-old niece, Isobel.

We started from home in the evening of 28th April and arrived at Grenchen on 30th April at 3 p.m., when the weather was so perfect that we rigged and I flew for an hour, unshaven and travel-stained. Before flying I was warned not to risk landing out over the mountains as the trailer might have to travel 200 km. even though the glider was only 5 km. over the ridge.

The ridge runs for approximately 120 miles roughly east-west, and averages 3,500 ft. above the plain. In sunshine the anabatic wind would lift the glider at an average of 2 knots and the frequent thermals would give off-the-clock lift. All sorts of birds use the ridge for soaring, particularly large brown buzzards flying close to the trees in their search for food. The closer one flies to the trees the stronger the lift.

Switzerland may be called a glider pilot's Paradise because the airways have to be 2,000 ft. above the highest peaks. Navigation is easy as the lakes and mountains of various sizes are readily recognisable. Nevertheless it is no country for inexperienced cross-country pilots, the fields being small and obstructed. I was often horrified to see gliders circling low down among the peaks in the snow-covered clearings, with no hope of getting back to the plain if the thermals did not develop.

The briefing was all in German, and as I did not have an interpreter to myself I had to go round afterwards and glean what information I could get about the task for the day.

The first task was a 100-km. triangle, and on the first leg along the ridge in

good weather I passed ten of the twenty-four competitors. But half-way on the second leg the route was over a heap of snow-covered mountains up to 4,500 ft., capped with a huge raining storm cloud. One was supposed to fly through the storm to find and photograph a church in a valley, but I was cautious and went partly along the third leg back to Grenchen and up the valley to the church, which I reached at 700 ft. Back on the third leg the rain started, and I looked up at snow-covered mountains on both sides of a valley too narrow for turning. Below me the valley was heavily populated ribbon development with small fields surrounded and crossed by telephone wires, high-voltage electric cables slung from side to side of the valley, and similar delights.

Seeing a glider land ahead of me in a long, narrow field with large snowdrift remains along the sides, I dived down and stopped a wing-span behind him with a sigh of relief. He proved to be a previous Swiss champion.

There was nothing special to note about Days 2 and 3, and Day 4, a goal race of 124 km., was so poor that nobody did very well. I passed 2X, but too few others scored to make it a competition day. Two other gliders landed with me, each in near-by fields within shouting distance and each big enough for just one glider.

Day 5 was an ambitious 320 km. out-and-return race, and again I passed 2X, but scored only moderate marks as two pilots who had started early covered nearly half the distance, compared with my 60 km.

At the end I was given a very beautiful clock as a prize. This I felt was undeserved as I had not at any time been high in the scoring list. The Customs Officer commented on its high quality, Isobel smiled, and he charged no duty. As Philip Wills had previously advised me, "If the weather is too bad for flying, do not worry, the Swiss people are so very nice".



THE KRONFELD CLUB

74

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A full report on the Club's most successful art exhibition at the World Championships appears elsewhere. In passing, we would like to thank all those club members who gave up time to prepare the exhibition, particularly Pat Anderson, who produced the prefabricated stands for us. Our Annual Exhibition and competition will, as usual, be held during the month of November. Entry forms now available.

Marshal of the R.A.F. Sir Dermot Boyle, G.C.B., K.C.V.O., has kindly consented to open the Exhibition at 8 p.m. on the 3rd of November.

The Club's Annual Dance is scheduled

for Friday, 22nd October. It will take place on the premises and a Buffet supper and music will be provided — more details next issue.

22nd September should be an opportunity for one and all to air their views on rating and marking systems. Flight Lieutenant Coatesworth will propose, "That the present rating system should be changed in the interests of the Gliding Movement". He will be opposed by Wally Kahn.

6th October. Sqd.-Ldr. Johnny Ward, who was well-known in the movement when he was on the B.G.A. Council some ten years ago, is coming along to talk on "Safety in the Air" and his talk will be supported by a film on the subject.

Please note the Club is now open 6 p.m.-11 p.m. Monday to Friday.

The lecture room is available for hire for meetings, film shows or parties at reasonable rates on any evening other than Wednesdays.

Y. C. B.

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A new book about the history of soaring flight.

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An informative introduction to gliding written in non-technical language.

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Exciting adventures for young people.

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BRITISH GLIDING ASSOCIATION

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

- Aug. 11. The Regionals.
- „ 18. "On throwing away the winch", by Roy Procter.
- „ 25. 1965 Paris Air Show.
- Sept. 1. Severn Wildfowl Trust Film.
- „ 8. Flying Reminiscences by Sheila Scott (Governor of the 99th).
- „ 15. The Gliders at South Cerney: a detailed look by Frank Irving.
- „ 22. Rating System Debate (see above).
- „ 29. Films: European Grand Prix, Rolls-Bentley Pageant.
- Oct. 6. General Aviation Safety Committee. Talk and film by John Ward.

HOW THE R.A.F. SUPPORTED THE WORLD CHAMPIONSHIPS

IN the Autumn of 1963, at the request of the British Gliding Association, through the Ministry of Aviation, the Air Ministry agreed that the Royal Air Force should play a large part in the organization of the 1965 World Gliding Championships, including making available the airfield at South Cerney, with all its facilities, for the whole period. There would be accommodation for about 700 civilians, a fleet of Chipmunks with Service pilots for towing, catering facilities for all competitors and helpers, and supporting manpower for this task from the Royal Air Force.

A Fighting Service was to play host to a largely civilian international gathering equal in size to the population of a large village, which would entail increasing the resident population of South Cerney threefold for a period of four weeks. To add interest, everything associated with the Championships had to be conveyed in three languages: English, French and German.

A Ministry of Defence Steering Committee was formed, under the Chairmanship of Air Vice Marshal Chacksfield, and, working in close co-operation with the B.G.A. World Champs. Committee, settled down to the task of dealing with the detailed arrangements. The Station Commander at South Cerney, Group Captain Peter Ottewill, watched his quiet and peaceful Cotswold Station change drastically and expand until it seemed to be bursting at the seams. To make way for the influx of visitors, part of the Station's commitment was transferred to R.A.F. Shawbury to make room for the mixed bag of arrivals. A vast amount of equipment had to be moved in, including 540 extra beds, over 2,000 blankets and sheets, over 7,000 pieces of cutlery, 4,000 glasses, etc., etc.

Over 300 additional Service personnel were attached to the station to cater for, house and generally look after the needs of this self-contained cosmopolitan village. Provision had to be made for servicing of aircraft and ground equipment, manning the crash and rescue vehicles, air traffic control facilities,

transforming a "non-flying" station into a busy flying unit, housing 32 Chipmunks and approximately 100 gliders. As the months went by, the R.A.F., including a large proportion of R.A.F. Gliding and Soaring Association members, worked on planning and on the moving, allotting, receiving and checking, with the result that by 22nd May this year the station was ready to receive its first visitor.

In preparation for the Championships, the R.A.F. arranged a full-scale rehearsal at R.A.F. Bicester in April, obtaining a great deal of useful information, particularly about the launching organization. It was controlled entirely by members of the R.A.F.G.S.A.; that is why, at the World Championships, their members were in control of the flying, engineering, communications and equipment, and so contributed to the smooth running of the championships.

During the practice week, commencing 22nd May, the influx of visitors steadily built up until, by the 29th, all teams and supporting personnel had arrived. The near-by R.A.F. station at Lyneham, a busy Transport Command station, became busier still when twelve C119 "packet" aircraft brought the Belgian and Italian teams and their equipment. Another near-by R.A.F. unit was provided for visitors by air when South Cerney was too busy with competition flying.

The training week proved most beneficial; the whole launch organization was thoroughly rehearsed, the station catering staff had a foretaste of the problems which would face them later, the R.A.F. telephone operators who manned the tiny switchboard in station headquarters were given a sample of the 1,000 calls a day which they were to deal with, a large proportion from overseas and in a foreign language; and in particular, the station administrative staff were at last able to see the results of all their efforts over the past few months taking shape.

On the cold, wet and windy Opening Day, a little warmth was introduced

to proceedings by the R.A.F. acting as hosts at a formal luncheon to all Ambassadors and team captains. A short but entertaining flying display followed the ceremony.

On the six contest days available in the following two weeks, the team of R.A.F. Chipmunks flew a total of 660 hours and provided 2,667 aero-tows. The smooth and efficient towing organization greatly impressed all competing pilots, and a launch rate of 23 seconds enabled a whole Class of 40 gliders to be airborne in 16 minutes. Great credit for this must be given to the tug pilots, all volunteers, many of whom had only recently been introduced to the intricacies of towing, and who varied in experience from V-bomber captains to Lightning fighter pilots, with a few experienced competition glider pilots forming the hard core.

Yet the achievement figures of the flying organization are small compared with the catering statistics. The 75 senior N.C.O.'s and Airmen of the catering staff produced and served over 100,000 meals during the Championships, provided 500 packed lunches on each flying day, and ran a continuous 24-hour catering service throughout. A tragic sequel to this great achievement was the sudden death of the man responsible for it, Flt.-Lt. John Rees, who met with a fatal motoring accident when returning to South Cerney during the last week of the Championships.

Despite the weather, the ground organization ran smoothly and most sections were manned continuously. On the technical side, invaluable help was given to competitors by the team of R.A.F.G.S.A. experts. Over 900 batteries of all shapes and sizes were charged, instruments were adjusted, serviced or repaired, and much "burning of midnight oil" took place in the instrument and electrical servicing bays and station workshops. The ground crews of the Chipmunk Squadron achieved the remarkable record of maintaining over 95% of the aircraft serviceable every day. This greatly impressed our overseas competitors, who marvelled at the stream of Chipmunks which emerged each day.

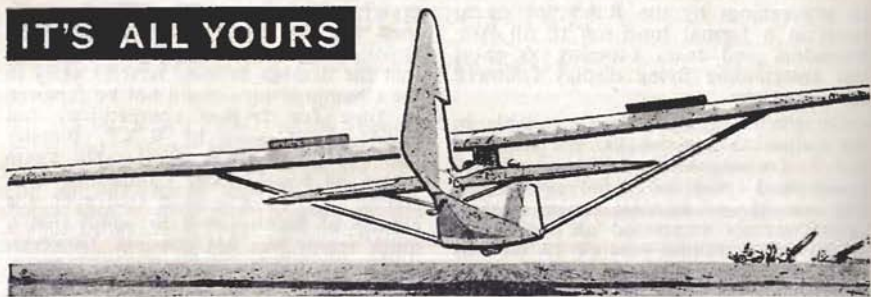
The Russian team were extremely

grateful and impressed with the help they received from the technicians of R.A.F. Bicester. They were convinced that the damage to their KAI-14 early in the Championships could not be repaired in time for further competition; but expert repair work by R.A.F. Bicester had the glider fully serviceable again within 48 hours. Later damage to their second KAI-14 was such that even the experts at Bicester had to admit that a quick repair was not possible. However, they managed to achieve the "impossible" with a very quick repair to yet another Russian casualty, the A-15, which sustained damage to a wing and fuselage. While all this repair work was being carried out at Bicester, the Russian team received the hospitality of the Station Commander, Wing Commander S. M. Russell and Squadron Leader E. S. Robertson, a R.A.F.G.S.A. member of the championships technical staff, who escorted them to such places of interest as Bladon and Blenheim Palace to see Sir Winston Churchill's grave and birthplace.

Out of the public eye, but very much in the public hearing, were three airmen from R.A.F. Henlow, who manned the R.A.F. Public Address system and provided continuous music throughout the day, representative of all nations and ranging from Bach to the Beatles. The R.A.F. provided a large number of battery-operated walkie-talkie sets for some of the key personnel, enabling the whole organization staffs to keep in touch, so that fast executive action was ensured when needed.

A problem which caused worry to some was how to avoid an air of "militarism" when large numbers of uniformed Service personnel, subject to Service discipline, were integrated with civilians into one organisation. The R.A.F. were as keen as anyone to avoid this, and agreed to limit the amount of uniform to be seen to the minimum, those in uniform being confined to station personnel and tug pilots. All the R.A.F.G.S.A. members working in the various departments, e.g. launch and marshalling organization, technical, equipment, guest flying, etc., though on duty, wore civilian clothes. In the result, there was certainly nothing militaristic about the event!

IT'S ALL YOURS



NOW that the World Championships are over, I hope to spend much more time on Instructor Panel matters and future plans. During the past year John Everitt has largely been doing my job as well as his own, and I would like to express my gratitude for his help. My thanks also to Doug Bridson not only for his two excellent articles on cloud flying, but for his fine demonstration flying at South Cerney. Any instructor will know that he has quite a way to go, if he watched Doug's display at the prize-giving, with its superb finish.

C.F.I.'s Conference

There will be a conference for Club C.F.I.'s in November, from Friday 12th to Monday 15th inclusive. Discussions and lectures will be concentrated on the Saturday and Sunday, with opportunities for flying, including check tests if required, on the Friday, Monday, and possibly the Saturday morning. The programme will include discussions on future instructing policy, advanced training of pilots and instructor training. Talks will be on the avoidance of spinning accidents, stability and control, and the teaching of thermal soaring.

The conference will be at Lasham, and will be restricted to the C.F.I.'s of Member and Associate member clubs, who may bring one other instructor. A circular with further details will be sent later to clubs.

Although on paper there are plenty of instructors, there are not many who are highly skilled with a broad background of experience. In an expanding movement such a shortage is serious, because it is only these instructors who

are capable of becoming good C.F.I.'s, and of training new instructors. Already this year two clubs have been unable to find themselves a new C.F.I. either from within their club or living within a reasonable distance.

If we are to teach pilots, we must have instructors, and with private ownership of fast and expensive ships within the C pilot's reach, pupils must be taught well. As well as elementary flying, the instructor must be able to teach soaring, field landings and the sense of responsibility essential to cross-country flying. The fact that the club where the pupil starts may possess nothing better than a Tutor is no reason for saying that the instructor need not know about soaring. A pilot's whole future is determined to a very great extent by the impact of his first lessons. The instructor who understands the needs and skills of the soaring pilot will build the essential judgment and ability to observe into his pupils from the beginning, and produce a better and safer pilot.

The good instructor is hard to get, but it is not difficult to find why, because there are so many reasons why he does not become highly skilled, or leaves instructing. It takes too long to get in enough hours to become an instructor in the first place, so enthusiasm is often declining when he starts.

Private ownership is attractive.

The instructor's job in a not very well organised club can be frustrating. Many instructors do not do very much teaching, either because of outside commitments, or through inclination.

It is difficult to spare holiday time to go on courses.

Instructors rarely have much say in who their pupils are, or how many of them they are supposed to try and teach, as a result of which they feel much of their effort is wasted.

The opportunity to become a professional is small, pay often insufficient, and prospects negligible.

Since the future of gliding is dependent on good instructors, it is essential to attract new ones, make it possible for them to get trained quickly and well, and then keep them doing a worthwhile job. To achieve this, some re-thinking has got to be done around the instructor's position in his club.

Firstly, the instructor must feel that the job is worth-while, that the pupils he has are his personal concern, and that they are going to be with him long enough to show real results. This can be done by giving regular instructors their own pupils who will come on known dates, and who will not be too numerous. Casual pupils can be flown by casual instructors. Secondly, pilots selected to become instructors must have priority for their instructor training, so that it does not drag out unsatisfyingly for months. The C.F.I. must take it upon himself to arrange courses for U/T instructors, as well as financial help, such as Wills scholarships. Thirdly, instructors must be able to get useful and enjoyable solo flying in soaring weather, if necessary having priority on club gliders. An instructor becomes less good if he rarely flies alone, and very frustrated if he sees everyone else doing so, and cannot fly himself except when no one else wants the glider in the evening. Instructors should be encouraged to fly in competitions, and to become the most highly skilled pilots in the club.

Some re-thinking is also necessary on the professional instructor side. Although there are good exceptions, it is not often satisfactory for a person to be employed by a voluntary organisation at the mercy of the committee and policy changes, spare time treasures, and at sites without security of tenure. If someone is going to work for small pay, or at an insecure job, they would rather set up their own business, and control it the way they feel best. In England we have had a horror of commercial

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P Z L FLYING INSTRUMENTS

activities in gliding as something which will despoil the club spirit; yet if we look around we have it already in various guises, but because it is not, and is not likely to become, big business, no one has bothered. I feel that it would be better to recognise that a framework within which some commercial operation and competition is possible might help to provide more and better flying operations. In other countries the club instructor shortage has been lessened by small commercial gliding schools. A man with appropriate qualifications, and experience to sell, sets up in one of several ways: either alongside a gliding club from which he buys launches, but sell elementary training; in association with a manufacturer, using their machines for training and possibly demonstration; or on his own.

One of the difficulties in running a club is that the operation covers such a wide range of activities, nearly all of which are specialised. The new club has very real difficulty in obtaining suitable equipment, and in teaching members to use it. If the range were reduced, through such sections as instructing being run separately by someone whose whole concern it was to succeed, it would be able to get itself on to a sound basis appreciably more quickly. Commercial gliding schools have not existed in this country because of the constitution of the clubs. To allow them to develop would mean changes in the B.G.A. and negotiation with M.O.A. as to the legality of operations. But neither of these things would be onerous if they resulted

in a stimulus for instructing, and the chance of a more stable instructor situation.

I am not worried about inefficiency any more than at present; the advantage of a commercial undertaking is that if its wares are unsatisfactory no one will buy them, and the operator will either have to improve or get out.

ANN WELCH

COLLISION-COLLISION-COLLISION

Within a year there have been three collisions between gliders while thermal-soaring. That no one has ever been injured does not make the situation less serious.

As well as keeping a really good lookout and obeying the B.G.A. regulation circling in thermals, it is recommended that:

Unless you are absolutely certain that there is no other glider in your thermal, or anywhere near, you should never make any abrupt or large change of direction or speed when centring, or joining or leaving a thermal.

Unless you are absolutely certain that the pilot of another glider has seen you, and knows exactly where you are, you should never follow closely or remain flying in its blind spot, particularly if there is only a small number of gliders in the thermal.

C.F.I.'s please publicise.

ANN WELCH, *Instructors' Panel*
P. MINTON, *Safety Panel*

COACH AND CAPSTAN

The B.G.A. is running an Instructors' Course at Lasham Airfield, by courtesy of the Lasham Gliding Society, from Saturday, 18th to Sunday, 26th September, 1965, inclusive. The Course will be run by John Everitt. Candidates may be eligible for Wills Scholarships. The basic charge for the Course is £7 15s., inclusive of £2 2s. temporary membership of the Lasham Gliding Society. Other charges are:

Accommodation, 3s. per night; food, between 10s. and 12s. per day; motor

launch (Capstan), 5s. 6d.; aerotow 2,000 ft. (Capstan), £1 15s.

Solo flying will be possible in Lasham aircraft at current rates.

Applications to B.G.A. office as soon as possible.

BLACKBUSHE AIR DISPLAY

As advertised on page 355, the Three Counties Aero Club are holding an International Air Display on Saturday, 4th September, starting at 3 p.m. Derrick Goddard, C.F.I. of Lasham, will be giving an aerobatic display in a glider.

DUTCH NATIONAL CONTESTS

12th—25th June

By J. TH. VAN ECK

AS there was a small overlap between the World Championships and our Nationals, it was impossible for Ed van Bree (National Champion, 1964) to defend his title. Therefore this contest was not a Championship; however, nearly all the other pundits took part. It was held, as usual, at the National Gliding Centre, Terlet.

The weather was constantly influenced by low-pressure areas over the British Isles, so strong south-westerlies prevailed, and the tasksetters were more or less bound not to give tasks into wind, and no triangles were set. Nevertheless, tasks were set on 10 days, which resulted in eight contest days.

Among the 30 participating gliders were 15 Ka-6's, 6 Ka-8's, 4 Sagittas, 3 Ka-7's (flown two up) and 2 Skylark 2's. Launching was by winch with eight cables from two independent strips, and this system proved to be very satisfactory. On the eight contest days 235 competition flights required 343 launches, an average of 1.46 launch per flight.

After the Opening Ceremony on the evening of the 12th June, the first task was given on 14th June. Under complete cloud cover the pilots struggled their way out from Terlet on a 159 km. out-and-return, but nearly everyone landed after 20 km. Only Bernsen rounded the turning-point and landed after 140 km., and Rijk Breunissen after 65 km. No contest day.

TUESDAY, 15TH JUNE.—In a 20-knot S.W. wind with 4/8 Cu., a race of 112.5 km. to Witten (a gliding site in the middle of the Dutch T.T. circuit) was set. 18 pilots completed the task with Bernsen fastest at 79 km./h., followed by Mölling, 74; Rijk Breunissen, 71; Dekkers, 68.5; and van Melzen with 67 km./h.

WEDNESDAY, 16TH JUNE.—A race to de Voorst was set under similar conditions as on the 14th, again a No Contest day resulted.

THURSDAY, 17TH JUNE.—Race to Borkenberge, 98 kms. In a 25-km. north-westerly, van Melzen flew this task in

just under one hour, achieving 100 km./h. Among the nine others who reached the goal were Rijk Breunissen, 92; Dekkers, 90.5; Fernhout, 88; and Rab, 83 km./h. Overall Rijk Breunissen took the lead, followed by van Melzen and Dekkers.

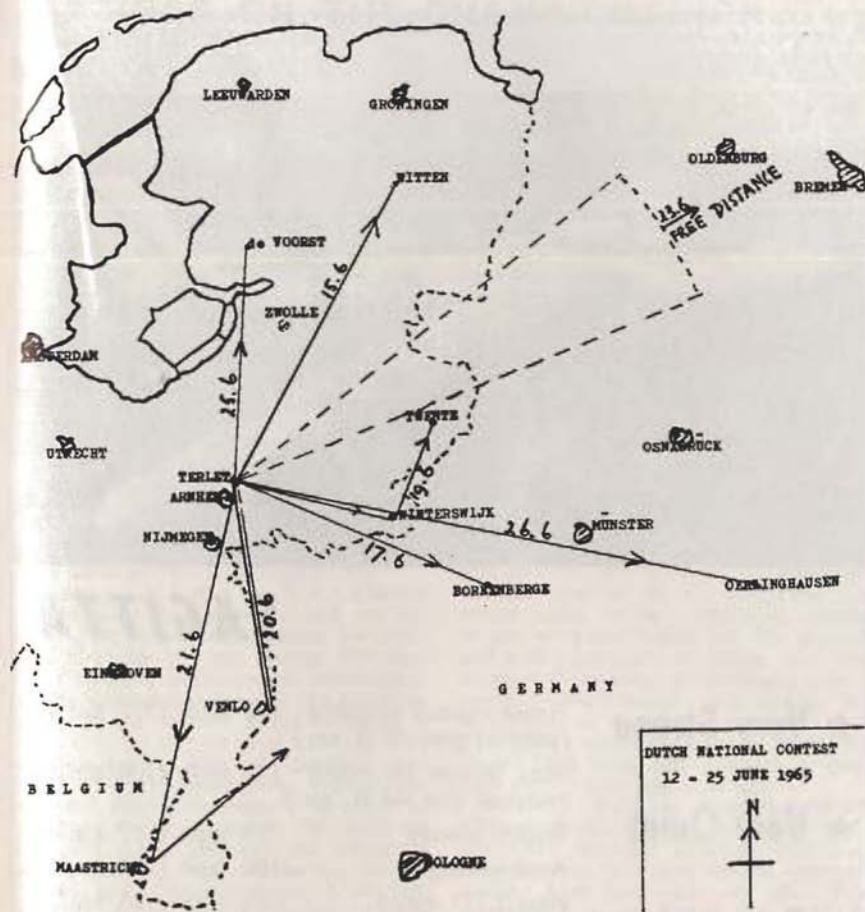
SATURDAY, 19TH JUNE.—After a front passage on the 18th with a south-westerly gale, a race was set to Twenthe via Winterswijk, 95 km. Although 20 pilots reached the turning-point, due to over-convection only Dekkers and Mustert reached the goal at 80.5 and 50.5 km./h. respectively. Dekkers now took the lead, Rijk Breunissen was 2nd and van Melzen 3rd.

SUNDAY, 20TH JUNE.—A fair day with a 12-kt. wind and 4/8 Cu. An out-and-return to Venlo, 158 km., proved to be a good task with 13 pilots completing it. Best time, van Melzen, 52 km./h., which now gave him 2nd place overall.

MONDAY, 21ST JUNE.—The forecast gave a moderate wind at first, increasing later with very good thermal conditions; the task, distance along a line through Borkenberge via Maastricht in the south of Holland. This brought 500-km. distance flights within reach without having to cross the "iron curtain". The wind, however, proved to be too strong and nobody reached the turning-point. Best distance was by Dekkers, followed by Jungblut and van Melzen.

TUESDAY, 22ND JUNE.—Free distance was set with a 25-knot wind blowing from the south-west. Due to showers in the morning, the start opened at 13.15 hours. At that time conditions were quite good, but further on in northern Germany clouds became scarce. However, nine pilots reached or passed Bremen with Rijk Breunissen furthest, 287.5 km.; Huberts and Linders (Ka-7), 258.5 km.; and Bernsen, 255.5 km. Dekkers, who wanted to go too fast, ran into trouble and came unstuck after 62 km., which brought van Melzen, 195 km., very close behind him in the overall positions.

THURSDAY, 24TH JUNE.—After a rest



day, racing again, this time to de Voorst, 70 km. This task was a bit too easy and 25 pilots reached the goal, making speed very important (something like 30 points per minute). Rijk Breunissen flew the task in 51 minutes, closely followed by van Melzen and van Steinfoorn. Dekkers took four minutes longer than van Melzen and this was sufficient to change places overall.

FRIDAY, 25TH JUNE.—The eighth and last day brought a strong south-westerly again with favourable conditions, and a race to Oerlinghausen, 188 km., was set.

Van Melzen kept his first place by making the fastest time, nearly 90 km./h., and 17 pilots reached the goal.

Final leading results:

1. van Melzen	Ka-6	6858
2. Dekkers	Ka-6	6586
3. R. Breunissen	Ka-6	6404
4. van Steinfoorn	Sagitta	5999
5. Bernsen	Sagitta	5588
6. Jungblut	Ka-6	5284
7. A. Breunissen	Ka-6	4890
8. Mölling	Ka-6	4882
9. Breukink	Ka-6	4824
10. Rab	Ka-8	4779



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JOTTINGS ON THE CHAMPIONSHIPS

By PHILIP WILLS

IT is clear that, after the outstanding success at South Cerney, the future of the British Gliding movement will be radically altered. For the better? That is up to us, for it is often as difficult to cope with success as with failure.

We could expand too rapidly, and lose control. Almost certainly the day is nearer when running the movement with devoted enthusiasts in their spare time will prove too much, and when a revision of the set-up of the B.G.A. will become essential. It is too early yet to focus these matters, and here I will mention only a few of the aspects which occurred to me.

BRIEFING.—The system of carrying out briefing mainly by visual aids was a brilliant success. Multi-lingual briefing has always been a headache at previous World Championships. At South Cerney briefing took from 20 to 30 minutes—there were practically no questions.

TASKS.—C.V.S.M. (The F.A.I. Gliding Commission) has always, and to my mind quite irrationally, pressed for common tasks for the two classes. The idea is to produce quite useless information on the relationship between the performances of the aircraft flying in each. It does nothing of the sort. But it *does* (a) increase the size of "gaggles", and gaggle-flying is undesirable—it is inevitable but should be reduced as much as possible; (b) it increases the collision risk and (c) it increases the necessary size of the tug fleet, and so the cost of running the Championships. A smaller number of tugs can launch two classes on different tasks at different start-times.

RADIO.—I have always pressed for radio in both classes. This time we got it—and much, much more. Enormous base radio stations navigating their pilots round the course, mobile stations running round the course giving advance information, pilots helping each other. The valid case for radio lies in speeding retrieves, and so lessening pilot exhaustion and preventing rest days which may be necessitated by it. But anything which makes the result rely less on the pilot's individual skill is flat against the basic idea of our sport.

When C.V.S.M. rather reluctantly agreed to radio for the Standard Class at South Cerney, I suggested limiting it to one transceiver in each glider and one in each retrieve car. This was rejected—I hope we can agree to recommending it again. One could even limit each to a single channel. If those at base want fun, and information to help entertain the public, they could have receivers only. People may say one could cheat. One could cheat now, by such means as coded communication of identification letters at turning-points. One doesn't.

AIRCRAFT.—A dazzling display. The D-36 shows the shape of things to come, though possibly years ahead. But the modern tendency to lower and lower gliders brings wing-tips nearer and nearer the ground and so one must find lower and lower herbage to land in to avoid the risk of ground-loops. Possibly this was one of the reasons for the high accident rate. If so, the only way out would seem to be retractable wheels, to get wing-tips higher off the ground, and with them costs get higher also. One wonders if the small performance gain is worth it, but I suspect that fashion has us all now in its grip. Certainly Skylark 3's, 419's and Ka-6's now look like Dodos—but they still perform a great deal better than that bird did.

FINANCE.—We have shown that World Championships can be organised without State financial support. This may open the way for many nations who previously have not dared to offer. Few countries may possess W. D. & H. O. Wills, but many have Treasuries which would not make an actual charge for the use of an airfield, which cancels it out.

THANK YOU's are due to so many people and organisations that here I can only mention a handful of outstanding ones: Ann, Air-Marshall Sir Augustus Walker; Air Marshal Sir Patrick Dunn; Group Captain Peter Ottewill; Earl Bathurst; and two organisations: the Royal Air Force and W. D. & H. O. Wills.

Everything else followed from the work and help of these.

REFLECTIONS ON A GLIDER

By GORDON CAMP

"SKYLARK NINER, this is Rivenhall Radar, fast traffic range 7 miles at 4 o'clock. Over."

"Skylark Niner, Roger. Four thousand feet in cloud, maintaining 290 degrees. Out."

"Skylark Niner from Rivenhall, traffic now 4 miles. Over."

"Roger, breaking cloud. Out."

"Skylark Niner from Rivenhall, if you still read then traffic is above or below you! Over."

"Rivenhall Radar, Skylark Niner, have traffic in sight. Out."

Many pilots listening out on 130.4 mc/s will recognise the context of this conversation; it was typical of the radio communication throughout each working day of the Marconi radar trials. It also symbolises the purpose of the trials, which was to improve the radar reflectivity of wooden sailplanes and reduce air-misses. The tests were conducted on behalf of the Ministry of Aviation by Marconi Ltd. of Chelmsford in conjunction with the London Gliding Club, who supplied the tug, the glider and the pilots. The contract was to continue from the point where experiments made by Farnborough some years ago left off.

Tests began last October at Ipswich Airport using the prototype Skylark 3 (Competition No. 9) equipped with a Pye Bantam transceiver. Jim Wingett, Mike Till and John Cardiff were the regular pilots employed, sharing the tugging and the gliding between them; whilst Don Gerrard gave assistance on the ground; in the latter stages of the trials Colin Richardson, Ian Burgin and myself helped out with the gliding on occasions when one or other of the regulars was indisposed. For the first few weeks all the flying was done from Ipswich, but as the regulars became more and more nervous of sharing clouds with the local F-105 interceptors, it was decided to operate from Weeley Heath near Clacton, using Ipswich just for hangarage. At Weeley the local farmer owned a Piper Commanche and had subdivided his largest cornfield by

two grass airstrips, conveniently of 18½ metres width!

Basically, all that Marconi required was that the glider be presented to them in level flight at different angles. Thus the Skylark was simply aero-towed by the Tiger Moth to three or four thousand feet, then made its descent on different headings dictated over the radio by Marconi's radar station at Rivenhall, near Braintree. Up to the time of writing some 200 such descents had been made, though the contract was then drawing to its close.

An initial series of tests was carried out with the Skylark in standard trim with no reflectors attached. Then for the second series No. 9 was adorned with 40 or 50 strips of five thou' (0.005 in.) aluminium foil strips about ¼ in. wide and of lengths equal to the radar wavelengths. These strips were intended to improve reflection of the commonly used 50-cm. and 23-cm. radar wavelengths — which indeed they did. For the next set of tests the strips were retained but the Skylark was further modified by the insertion of a rectangular reflector filling the fuselage just behind the cockpit. This reflector consisted of three sheets of 20 gauge (0.036 in.) aluminium sheet mounted orthogonally (at right angles to each other); this was designed mainly to increase reflection of 10 cm. radar, but it also improved response to the 3.2 cm. variety. For the final series of flight tests, just the internal reflector was carried.



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Of interest is that a timber glider gives maximum reflection in the head-on, tail-on or broadside attitudes, and significantly less at intermediate slant angles. Angle of bank makes little difference, surprisingly not even in the broadside view.

It seems that future wooden gliders will need both the foil strips and the rectangular reflector built somewhere into the structure. For existing sailplanes the reflector may become a compulsory accessory, but it is hoped private owners will be spared from having to stick the foil strips on their laminar-flow surfaces. The Marconi contract should prove of lasting benefit to gliding and, far from restricting our cross-country movements, the results may even lead to greater freedom in the airways.

O.S.T.I.V. CONGRESS

By A. STIRNEMANN

THE 10th Congress of the Organization Scientifique et Technique du Vol à Voile was held from 4th to 12th June, 1965, at South Cerney, England.

At the opening ceremony, the 1965 OSTIV Plaque for outstanding scientific work was awarded to the British meteorologist, C. E. Wallington. OSTIV diplomas were given by the President, Mr. L. A. de Lange, to Mrs. M. L. Schwarzkopf and Mr. E. R. Lichtenstein (Argentina) for the best meteorological paper presented at the 9th Congress (Junin, Argentina), to Dr. Ing. F. X. Wortmann (Germany) for the best technical papers presented at the 1963 Congress, and to Mr. P. Weishaupt (Denmark) for the best work on the results of the 1963 Varese OSTIV course.

During the 10th Congress, 37 lectures were held on technical subjects, 21 lectures on meteorological problems, and 6 during the joint symposium.

The Sailplane Development Panel of OSTIV met under the chairmanship of Major-General Dipl. Ing. C. W. A. Cyens (Netherlands) on 10th and 11th June, 1965. They continued their discussions on the next issue of OSTIV Airworthiness Requirements, and had

some discussions on the Rules for Standard Class Sailplanes.

The General Assembly of OSTIV was held on 12th June. The Board, for the next period, from 1965 to 1967, was confirmed as follows: L. A. de Lange (Netherlands), President; Dr. W. Eichenberger (Switzerland), Vice-President; Dipl. Ing. J. Bojanowski (Poland), Dipl. Ing. B. J. Cijan (Yugoslavia), Floyd J. Sweet (U.S.A.), A. H. Yates (U.K.), Dipl. Ing. H. Zacher (Germany).

Mr. B. S. Shenstone, formerly chief editor of OSTIV, was appointed an Honorary Member to acknowledge his merits and his outstanding work.

Mr. H. R. Watson (U.K.) was confirmed in the office of Chief Editor.

The OSTIV Trophy for the designer of the Standard Class sailplane which had been judged to be the best combination of cheapness, simplicity and efficiency, in particular with respect to club use, was awarded on the recommendation of the Jury (Chairman, L. Welch, U.K.) to Slingsby Sailplanes for their design of the Dart 15.

Special commendation was given to W. Okarmus, the designer of the Foka 4.

O.S.T.I.V.

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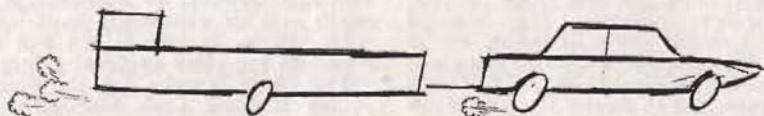
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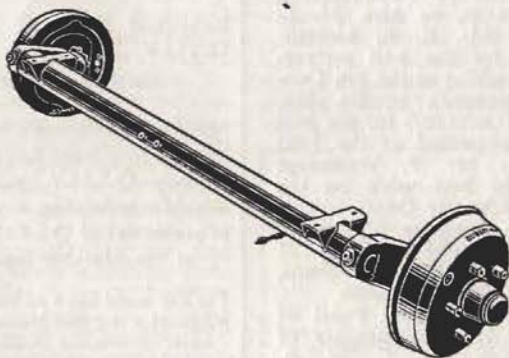
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WESTERN REGIONALS

NYMPFIELD—26th June—4th July

By T. R. GARLAND

DURING the contest period every day proved to be soarable and, out of a possible nine days, tasks were flown on seven. The weather was kinder than it has been all year, and the record number of contest days gave the competitors one of the best competitions for a very long time.

The 21 competing sailplanes were launched by three tugs and everyone could be airborne in under an hour. The only serious incident had a happy ending. After a collision between Ralph Jones and David Roberts, the former successfully parachuted and the latter regained the field; neither was injured. Ralph, in fact, continued to fly *hors concours* in a replacement glider.

26TH JUNE.—Race from Nympsfield to North Deans (Gt. Yarmouth), 291 km.

Those who wanted Gold Distance or Diamond Goal were towed a few km. west for the full distance. In a moderate westerly Tony Gaze made it first. His average speed was 111.3 km./h. which, had he been towed up-wind for the full 300 km., would have beaten the U.K. Goal record by 8 km./h. Twelve completed the task.

Leading Places

1. F. A. O. Gaze. 2. S. Redman. 3. M. Randle.

27TH JUNE.—Out-and-Return, Long Marston, 118 km. 15 kts. N.W. wind and spreading cu. 17 got round the turning-point and 12 finished.

Leading Places

1. C. Pennycuik. 2. P. M. Scott. 3. S. Redman.

28TH JUNE.—Distance along a broken line, Nympsfield-Duxford-Perranporth.

A light westerly turned out stronger than expected and thermals weaker. This ruled out the possibility of 500 km. Peter Scott flew 311 km.; John Fielden, close behind, was within a mile. All the others reached or got round Duxford.

Leading Places

1. P. M. Scott. 2. J. S. Fielden (H.C.). 3. S. Redman. 4. S. Waller.

29TH JUNE.—Out-and-Return, South Marston, 80 km. Wind, 15 kts., E.N.E.

Under spreading cu. this proved more difficult than anticipated, but 7 completed the task. Tony Gaze found a new use for RT when he overshot his field landing and was wedged firmly under a hedge, unable to open the canopy. His call for help was promptly acted upon by his crew.

Leading Places

1. C. Pennycuik. 2. R. A. Sandford. 3. S. Redman.

30TH JUNE.—The task was cancelled due to haze, but the day later improved and several pilots soared the north ridge during the evening.

1ST JULY.—5 times round 20-km. Triangle, Nympsfield-Ozleworth Tower-Til-tups End lay-by.

Early in the day the weather did not look promising, but was good at take-off time. Wind, light northerly. As nearly all competitors had radio and they could be seen all the way round from the clubhouse, this task proved to be excellent spectator entertainment. It also provided an opportunity to test the value of radio at turning-points. Crews kept pilots informed of lap times, which were from 12 to 25 mins. On landing, pilots were enthusiastic about the task. 17 completed, and several laps were subsequently flown by a number of sailplanes' alternate pilots. The winner's average was 60 km./h. Best lap by Dennis Corrick in 12 mins.

Leading Places

1. S. Redman. 2. S. Waller. 3. P. M. Scott.

2ND JULY.—Race to Lasham via South Marston, 106.6 km.

This course was chosen to avoid Lyneham control zone. Wind, light N.W., more spreading cu. This task looked difficult and conditions were obviously deteriorating by the last launch. Only Simon Redman got there, in 1 hr. 30 mins., but 16 scored.

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Leading Places

1. S. Redman. 2. J. Smoker. 3. R. A. Foot.

3RD JULY.—Race to Keevil, 46.5 km. Wind, light northerly.

In haze and weak lift 8 did it the hard way, but 2 climbed high in cloud up-wind of the start to glide-out, one of these was Mike Randle, who won the day at 70 km./h. average, using the ploy of crossing the start and then returning to his cloud up-wind.

Leading Places

1. M. Randle. 2. C. Donald. 3. J. Smoker.

4TH JULY.—No competition task.

Scoring was by the Wallington ranking system. Chief scorer, Tony Pentelow. The daily winners received individual prizes and the Challenge Trophy, given by Sir Egbert Cadbury, Bristol G.C. president, was presented to Simon Redman by Ann Welch. Cheques also went to the first three in overall placing.

With task-setting by John Fielden, met. forecasting by C. E. Wallington, Tiger Moths from Dunkseswell and the Tiger Club, and the unstinting help of

tug pilots and members of the Bristol G.C., this event did more than enough to restore faith in Gloucestershire for gliding. Warm appreciation goes to all those who made it possible.

FINAL RESULTS

Place	Pilot	Sailplane	Club
1.	S. Redman	Skl. 4	Cambridge
2.	C. Pennycook & S. Waller	Ka-6CR	Bristol
3.	P. M. Scott	Oly. 419	Bristol
4.	C. Donald & G. Cornell	Skl. 3F	Perkins
5.	J. Brenner & J. Pickett-Heaps	Oly. 2B	Cambridge
6.	R. A. Foot	Skl. 3F	Yeovilton
7.	M. Randle & R. Swift	Dart	Midland
8.	J. Smoker	Skl. 4	Oxford
9.	R. A. Sandford & P. Etheridge	Oly. 463	Bristol
10.	F. A. O. Gaze	Std. Aust.	Bristol
11.	J. Stuart-Menteth & Jane Warner	Oly. 463	Bristol
12.	J. Webster & G. McBroom	Skl. 2	Bristol
13.	L. Redshaw	Skl. 3F	Lakeland
14.	D. Corrick & R. Perrott	Std. Aust.	Bristol
15.	R. Prestwich & S. Wills	Skl. 4	Midland
16.	C. Simpson & P. Martin	Skl. 4	Leicester
17.	D. Roberts & M. Gibbons	Oly. 2B	Oxford
18.	G. Senior & F. Jacques	Skl. 2	Surrey
19.	A. Macdonald & S. T. Soames	M-100S	London

Hors Concours

Below 9. J. S. Fielden & C. E. Wallington
Below 10. R. Jones

Skylark 3A
Skylark 3F and
Olympia 403



At the Western Regionals (L to r.): John Fielden, Simon Redman, "Wally" Wallington and Ann Welch.

REPORTS FROM VARIOUS DEPARTMENTS

HOSPITALITY

ON arriving at South Cerney at the beginning of "Hammer and Nails" Week, Ann greeted me with, "Hallo, we've given you an Office". I said "Thank you very much" and wondered why but soon found out! I went and arranged tables and chairs in said office; a "hammer and nailer" came and put up a notice board, which read "Hospitality and Parties".

This, at first, conveyed to all nations that I was dispensing free drinks, and that there was some inner den where wild parties could take place. Once this misapprehension was cleared up, we were able to get down to our work, which was, we thought, to arrange social functions for any who wanted them.

Our terms of reference in Hospitality were vague, the requests and queries varied. We did our best with this sort of thing:—

Where can I pick wild orchids?

What is the Latin for gooseberry?

Please find beds for 30 Frenchmen — at two days' notice.

From an R.A.F. Officer — Mobile Ladies' Loos now installed — please test!

And from Ann — The V.I.P. caravan is not coming; find another today. (It was found, lent and installed by Blunsden Abbey Caravan Co., within 18 hours.)

We had a few crosses to bear: One V.I.P. host who flatly refused to give visiting M.P.'s a drink if their political leaning was not in accord with his own; another whose hat was too small because the rain had shrunk it; and another who said, "I'll mind the office for you, my dear, but I'm not answering that damn phone or telling anybody anything"; and Mamie, whose beautiful floral arrangement she found being used as a hatstand; and all of us when we heard ourselves described as Hostility Office.

Never mind, there was a soulful Frenchman who asked about a rather attractive member of the Information Office Staff — "What is the name of

the lady next door, you know, Miss Information?"

And so we went from Barbecue to Banquet. I think I was the only person who was slightly relieved when Saturday 12th was a non-flying day. This meant that the pitiful cries for help from the gym. could be answered. I think the guests at the Final Banquet would have found it difficult to believe that, 48 hours before, the venue was the glider repair hangar. Mamie was up all night doing the flowers, B. B. Sharman was writing place cards fifteen minutes before the first guests arrived, the anti-bird parachutes did not quite reach far enough to protect the C.O.'s plate, and the Polish winners were lost; but it was a wonderful meal, beautifully laid up and served by the R.A.F. This last event finished with a bang — that of 2,500 balloons being popped in something under five minutes.

BARBARA WRIGLEY

THE INTERPRETERS

A nucleus of six French and German interpreters, most of whom had other jobs, kept this office manned. Tony Goodhart and Enid Paget (French) and Barbara Franken-Scharge (German) coped magnificently, and often off the cuff, with Briefing, Team Managers' Meetings and the more technical translations.

Our main job was translating into French and German for the B.G.A. and the Newsletter. Other activities ranged from manning the retrieve phones, and putting through continental calls, to writing business and bread-and-butter letters for competitors.

With much help from the B.B.C. and the R.A.F. we put on an Austrian Championships film with the English version of the Austrian live commentary.

Perhaps the most memorable episode was in the early days when a German interpreter was called over to Station Sick Quarters to interpret the M.O.'s request for a Central European pilot with an undiagnosed fever to produce the required specimens.

JANE COLE

THE OBSERVERS

WITH the development of the "Designated Launch", the prospect of observing the World Championships assumed frightening proportions, for whilst the provision of an equal opportunity for every competitor is desirable, it is obvious that if every competitor is enabled to start at the optimum moment, the Start-Line Group must be utterly defeated and the "Yachting Start" will be with us.

On most days the entire entry was airborne in the neighbourhood of South Cerney, in small gaggles at first but developing into circling flocks of twenty-five or more when weak thermals decayed before a starting height had been gained.

From time to time small groups of five to ten aircraft would dart through the gaggle to cross the line quicker than a single person could record a competition number and the seconds of the starting time.

These figures were therefore recorded separately when necessary and "paired" whenever an interval of more than a couple of seconds became available.

It seems that there is no single piece of portable equipment which can identify and record the passing of a multiple target without enormous complications, and the basic equipment for the job remained as hitherto several pairs of good eyes behind binoculars.

On one occasion 90 starts were timed in an hour and on another day 120 starts were recorded in less than two hours after half of the competitors had drifted back over the line for a second crossing.

The traditional trials of the Turning Point Observer are ever with us, and the teams travelled many miles to see not a single glider, or saw them all within one hour but remained "on duty" in case of "re-lights" or for the competitor who omitted to advise the organisation that he had landed.

There are, of course, a variety of compensations, and fresh (caught yesterday) salmon salad was served to a grateful crew at Caradoc Farm, and sherry on the lawn of Wells Cathedral is also reported. For the rest, the order of the day was the inevitable "packed lunch".

It is in the nature of the Observer's job that it shall be frustrating and dull

as well as exciting and very satisfying. For those who assisted with this aspect of the Championships it will be sufficient for them to know that on all sides it has been said that a difficult job was well done, for to have been present and part of the organisation was of itself an experience which was adequately rewarding.

ARTHUR SPEECHLEY

THE SCORERS

KNOWING the keen rivalry to be expected in the championship flying, the scorers presumed a zealotry among the pilots to be awarded their full quota of points for their self-estimated performances. So in planning the mechanics of scoring, great care was taken to minimise errors in calculation and transcription. Every step affecting the result was done twice and cross-checked; three Olivetti desk calculating machines churned out strips of paper recording the figures at each stage to a high degree of accuracy. The official scoring map was found to be slightly unreliable because of contraction in one direction while pasting it to its baseboard; so exact distances were calculated by reading off grid co-ordinates and using Pythagoras's theorem.

After preparing numerous forms, work would start in earnest about mid-day, attention being focussed first on approximate data and calculations, to provide an interim result during the evening for the Press and competitors. Then the accurate official data were used to produce the final results: in the case of a race, approximately 1,000 separate entries and calculations needed to be made and checked for each class, and the work could not be expected to be buttoned up before 2 or 3 a.m. One of the final jobs was the painting of the individual scores on the 170 slats and slipping them into their correct places on the immense scoreboard.

The success of the scoring process can be attributed to the co-operation and understanding of the pilots and to the willingness (and even eagerness) of the team of scorers to work any hours necessary to complete the score sheets in time for them to appear in print at the 9 a.m. briefing next morning.

ROBIN HARPER

THE KITTIWAKE PROJECT

(or Progress on Throwing Away the Winch)

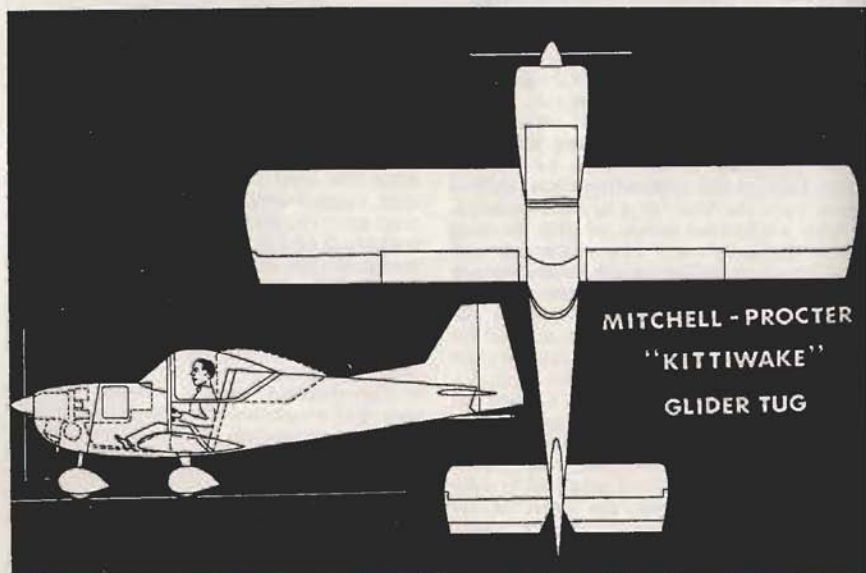
By ROY G. PROCTER

YOU may remember that I burst into print last year on the design of a specialised glider towing aircraft. Encouraged by some and discouraged by others, we have pressed on oblivious. Project work was carried out last year to determine the leading parameters for the aircraft. This had progressed by the end of the year to a state at which detail design could begin. At about this time the results of the Rollason Midget Racer Design competition were announced. I was much taken with "Scamp", an entry by Kit Mitchell and Ron Prizeman. It was an all-metal single-seater with tricycle landing gear.

Kit did not react at all badly to my suggestions that Scamp was quite good, but it really needed 30% increase in wing area, much more power, and a tow hook! The result is that a new design is being prepared primarily for towing, known as "Kittiwake", by Kit

Mitchell and myself. It is based on Scamp, but is considerably altered in many details as well as the more obvious changes.

Kittiwake is of all-metal stressed skin construction. It is a low-wing single-seater with tricycle landing gear. Power is provided by a Rolls-Royce Continental O-200A giving 100 b.h.p. Performance is calculated to give a rate of climb of 700 ft./min. with a 1,000-lb. glider on tow; this is better than the Auster 6A used by many clubs at present, and much better than the Tiger Moth. Attention has been paid to those features especially required for towing: excellent visibility all round through a bubble canopy; sturdy landing gear, tricycle with nosewheel steering for fast taxiing; good hydraulic brakes for stopping; generous flap with high operating speeds for instant descent; a proper cooling system for the engine; an electrical



system with self-starter, generator, etc.; provision for radio; a device to consume its own tow rope during the descent; good handling characteristics.

Kittiwake will be a strong aeroplane. It is being stressed for full aerobic capability and a maximum speed of 220 m.p.h. With a normal propeller, the cruising speed is expected to be 120-130 m.p.h. Provision is being made for fitment of additional fuel tanks to increase the range to 600 miles (more if possible) for the longer retrieves. We feel that Kittiwake will also have an appeal as a good, small touring aeroplane and also for aerobatics for those who like that sort of thing (rate of roll

200°/sec. at 90 knots!). A two-seat version is also foreseen.

Detailed drawings for the wing have been done at the time of writing, and construction has started. Production type press tools are being made for the wing ribs; spar end fittings are being machined and we await delivery of materials for the wings.

It is our intention to build the prototype Kittiwake and to certificate it. Then we shall be able to prove our various contentions one way or another. If successful, we would hope that a firm can be found to take on the production of Kittiwake so that the rest of you can have one!

A STANDARD INSTRUMENT LAYOUT

By DON AUSTIN, *East Midlands R.A.F. Gliding Club*

I have been interested in glider instrumentation for several years and during that time I have noticed some highly original combinations and widely differing layouts. The lay-outs vary between a complete hotch-potch of putting the instruments where they will fit, and what could be the beginnings of a standard layout, the latter more especially perhaps among the R.A.F. G.S.A. aircraft.

There are many reasons for adopting a standard system. The one more obvious reason is the elimination of the pilot error on first conversion where he turns in at a height of 40 knots and starts approaching at a speed of 400 feet. There are various other reasons, starting with ease of scan in soaring and cloud flying.

To my mind the logical approach to a standard layout is the modification to meet glider requirements of the standard R.A.F. instrument panel used in elementary training powered aircraft. Let us take the various instruments in order of their importance in their respective roles. The most prominent position in the panel is top centre and this should have the most important instrument fitted here.

The primary instrument in gliders is

the Total Energy Vario with speed-to-fly ring, and this must be top centre.

Crossfell Electric Variometers

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Top left in the powered panel is the A.S.I., and there is no reason to change this, as the importance is on a par in both spheres. Top right is the V.S.I. on powered aircraft, and since most gliders have a sensitive Vario on cockpit static this is also the place for it to be fitted. An audio attachment to the latter instrument is a tremendous advantage; the speaker should be mounted at the rear away from compasses and in close proximity to the ear.

We are left now with the Altimeter and Turn-and-Slip to fill the bottom row on either side of the horizon which has to be central because of its bulk. In powered aircraft where height and airspeed are maintained, the Altimeter below the A.S.I. is an advantage; we seldom require this facility but most of us like to keep an eye on the slip ball, so the obvious position for Turn-and-Slip is below the A.S.I. This also makes limited panel needle-ball-airspeed gyrations easier to carry out. The Altimeter goes bottom right. Most glider pilots trained in side-by-side two-seaters are accustomed to looking to the right for this instrument anyway.

This leaves the Compasses, and perhaps a word or two on them would not

come amiss. There are two main types in use — the E2 variety and the Cook. The E2 is perhaps the most accurate and certainly the hardest to use. The maximum distance it can easily be placed from the magnetic effects of varios, etc., is extreme left of the panel, or even on the cockpit side, but still adjacent to the panel. The Cook, which needs a vertical rather than horizontal viewing, is best placed halfway back on the right-hand cockpit wall. This is awkward to use when rolling out or heading in cloud, unless one is in practice, easy for a quick heading roll-out in clear air.

The above is a suggestion for a uniform layout with reasons given to substantiate the system. As with all things, the final choice is up to the individual; many people already use a panel nearly, if not completely, identical to the above. The advantage in club machines will be obvious to all instructors who have briefed pilots in strange machines. Apart from the fact that the layout is excellent to use in practice, I feel certain that a standard layout will eliminate one more potential accident hazard and should be adopted for these two reasons alone.



OBITUARY



P. R. Pinniger

AFTER a lifetime in aviation, begun in 1909 sweeping out an aircraft manufacturing shop in the archways of a railway viaduct in London, P. R. Pinniger, "Pop" to everyone who knew him, died in hospital in Fareham on 25th April.

He became a pilot before the 1914-1918 war and joined the Royal Flying Corps on 4th August. But his forte was aircraft construction and maintenance. Between the wars, he was in the aircraft industry in Chile, Japan and Greece, returned to Britain and joined a flying circus, then formed his own small aircraft company. After the beginning of World War II he joined Boulton and Paul and then moved to Cunliffe Owens

in Southampton whence he was directed in 1941 to the R.N.A.R.Y. at Fleetlands, Fareham.

It was there that, after the war, he became involved in gliding through the Royal Naval Gliding and Soaring Association. His vast experience with wooden aircraft plus superb craftsmanship and, fortunately, an acute interest in the gliding movement were a rare combination, and it was not surprising that he became the chief examiner of inspectors and chief surveyor of the British Gliding Association.

His being was in Fareham and the R.N.G.C. profited for many years from his expertise. Never have a gliding club's gliders been maintained so well. Many other clubs and pilots have also benefited from his experience and advice which was given bluntly — "Pop" never managed to call a spade anything but a spade. He was generous to a fault, a rough diamond with little business acumen, and retirement at 60 was not easy, especially as he was dogged with ill health and amputation of a leg in the latter years of his life. He never lost his interest in aviation though, and his greatest regret was that he was unable to work on and be with the gliders he had grown to love.

He was cremated at Fareham and, to meet his wish, one calm sunny evening in May, his ashes were taken for an aero-tow in the P.N.G.C.'s T-21 over R.N.A.S. Lee-on-Solent and Grange Airfield at Gosport, and then, after the tow was slipped, they were scattered over the Solent near those two airfields he had so much to do with, firstly in the 1914-1918 war and latterly with Fleetlands and Gliding and the place he had made his home

J. S.

CORRESPONDENCE

FLYING FOR SPEED

Dear Sir,

Ian Strachan's excellent article on speed flying indicates how much one ought to get organised before a flight is begun. However, before discussing a recent situation for which I was quite unprepared, I should like to correct an impression in Strachan's argument.

In-flight decisions *must* be based on dynamic planning; that is to say, one's best estimate of *future* events. Thus the previous thermal's average strength is of

no consequence if the next lift sources are going to have different space/time characteristics: e.g. cloud street, wave, sea-breeze front, weak thermal under overcast, etc. Furthermore one's altitude, starting or otherwise, is of no consequence in selecting speed-to-fly unless:

1. It permits a *direct* glide to goal faster than the optimum for the apparent thermal strength.
2. It permits a *direct* approach to a lift source having better than average characteristics, due to the operational altitude or any other reason.
3. It is wholly inadequate!

In illustration of the problems of dynamic planning and the need for more complex calculations, it is worth discussing a recent near down-wind race. The scene is set in the cockpit of Skylark 4 climbing en-route at 6 knots in 35-knot wind (track component, say, 30) in stationary wave lift. The previous lift source was thermal, giving an achieved climb over some 5,000 ft. of about 6 knots all the way from the cross-wind leg of a green and wet field. The goal is still some 80 miles away on the far side of opaque GREEN ONE. More than 2,000 ft. ticked by on the altimeter before arithmetic triumphed over emotion, and course was set. Subsequent better sums show that this wave lift was costing about 10 m.p.h. against 6-knot thermals; this 6 knot wave is slightly less profitable than 4 knot thermals.

Perhaps Anthony Edwards will produce for us the arm-chair Speed-to-fly, choice-of-lift Calculator, complete with obliquity factors, drift components and what-have-you. In the meantime I'll always find a few minutes to loaf in perpetual surprise in each and every standing wave encountered.

Ollerton Hall, Knutsford

R. RUTHERFORD

SUGGESTION FOR FUTURE NATIONALS

Dear Sir,

Each year it becomes more expensive to buy a new glider which can compete successfully in British competitions. With the introduction of retractable wheels and flaps the cost of Open Class gliders is likely to show a further sharp increase in the next few years. In view of this I find it most surprising that the British Gliding Association makes no effort to encourage Standard Class aircraft. Even the handicap advantage has been withdrawn, although we are assured that with aircraft of the same design 18 metres will give at least a 10% advantage over 15 metres.

Surely the time has now come to abandon League 2 and run the Nationals as an Open and Standard Class with separate champions. For the first year the Standard Class might be rather small, but I'm sure that, as soon as there was a proper competition to enter, many top pilots would buy 15-metre gliders. It should then be possible to select our Standard Class World Championship team from pilots who are familiar with 15-metre gliders rather than from people who usually fly 419's and Skylarks. Although League 2 has performed a very useful function in the past, its job can easily be taken over by the excellent Regional Competitions now held.

I suggest that it should be announced now that Nationals like this will be held in 1967, and people told exactly what they have to do in 1966 to qualify. Personally I feel that the rating scheme should be abolished and pilots should qualify by their performance in the previous year's Nationals or one of three or four Regional Competitions. This would enable scoring systems to be altered if required.

Waresley Park, nr. Sandy, Beds.

SIMON REDMAN

THE 1966 NATIONALS

Dear Sir,

At the recent World Gliding Championships, the Standard Class was deemed to be the senior class because of the greater number of entries. It seems likely, if this precedent is followed in future World Gliding Championships, that the size of the Standard Class will grow even further. In this country there are more

Open Class gliders of reasonable quality available than Standard Class, and this probably reinforced the Open Class even more. In most countries, the reverse is true. It is also, of course, a fact that Standard Class gliders happened to win both classes.

The method followed in recent British Nationals was to declare a British Champion and also a Standard Class champion provided he obtained 80% of the marks of the winner. This gives little or no encouragement to pilots of Standard Class gliders. There is little doubt that a large glider enables a pilot to climb out of a "hole in the ground", while the Standard Class glider is forced to land. Most pilots will opt for the big glider, if given the opportunity, and if they want to win.

The flying of Standard Class gliders is different from big ones, and if we wish to do well in future World Championships, this Class must be encouraged so that the best pilots opt to fly them.

There are several possible methods.

The first and easiest is to say that all Standard Class entries in League 1 will have a 10% plus handicap. This is probably more than is justified by average performances, but it does provide a positive encouragement. The top scoring pilot of any Class is then the Champion.

The next method is to divide League 1 into two Classes scored together and say that the British Champion will be automatically the winner of the Standard Class, even though he may not score as many points as the winner. This may seem odd, if entries are weighted very much the other way, and scores are well down.

The last method is to have two quite separate Classes in League 1 and to score them separately. The British National Champion will then be the winner of the Standard Class and there will also be a champion of the Open Class. Unless this is done, the best pilots will continue to fly large gliders.

I am sure that the B.G.A. must decide very soon on the rules for the next British Championships. It will very much assist manufacturers and pilots so that future policies for gliders may be thought out.

There may well be other methods which will achieve the same object. Of the three which I have mentioned, I favour the last one, but the other two would do just as well. What we want now is a policy for the future.

TONY DEANE-DRUMMOND

TURNING POINTS SIMPLIFIED

Dear Sir,

During the Swiss competitions there were no turning-point observers to organise. The system was simplified by issuing a cheap camera to each of the 24 competitors with their names in sellotape on it. The camera was loaded with a film and the first picture of the briefing board was already taken before handing the camera to the pilot, who then took a picture of his glider number to identify the film, and thereafter two pictures of each turning-point.

On return, the films were developed but not printed unless the pilot had used spare shots for his own use.

The picture had to be within 1 km. of the turning-point and either vertical or on the far side of it.

I would like to suggest that Regional Competition organisers should consider this arrangement for their contests, or better still that B.G.A. should buy 100 cameras on (probably) very favourable terms, and hire them to Regional Competitions when not used for National Competitions.

The camera used was one similar to the Brownie 127 which cost 25s. 2d. At trade price or better, and hired out at, say, 10s. per camera, it would be a useful source of revenue to the B.G.A. if every competitor was obliged to use it. No doubt some competitors would like to make doubly sure of avoiding camera failure by using their own cameras in addition; it would be up to them to do this if they so desired.

Alverstoke, Hants.

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OLYMPIA 463 No. 261. First class condition. One owner. No instruments. 1/w trailer. C. of A. April 1966. Available 1st October. M. Garrod, 2 Crosspath, Radlett, Herts.

NEW surplus RAF seat type parachutes £12 10s. each, carriage 10s. New glider parachutes Irvin mark 32 only £32 each. Reconditioned steel grey RAF flying overalls 47/6 each. Ask for leaflet. Tarpaulin and Tent Mfg. Co., 101-3 Brixton Hill, S.W.2. TUL 0121.

"PERAVIA" barograph calibrated to 30,000' and spare rolls £40. Charles Green, 78 Regent Street, Leamington Spa.

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PUBLICATIONS

"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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"SOARING" — Official organ of the Soaring Society of America. Edited by Alex Dawydoff. Address: Box 66071, Los Angeles, California 90066, U.S.A. Subscription, \$5.00 outside U.S.A.; apply to your Post Office for a form.

SITUATIONS VACANT

C.F.I./MANAGER required. Anyone interested please write personally to The Chairman, T. S. Zealley, London Gliding Club, Tring Road, Dunstable, Beds.

WANTED

BOOKS WANTED. "Kronfeld on Gliding and Soaring", "Gliding and Advanced Soaring", "Soaring Flight", Hirth's "The Art of Soaring Flight". Peter Browne, Surrey Club.

OLYMPIA 2 or similar. Details to Carter, 174 Rainsford Road, Chelmsford (Tel. 3112 evenings).

WANTED, glider barograph. Details to Barker, 2 Cottesford Place, James Street, Lincoln. Phone 22433.

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



IN this issue for the first time we welcome the Edinburgh University Gliding Club. Copy for inclusion in the October issue should reach me, typed double spaced on foolscap, not later than Wednesday, 18th August at 14 Little Brownings, London, S.E.23. Don't forget to include any suitable photos.

30th June, 1965

YVONNE BONHAM (Mrs.),
Club News Editor

AVRO

WE have a new plan form in the Woodford sky. The syndicate Kranich is now airworthy having been repaired and various mods. incorporated.

Our Skylark is hardly ever at base these days, several members have collected Silver C legs during visits to Camphill, and at Woodford the Tutor drivers have gained three C's.

Harry Evans, our mechanical genius, does considerable work towards keeping us airborne, and single-handed seems to manage jobs that normally call for a "working party".

Once again Bill Scull supervises mid-week evening flying, this boosts our launch rate and makes the gap between weekends bearable.

J. A. K.

BATH (Keevil)

AFTER two years of almost continuous negotiation at Keevil we have at last received official sanction in the form of a very legal looking document, to use the runways, peri-track, control tower and ex-airmen's dining hall, which we have converted into a hangar.

This at least gives us a feeling of greater security. In the past much of the fantastic amount of work which has been put in has always been done with the feeling that it would be wasted when we found ourselves kicked out on our tailplanes with very little notice.

In order to co-operate as fully as possible with the farmer who has the grass rights we have swapped over to all auto-tow and, when John Graves completes his Auster's C of A, aerotows for the summer months.

We normally have use of our airfields only at the weekend but Grp. Capt. Mackie, O.C., R.A.F. Colerne, under whose command Keevil operates and to whom we owe a great deal for his whole-hearted support, very kindly gave us permission to use it for a training week at Easter and a soaring week at Whit-sun.

During the first week as many solo pilots as could did the donkey work for the U/T pilots and during the latter the opposite applied.

Although the weather during both could have been much more co-operative some good soaring was achieved.

On Whit-Tuesday, Ralph Jones climbed to 11,100 ft. in his Skylark 3. Unfortunately his trace was a bit "dodgy" at the start and his claim for Gold C height has not been confirmed at the time of writing.

Ron Lynch climbed the Swallow to something over 5,000 ft. to claim his Silver height, and Charlie Derrick achieved Silver distance in the Olympia 463.

Quite a number of thermal flights of between 2 and 3 hours have been recorded.

We saw quite a lot of the World Championships in our part of the country. The Australian pilot D. Reid and the Russian M. Veretennikov landed at our airfield on the Friday, and we made them as welcome as possible. David Barker, our very efficient treasurer, took advantage of the opportunity of practising his Russian at first hand and did what he could to further cement Anglo-Soviet relationships — we think!

K. N. S.

BRISTOL

WITH the acquisition of a diesel tractor and mobile winch it is hoped to keep the newly increased launch fee stable for some time. Plans are afoot for the building of a hangar block. One person who will be pleased if this plan goes ahead will be Barry Walker, who having recently soloed, had the agony of seeing his Blanik delivered from Kidlington into the wrong field! It now remains "staked-down" in all weathers.

Other solos include R. Bowsfield, G. Stevens, D. Leeser, M. Lamb and M. E. Brown. Ralph Bowsfield and Geoff Stevens followed up quickly with their C's shortly afterwards, likewise Liz Saint. "Hoppy" Twiston-Davis completed his Silver with five hours, also Mike Pope. Don Cameron flew No. 417 (Olympia 463) to victory in the Dunkeswell task week, also obtaining his Silver distance.

The introduction of a ladder competition shows, as one would expect, the members of the ladder committee at the top, but Ron Sandford is putting in some excellent flights and rapidly pushing them down.

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Finally, whilst half the club members must have been to the World Championships, everyone at South Cerney must have been at our barbecue, on a so-called rest day. C.F.I. Peter Etheridge is still world champion (half yard) and a reward of a "yours" will be paid for information leading to the retrieve of all or any of our bar trophies.

R. G.

BLACKPOOL AND FYLDE

WE returned to our summer gliding site at Samlesbury Airfield early in April and, apart from continuous gale force winds during the first two weekends, we have enjoyed quite good weather and some very interesting soaring.

It is always a pleasure to record our gratitude to the British Aircraft Corporation, and in particular, to instructor Ivor Stretch for the continued use during the summer months of our excellent soaring site at Samlesbury.

No doubt it is fairly unusual for a father and son to go solo within a week of one another, and as this did not occur on a course but within the usual sequence of training, we were delighted when Mike Harris soloed the weekend after Jack, his father. It will certainly be a happy event if they manage to do their C flights on the same day — a liquid celebration would be inevitable.

Club members who have recently taken advantage of the excellent soaring conditions are Tony Kemsley, Derek Raymond, Len Clarkson and Ian Hamilton. Incidentally, Tony Kemsley and Terry Hogben are now flying the Olympia 2b. Our President, Herbert Liver is soon going to be pretty busy presenting certificates but, at the moment, there is some frantic "cramming" of Air Law going on in order to satisfy our C.F.I.

We shall shortly be losing David Field who is emigrating to Australia, but he has set his mind on taking a B certificate with him. Our very best wishes, David.

Keith Emslie is now our Safety Officer and an U/T instructor. John Gibson, our Technical Officer, has also become an U/T instructor.

J. A.

CAMBRIDGE UNIVERSITY

AFTER the early start of the soaring season, opened at Cambridge by John Goodall with a two-hour flight in the Olympia 2 at the end of February, the mediocre soaring conditions in spring came as a disappointment. Nevertheless, there were quite a number of remarkable and unexpected flights. On 27th March, for instance, Alan Davie soared his Skylark 4 for almost 2 hours in wave lift between 5,000 and 7,000 ft. over Cambridge, joined by David Ware in our newly acquired Ka-7.

Among the highlights in May were a flight of 5½ hours by Tony Joss in the Olympia 2 and a cross-country to Spalding in the same aircraft by Roy Brown who thereby completed his Silver C.

The June Camp at the Long Mynd was a great success. 260 hours were flown and over 400 cross-country miles. Four members managed 5-hour flights, and John Bushnell completed his Silver C with a 60-mile dash to Leamington in the Olympia 2. On the middle weekend of the Camp a task flying match between the C.U.G.C. and the Midland Gliding Club was held and won by the latter, but David Braham scored the best individual flight by flying his Ka-6 170 miles to Mendlesham. Another good effort was a 98-mile flight to Podington by Jeremy Pickett-Heaps in the Skylark 2.

G. S. N.

CORNISH

AFTER some anxious moments in the early part of the year, we feel that we are doing quite nicely. From the capital point of view we are considerably "up", thanks to a government grant in aid of the Blanik and on the income side we seem to be taking more in flying fees than ever before.

Course bookings were slow to begin with, but there has been a steady trickle of applications and we are now almost fully booked. Quite a number of old friends are paying us a return visit.

New members are coming in about as fast as we are able to absorb them. Fortunately we have also quite a number of new instructors in various stages of training, which helps to ease the load

on the categorised instructors. The C.F.I. has in fact had to close the instructors' list for the time being, while the "New Boys" are being knocked into shape and the "Old Hands" are converting to the Blanik.

Bill Owens has come to us as resident instructor for the courses, so our course members can be sure of some first-class instruction and a very pleasant time.

The launch rate has gone up by 9% over last year's figure. We haven't done anything in particular to achieve this; members just seem to have decided, spontaneously, that "Finger Trouble" can and must be eliminated. We have already passed last year's total of aerotows, with less than half the year gone. Tug pilots, tow car drivers and ground crews have made a first-class effort and we really can't refrain from mentioning our youngest, honorary associate member (aged 11) who was seen doing a valiant job.

On the social side the house committee have been doing their usual excellent and unobtrusive job. The new bar has been completed and is attracting considerable custom.

G. E. T.

COVENTRY

AT the time of writing our chairman for many years, Mike Hunt, has now left these shores for a new career in South Africa and we wish him every success for the future in his new life.

Mike Hunt was a founder-member of the Coventry Club who will be missed very greatly and to whom we all owe a debt of gratitude for the hard work he has put in over the years to build the club up to its present state, especially with regard to our new site at Husbands Bosworth.

At our recent A.G.M. our hard-working secretary, John Large, was elected chairman in Mike's place, with John's place as secretary being taken by Bill Fay.

For those who may wish to contact us, we are pleased to record the installation of a telephone, the number being Husbands Bosworth 429.

It was with the deepest regret that we learned of the tragic death of Howard Greenway in the recent Jersey

Joan - James
son.

air disaster. The Greenway's were, for many years, very closely associated with our club, kindly allowing us the use of their airfield at Edgehill, and Howard was a "natural" who lived for flying and rapidly became a very accomplished pilot. Our deepest sympathies are extended to the Greenway family in their great loss.

F. W. F.

DONCASTER

SINCE our last notes we have held our A.G.M., at which chairman Jack Tarr reported on a year of steady progress both in flying and social activities, an increased flying membership and a very sound financial position.

As promised another T-21 has been added to the club fleet.

Since the meeting a committee has been busy thrashing out organization for the Northern Regional competition, which by the time this is published, will be over and no doubt full scale inquests the order of the day. Judging by the large number of members who visited South Cerney there should be no shortage of "informed" advice.

People continue to go solo and gain C's with monotonous regularity, Messrs. Collingham, Carter and Walker made A and B flights this month and Messrs. Staley, Benton, McLean, Cawkwell and Marshall, oh yes — Collingham again, completed their C certificates. Frank Thompson, after an aerotow to Sutton Bank, did an epic 6 hours on the ridge, landing when he saw the trailer climb the hill. He did not dare land as there seemed to be no one to time his landing. Please Y.G.C. fit a glass roof to the bar.

In spite of mixed weather, soaring time is, if anything, greater than for the same time last year and there is a definite increase of people making cross-country flights. A mass attack was made on Sutton Bank on 23rd May by Jack Tarr, Bill Bailey and Sid Hayes to reclaim the "pot", all arrived safely. The best flight so far has been made by John Hayes in the Gull 4: 101 miles to Foulsham — 4 miles short of his goal Swanton Morley.

Club members Les Muncaster and Jack Bower collected two Blaniks on

one open trailer from an airfield near Prague, towed them across half Europe on behalf of Peter Clifford Aviation. The full story would need an article to itself, with tales of fuselages probed for midget refugees at frontier posts and blunt Yorkshire stolidity meeting blunt German stolidity at customs check. All ended successfully after a round trip of 2,000 miles.

D. J. W

EDINBURGH UNIVERSITY

THE Edinburgh University Gliding Club is now well and truly established. Just eight months after the club's formation, we find ourselves proud possessors of an Eagle and an Olympia 2B.

We started flying last November at Portmoak due to the kindness of the Scottish Gliding Union who generously let us have the use of their T-21B's on Wednesday and Friday afternoons.

The Dumfries and District G.C. also generously gave us the use of their aircraft on Saturdays, and we have been flying regularly at Dumfries in their T-31.

In March the University Disbursements Committee demonstrated their profound enlightenment by giving us a grant with which to purchase two gliders. This is the largest single grant ever made by the committee. We purchased our first aircraft, the Olympia, in May, and made the long trek south to collect it from R.N.A.S. Yeovilton. The Eagle followed in the middle of June. It is hoped that training from ab initio to solo stage will be done in the Eagle, and that all solo pilots will fly the Olympia.

A diesel winch based on a double-decker bus and capable of launching an Eagle is being constructed and will be ready by the beginning of the new term in October.

We have not yet found a site of our own but are hunting hard and hope to have somewhere soon. Until that time Dumfries and District G.C. are kindly permitting us to use their site.

Finally we should like to say a big thank you to everyone who has given us the help without which our "instant" gliding club would still be firmly on the ground.

J. A. C.

KENT

SINCE the last notes appeared, there has been plenty of good soaring weather. Silver C's have been completed by "Bill" Bailey, who gained his height at Dunkeswell, Ian Napier with height and distance, Geoff Tilley and Bill Gartland, distance. Robin Wilson and Peter Beechey have flown their distance leg, and Ray Hatton and David Brown gained their C's with thermal flights. Judith Rogers and Peter Martin have gone solo recently.

The club's ninth birthday party at St. Julians on 1st May was enjoyed by all who attended, another party has been arranged for 10th July when it is hoped the weather will be warm enough for the more energetic members to disport themselves in the swimming pool.

The clubhouse is now in use, and "The Farm" is in operation, after much hard work by numerous members. Work has also been going on to convert the diesel bus into another winch.

P. B.

LAKES

AS we go to press the "pyramids" begin to look like a clubhouse, thanks to the efforts of all and sundry inspired by the untiring example of the "few".

The diesel winch was to have made its debut last week, but decided on a show of temperament at the last moment. When the builders get the bugs out of it there is no reason why it should not give as good service as the present one; if it does that Howard Woods and his boys will have no cause to regret all the work they have put in.

Flying has proceeded without interruption but perhaps not as smoothly as heretofore. With so much attention diverted to building operations of one kind or another it is not altogether surprising to meet the occasional fumble. This has affected launch rate and flying time to some extent. Nevertheless, we are able to record Silver C height for S. Wearing and qualifying flights for C certificates made by Jill Redshaw, John Craven and Peter Thomas. Two more have attained solo status.

F. G. R.

LAND'S END

THE Club has started flying on a dispensation from the Ministry of Aviation, although at time of writing a Management Agreement for the airfield has not been signed. The fleet consists of a T-21 and Blanik, with a Skylark 3F currently flown by 7 of our 78 members. So far most of the flying has been done with the Blanik as the T-21 is a recent acquisition. In the first six weeks nearly 300 launches have been achieved, almost half by aero-tow using the dual Auster.

Exploratory flying began over Easter, when Alan Davie and C.F.I. Geoff Wass flew nearly 10 hours between them from nine launches in Alan's Skylark 4. Ridge, wave, thermal, and sea-breeze were variously used in these flights, and appetites were thoroughly whetted.

Club flying began in May with the Blanik using mostly aero-tow as the diesel winch required extensive overhaul before showing its true colours. It is now giving excellent launches even in light winds on this comparatively small site.

A course programme has started and so far everyone has gone away happy, thanks in no small measure to our other full-time instructor, Brian Pritchard. The course programme will continue throughout the year with an accent on high performance, so we look forward to many visitors from other clubs wanting conversion to aero-tow, Skylark, aerobatics, blind flying or whatever.

A period of atrocious weather limited activities, but in the brief gaps quite a lot of soaring has been done, the Blanik elevating itself to well over 2,000 ft. on occasions, and wave has been contacted again. Thermal soaring has been mostly of short duration in offshore winds, precluding any attempts at cross-country. The soaring story is completed by Brian's five-hour leg to complete his Silver on June 26th. For the last hour the wind fell light and variable, and the Skylark was only kept aloft by sweat, tears, and the accumulated star-dust from the previous owners of 66. Look at the log-book!

If you pass this way — with or without a glider — we shall be very glad to see you.

W. D. T.

LINCOLNSHIRE

TOWARDS the latter end of April the Club enjoyed its first social function — the first Annual Buffet Dance. This highly successful evening was well subscribed and attended by more than 100 people.

Spirits ran high and flowed freely. It is rumoured that two of our Welsh members got caught out in a down-draught subsequent to the passing of full strength Vodka — we understand they "landed out". In the absence of any claims for away landings, our investigations showed much more severe disciplinary action from the respective wives than any iron-handed C.F.I.

However, the band played loud and clear and we were delighted to see our friends and colleagues from East Midlands R.A.F. Swinderby — for once the rôle of our guests. This function made money, for which our thanks to Clarrie Parker and Ted Barker for organising a successful and highly entertaining night out.

Flying has progressed steadily to a total of 2,600 launches since our inception during October last. Fifteen members have now gained their A and B certificates — of which special mention and congratulations to Steve Nicoll for being our first female soloist. Seven of this number subsequently converted to the Grunau Baby and a further four to the Olympia.

Roger Allton must be congratulated on completing his Silver C so early in the season. To his distance and height gained in May, a visit to Camphill on a Sunday in June produced the desired duration leg. Many congratulations to Roger for pride of place in gaining the club's first Silver C.

Our first Skylark 3F appeared some two weeks ago, produced by a syndicate of Sanders, Nicoll and Barker. Its maiden flight of two hours plus, one Wednesday evening, in particular gave Ted Barker something in return for cash outlaid, and augures well for many pleasant potential hours airborne. The arrival of the Skylark, our first competition type, we feel helps to give the club prestige and confirms the birth of our new club well within its first year of existence.

E. B.

LONDON

THIS time, the keynote appears to be "losses and gains". Over the past year of fleet rationalisation, we have said goodbye to the T-21c, the Tutors, the Grunau Baby, the Skylark 2, the Sky and our half share in Charles Ellis's Skylark 3. We have gained two Prefects, a third Olympia 2B, a whole Skylark 3 in Lasham blue and a bright new Capstan in some indescribable colour. Also expected is a third Tiger Moth; and our new winch (the second Fluid-Drive, John Argent Special), which was given its inaugural launch, making three good, serviceable self-propelled two-drum winches.

On the staff side, we have gained Jan Mikulski, who was formerly a leading figure in Pakistan gliding. However, we are sorry to lose Jim Wingett. This leaves us with three full-time instructors and a professional winch-driver.

The private owners' rack has lost its Weihe and Standard Austria, which have disappeared in the direction of Dunkeswell and South Africa respectively, but has gained three sparkling new 15-metre jobs in the shape of a Ka-6, an Olympia 463 and a Dart 15. Vic and Ron Tull's home-built, multi-coloured Skylark 3 is now almost ready to fly.

Club members were present at South Cerney in large numbers, in such diverse occupations as tugging, observing and joy-riding. The two principle nuclei of club endeavour, however, were the Championships Journal department, and the Public Enclosure. This was a job involving arduous work of an unglamorous and unrewarding nature which demanded the stiffest of upper lips on the part of Arthur Doughty and his merry (sometimes) men and women.

Several members also crewed for some of the foreign teams, notably the Richardsons, whose Skylark 3F, loaned to the Rhodesian team, came unscathed through the contest. (Anyone who can cope with African *bundu* would find English fields a doddle.)

Last, but not least, we hope you are all coming to our Open Day on August Bank Holiday Monday. Judging by the last two Open Days, it'll be a fabulous affair.

G. L.

MIDLAND

THE Club's long-awaited Olympia 463 arrived at the end of May and has proved a popular addition to the fleet.

During the week-end 19th-20th June Club pilots were involved in an informal competition with the Cambridge Club, who were paying us their usual June visit and a rather more serious competition at Camphill.

The match with the Derby and Lanes. Club was an attempt to regain the Beer Tray. At Camphill, Sunday was the only contest day and our team of Mike Randle, Ron Rutherford and Ric Prestwich narrowly lost to the Derby team.

Tony Manning, who joined just over a year ago, has gained B.G.A. approval as an inspector. Thus in Tony and Jack Minshall we now have two approved inspectors on the staff.

On the last week-end in June considerable interest was aroused in the Blanik which was on the site for demonstration purposes.

K. R. M.

NEWCASTLE

SINCE the last Club notes were written, flying has continued at Carlton with remarkably little interference from the weather. However, there has been a marked lack of good soaring days occurring at week-ends, to the consternation of our embryo cross-country pilots.

Training has proceeded to such a pitch that all the regular T-21 pilots are now solo, and the T-21 is all too often to be seen resting in the hangar whilst the poor Tutor is sadly overworked. Recent additions to the solo ranks are Ron Dixon, Les Dyer, Len Mountford, Bill Iddon and Dennis Snaith, all of whom, together with Jim Dryne, have now acquired their C.

Such is the demand for the Tutor that a new Swallow syndicate has been formed, and it is known that others are looking for suitable aircraft. It looks as though the Club's trailer park will have to be extended to cope with the increase in the fleet!

In the midst of all this early solo activity Marjorie Paul gained Silver height flying the Skylark 4 in an evening wave, whilst on the same day Barrie Brighton flew the Kite 1 a distance of 42 miles to complete his Silver

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C, landing at R.A.F. Driffield, he was right royally welcomed by Ray Poxon, another gliding type living near the airfield.

Twice recently we have entertained a passing sea-breeze front. This was soared successfully on the first occasion, but its arrival the second time coincided with winch trouble and alas no one was able to get off the ground until it was too late.

Our efforts to grass the site seem to be meeting with some success at last and a rather sparse, though promising, green mantle is beginning to appear. We have, however, a long way to go before the whole site is covered.

Finally, congratulations to Sylvia and Adam Dodds on the arrival of David Andrew.

B. W. B.

NORTHUMBRIA

SINCE the last Club News, we have seen several important projects come, finally, to fruition.

First, and probably most important in view of its effect on the launch rate, is the Tommy Henley two-drum winch, now in service and doing a fine job. The use of lengths of stranded cable has also cut down snarl-ups and fumbles to the minimum so that we now are in the happy position of having as many launches per day as members could want or afford.

Over the Whit week-end, the writer gave a ploughing demonstration, and with a hard-working band of helpers, buried the telephone and signal cable, safe at last from cattle which have developed a remarkable craving for P.V.C. insulation. It is only to be hoped that the Hedley moles don't get the same taste!

Best news of all concerns the 21-year lease on the site which the club has obtained. Outline planning permission for the various buildings has already been granted and plans for the future development of Hedley Fell as a gliding centre are now being laid.

The Club's Tutor, refurbished and spoiled, collects dust in the hangar. Though inspected and passed as far back as March, it has still not been issued with a Certificate of Airworthiness — a disheartening state of affairs for those who worked so hard, for so long, to rebuild it.

The Club's Portmoak week, attended by 20 members, wives, children, dog and three gliders, was not a success. Adverse weather kept soaring off the menu but your scribe managed, finally, to solo.

Back home, after a longish period of poor weather, S.W. winds returned to Hedley with thermals popping by day and the whole sky waving in the evening. At 8.40 p.m. on 20th June, Dave Wilson and this writer were launched in the Eagle to set new Club scratching and altitude records — 40 minutes at 700 ft. ending up at 10,600 ft. at 10.30 p.m. The climb was broken off for darkness just as the lift got really good. Otherwise, who knows what the Hedley wave might have produced in the way of altitude? P. W. L.

OUSE

IT is with sorrow that I report the death of one of our keenest members, Howard "Andy" Anderson, as a result of an accident to the Tutor. A founder-member, Andy was liked and respected by all and will long be remembered. Our deepest sympathies go to his family.

Instructor Jim Smith completed his Silver badge by taking the Swallow to Filey. His is the club's second completed Silver C and was followed by John Taylor gaining height and distance with an excellent flight to Aldbrough. Keith Massey completed his Silver badge in a Swallow at Lasham with a flight to Keevil. Keith is the first "home-trained" pilot to achieve this distinction. Instructor Bob Plane gained his duration leg at Sutton Bank and wishes to thank those at the Yorkshire Club who made this possible.

We now have a Skylark 2b roaming the skies — Comp. No. 217 ex. Portmoak — fitted with a complete new blind flying panel which enabled Les Bellamy to regain the club height record with a cloud climb. Instructor Geoff Bailey-Woods recently took "217" to Carnaby to complete his Silver badge. Mike Annison has converted to the Swallow and is already showing his soaring ability with some good flights.



John Taylor shows his parents the track of his cross-country. Crew members Geoff Mitchell, Norman Worthy and Les Bellamy look on. Photo K. Massey.

First solos have been credited to Brian Pearson and Mike Mellor.

Our A.G.M. in May was a lively affair. New appointments to the Committee are Jim Park, Chairman; Stan Park, Ground Engineer (M.T.); Geoff Bailey-Woods, Ground Engineer (Aircraft); Barry Fletcher and Stan Harper. Our grateful thanks to the last Committee and retiring members. G. L. B.

PERKINS

AFTER a winter closedown the Club started flying again on 28th February.

During the closedown a number of necessary maintenance jobs were accomplished including the fitting of a new diesel engine to our winch.

We have been unfortunate enough to lose the services of our club correspondent, together with the use of his Skylark 3 but, nevertheless, we are looking forward to a record year's flying. T. J. D.

SCOTTISH

THE weather during the past two months has produced a variety of soaring conditions and several notable flights took place during this period. Longest cross-country was Thorburn's 101 miles to Fyvie, in Aberdeenshire, using thermal, sea-breeze front, and ridge-hopping through the sea-breeze zone, and he only just failed to reach the Aberdeen Club's site at Litterty. Bill Lawson covered 50 km. to Arbroath, and Silver distance was flown by Neil Clements, also by John Whitehead, on a visit from Aberdeen. Other recent visitors have been groups from the Northumbria and Yorkshire Clubs.

A north-west wind produced good wave conditions on 30th May, and although no one went away several climbs to around 10,000 ft. were reported. Also deserving mention is Anskar Sambale's recent wave-climb to over 11,000 ft. in the open T-21. Due to the cold both pilots began to feel the effects of anoxia at this stage, and the climb was therefore broken off.

The Tiger Moth, which recently changed from syndicate to club ownership, has been in frequent use with several new, keen faces in its cockpit,

and it has been used to retrieve a number of field landings in the vicinity. The club's new Olympia 463, which has been eagerly awaited, has now arrived, and it is hoped that our Silver C pilots will have put it to good use by the time this appears in print.

SOUTH WALES

THE Club has gained its first Gold C distance with Ivor Shattock's flight from Myndd Mayo to Kettering Hall School near Norwich on the 19th June. We are wondering if the distance has ever before been made either by starting or finishing in Wales.

June has been a very good month generally. For the first time we have had the Swallow, T-31, Skylark 2 and Kite all in the air together. No other cross-countries have been attempted, but a considerable number of members have had soaring experience, with flights of up to 4 hours, and the solo list is growing. D. E. F.

STAFFORDSHIRE

THE achievement of a Silver C endurance and height at Meir on 10th June by Laurie Birch broke two club records. The 5 hours has never been done at our site before, and in so doing Laurie claims the first Silver C completed entirely at Meir. Laurie was joined by John Greig 20 minutes after take off, John also completing his 5 hours successfully. Laurie's cross-country to Leicester East on Easter Sunday was a model affair, his arrival being nicely timed for the club-house there and the retrieve was very straightforward, LE being at the other end of the A 50 from Meir.

Two instructors have recently done Silver distance, W. C. Hutchinson went to Halfpenny Green and Charles Webb to R.A.F. Newton. Hutch made his flight during our annual gliding course which was a great success this year. There was plenty of soaring and the three ab-initios attending, Messrs. Beriman, Walden and Hewitt, went solo.

Recent soloists have included our first lady, Jacqueline Hurst, who got quite a write up in the local press as a result.

This, no doubt, combined with our advertising campaign, has helped to boost our membership to a record 80, mostly with newcomers to the sport but including Col. N. Christy, who brings considerable experience of both gliding and tugging which is of great value to the club.

A. W. H. L. W.

WORCESTERSHIRE

"CONTINUED progress" would, I suppose, be the phrase to describe our recent activities at Bickmarsh. All projects are well under way, although we have been, perhaps, a little optimistic about completion dates. Nevertheless an improvement in the launch rate over last year has been shown which, together with the development work on the site, has demonstrated that there is no shortage of enthusiasm.

The long awaited second Tutor has arrived and now our sights are on a T-21. Both winches are in action although one suffered a blistering verbal attack from a very articulate member when he tore his highly prized anorak on it.

We have been very pleased to have several visits from powered aircraft, which have increased the interest of the general public watching from the road. The number of spectators at weekends is making us think seriously of making a visitors' car park which could possibly lead to some financial gain.

R. C. S.

SERVICE NEWS

CHILTERNS (R.A.F. Benson)

WE have had a spate of cross-country. First honours went to Derek Godfrey who completed his Silver C with a flight to Henlow. Barry Nowells lost his Silver distance by wandering 90 degrees off course and landing at Bicester. Dusty Miller did a carefully planned initial glide to Watlington which gained him 12% of his Silver distance! George Raynor got stuck in the sink at Halton. Sue Parry and Adrian Dalton gained their C's, Adrian then went on to obtain his Silver height.

We have replaced our Skylark 4 with an Olympia 2 to tailor the club's fleet more exactly to our needs. A. J. B. P.

CISAVIA



Polishing the wings of the Kranich sailplane at Booker Aviation Centre is David Brett, secretary of the Post Office Flying Club, which is affiliated to CISAVIA, the Civil Service Aviation Association.

EAST MIDLANDS (Swinderby)

AT the Bicester meeting during Easter our C.F.I. John Delafield became the new R.A.F. Champion, and we had three other pilots flying in the contest, Con Greaves, Don Austin and Bob McLuckie. Crews for these pilots and for other pilots in the contest meant that club operations over this period were reduced. There was only a short period of full operations and then a number of members departed for South Cerney, helping in various capacities.

Club achievements are A and B certs. for "Bunny" Haslett, Jock Wilson, Ivan Farmer, John Parker, Ron Williamson, Ted Jeffries and Bob Styles. C certs. for "Mac" McDermid and Ken McRudden, who has been posted to Sharjah. Con Greaves and Don Austin attempted to pairs fly a dog-leg Gold C distance, Don landing after 160 kms. and Con after 290 kms.

The main club effort has been directed to preparing the new club premises, which are situated in permanent buildings on the main camp site. A rousing opening night proved a great success, and a large number of sun-glasses were in evidence on the airfield next day.

"Our" ridge at Caistor has provided ridge experience for some members, but we expect to use it more in the winter during the absence of thermals.

J. G. W.

FENLAND (R.A.F. Feltwell)

THE month of June has really shown that Fenland can compete with all-comers, and still produce creditable results, even without the benefit of a ridge, or a tow aircraft.

Figures for the month of June were as follows: Hours flown, 160; launches, 1,100; A and B certs., 13.

C certs. were obtained by the following: Jim Humphries, Geoff Dodd, Mick Starks, Tony Weldon, Chris Boyle, Jim Lennors and Janet Taylor, who is now with her husband, Carol, stationed at R.A.F. Acklington.

Silver height and distance have been completed by Mick Garnett, and the first Silver to be completely flown at Feltwell has been "won" by one of our most popular instructors, "Hank" Hancock.

One of our U.S.A.F. members, Doc Stocking, astounded us all, and gave the instructors fresh heart, by going solo in 20 launches.

We are now well above the target for hours and launches for the current year, and expect to continue in the same way.

C. R. E.

FOUR COUNTIES (R.A.F. Spitalgate)

SO far this year we have kept to the launch rate required to meet our target. We passed last year's total in the first six months of this year.

Congratulations to Simon Morrisson, a club member on leave from Aden, who flew his Silver height to complete his badge and also converted to the Skylark 4. Ian Smith has also completed his Silver with 5 hours in the Skylark 4.

We think that Jeff Argent and John Gates deserve a mention as they have both gained their Silver height and did the Silver distance, with flights of over 40 miles, at their first attempt.

We were very pleased to welcome the World Championship pilots when they raced to Spitalgate on Whit-Monday. We shall have a plaque in the clubhouse shortly suitably endorsed with most of the pilots' autographs on it.

Finally, we wish Dick Barrett and Ian Smith all the best in their new posting and hope that some of their enthusiasm has rubbed off on to some of our newer club members.

I. G. A.

MENDIPS (R.A.F. Locking)

SINCE our previous report good progress has been made on the flying side. The arrival of the Olympia produced immediate results when our ever popular D.C.F.I., Jim Martin, completed his Silver C with a 5-hour ridge flight. This was only the Olympia's second flight here and recompensed Jim for the many hours of flogging the circuit in the trainers. The same afternoon Messrs. Dixon, Murgatroyd, Chappel, Richenson and Pratt all worked the ridge for their C's in the Grunau.

A couple of weeks later Murgatroyd, Dixon and Roy Back, having converted to the Olympia, soared for their Silver heights, but much to Murg's chagrin the barograph did not record. However, the good conditions enabled our retiring secretary, Harry Price, to claim his C before he leaves for the lonely isle of Gan.

Recent solos were made by Jeff Lim, Bill Darling, "Ben" Benoist, "Doc"

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Insley (at Upavon) and Pete Bryan (at Bicester). These should be the first of many this summer.

The Moonrakers' offer of facilities has been well received, as it will enable the more experienced members of the club to take advantage of the better soaring conditions at Upavon. Howard Cox has already shown the way by flying the Olympia to Lasham for his Silver distance.

P. S. B.

PORTSMOUTH NAVAL

OUR activities lately have been curtailed by either high winds or bad weather, but when we have been operating the Tiger Moth has proved invaluable.

On a Sunday recently the Tiger did 19 tows and, although this may not be a high number for some clubs, this is a very good number for us. John Crawford, flying at Lasham, achieved his C and Ricky Ring, Dorrie Gill, Brian Penton and John Hopgood have all gone solo and been converted to the Olympia. Future solo pilots will have a Swallow to fly as this will have been collected from Slingsby's by the time this appears.

It is with regret that the death of Pop Pinner is announced (see Obituary, page 362). Pop did a great deal for gliding in this area in his time, and despite ill-health continued to visit the club regularly as he was our honorary technical adviser.

Keith Morton and Marilyn Stead are getting married in August and they have the good wishes of members for their future happiness.

News has been received of Pat Worthington, a former member, now in America. She has recently obtained her Silver C height.

L. D. V.

R.A.F.G.S.A. CENTRE (R.A.F. Bicester)

CENTRE members assisted the organisation at South Cerney in various capacities and enjoyed their stay there. Rudolph has re-appeared in the Bicester Bar and is awaiting collection.

Flying has continued as usual, with Ron Powell completing his Silver; Pam Shipton, Silver distance; Nigel King, 5 hours and height; to mention just a few of the certificate legs gained. Bill Andrew joins the league of Tug Pilots, with his new P.P.L. 19th June was the big day of the month. Four aircraft were towed to Keevil, to try a 300 km. run to Yarmouth. Congratulations to Ron Newall and Malcolm Medland on their Diamonds. Johnny Morris and Paul Shrosbree fell short at 164 and 80 miles respectively. On the following day, Colin Wray tried it again, and landed at Ely, a distance of 150 miles.

Fred Plumb leaves us for foreign parts early in July. We wish him luck in his



H.M. Queen Elizabeth discusses gliding with Flt. Sgt. Andy Gough during a Royal Visit to R.A.F. Bicester. Beside the Blanch is Sgt. Tom Williams, B.G.A. Inspector and A.T.C. Instructor.

new job, and thank him for his efforts at Bicester. It was nice to see Frank Burgess, back from Turkey on leave, getting his hand in again.

Finally, we extend a warm welcome to all gliding types who pass Bicester — drop in and see us any time. J. M.

CRUSADERS (Cyprus)

SINCE our last report the Club embarked on a four-day Easter Camp at the other side of the island, by an airstrip at Dhekelia. This is not in regular use, and thus we were unimpeded by the Akrotiri air traffic. In addition it is further inland and we had lots of thermals — which are rather rare, weak and narrow at Akrotiri, especially in the summer.

John Beckett, our C.F.I., found some wave one day and flew around in it happily for an hour or so with a pupil in the 21. There was a small ridge, but attempts to work it were largely unsuccessful. However, much very enjoyable flying was done, dawn to dusk, and the thirty or so members there almost all sampled soaring, often for the first time.

Len Barnes and Dave Stratford got their first solos in the ballasted 21, and Mike Gilmore and Dave Dawson re-soled after a long lay-off.

Tony Gee, one of our instructors, was briefed to take the Swallow off for 5 hours and his Silver height. He duly took off, chocolate in pocket, and 2 hours 13 minutes later he landed, having gained his height, to find he'd forgotten to switch on the barograph! Ah, well!

The first five months of 1965 have seen 12 A and B certificates; Harry Oxer found a lonely thermal at Akrotiri and got his C with 35 mins., and Alwyn Machin finally got down to his law exam, and got his C the week he left for England. Alwyn has been a loyal member for three years — we shall miss him.

Nev Ward scraped his C, circling at an incredible speed in the Swallow to achieve 16 minutes. Pete Hill, Denys Gould, Norman Nicholson, John Hollinshead and our youngest lady, 17-year-old Penny Potts, all got their A and B certificates recently, since our Dhekelia camp, which gave many members the concentrated practise they needed.

We have had some ground equipment unserviceability. These snags are being remedied and we are quickly building up on the 900 launches and 110 hours we have achieved so far this year.

H. F. O.

LAARBRUCH (Goch, Germany)

OUR efforts earlier in the period at "getting away" were damped, literally, by bad weather. So not deterred we buckled down to cleaning, mending, and generally getting aircraft fully serviceable for use at the first opportunity.

We now have a thriving "detachment" of ten Army lads from Paderborn and area who travel something over 100 miles to fly with us every week-end. They are keen pupils and two of them have gained their A and B certificates to date.

The season really got under way here on Good Friday, which was a cracking day, providing us all with a taste of things to come.

Our professional achievements amount to: 6 A and B's gained by Gus Gambrill, Ken Williams, Phil Phillips, John Howarth, Chris Collier (one of our members of the fairer sex) and Graham Willoughby-Crisp completed a fine double by gaining his A, B and C.

In April an expedition was mounted to Scharfoldendorf, where we soared on their excellent ridge, in conjunction with Detmold Gliding Club. Experience was gained in this field of our sport by those who hadn't ridge-soared before, but unfortunately the winds let us down (literally) and no 5 hour flights were completed.

The end of the period brought us to the Royal Air Force Germany Gliding Championships held at R.A.F. Butzweilerhof from 7th-17th May. Laarbruch entered three aircraft; one Ka-6, one B-Spatz and one Ka-2 which we loaned to Brügglen Gliding Club. The weather was poor generally and there were only four full contest days. The B-Spatz's longest trip was 75 kms, and the Ka-6 made 140 kms. on the first day. Harry Orme in the Ka-6 finished second overall and Al Stevens with the B-Spatz finished fifth. Our real claim to fame, however, is that we were the only club in the Championships that sustained no damage to aircraft.

M. C. B.

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*.

AUSTRIA

THREE Diamonds each have been earned by 13 Austrian pilots, putting Austria in 5th place in the number of Three-Diamond pilots per country, according to *Austroflug*, which lists them by the years they completed the badge: 1959: Hans Resch (Zell am See).

1962: Franz Ulbing (Villach), Guido Achleitner (Wörschach), Hans Senger (Zell-am See), Ernst Schrafl (Innsbruck), Harro Wödl (Wörschach).

1963: Othmar Fahrfehlner (Erlaufthal). 1964: Wilhelm Scheucher (Mariazell), Johann Fritz (Wörschach), Felix Muraier (Innsbruck), Siegfried Kier (Innsbruck), Kurt Reicholf (Zell am See), Ernst Soratroi (Innsbruck).

BELGIUM

MICHEL DOUTRELOUX has been awarded the Paul du Toiet prize at the annual meeting of the Belgian Royal Aero Club, for the best performance of the past year; he put up national gliding records for gain of height and absolute altitude. Madame du Toiet offered the prize in 1957 in memory of her husband killed flying in the 1914-18 war.

Conquête de l'Air.

CANADA

THE Nationals were held at Pendleton "gliderport", Ontario, home of the Gatineau Gliding Club of Ottawa, from 29th June to 8th July. (No report available yet.)

The Soaring Association of Canada

annual meeting was held on 13th March in Toronto. The newly-elected board of directors is: Jack Ames, Trenton, Nova Scotia, president; Charles Yeates, Beaconsfield, Quebec, secretary; David King, Ottawa, vice-president; James Carpenter, Toronto, statistics; Wolf Mix, Toronto, contest and F.A.I. committee; James Reid, Red Deer, Alberta; and past president Terry Beasley, Montreal. Graeme Craig of Ottawa takes over as treasurer. Mrs. Helen Piercey, Kingston, Ontario, is membership secretary. Her husband Walt continues in the chair of the Instructors' Committee, which has been doing great things in putting out a new manual and instituting a new grading system for instructors.

The technical committee, under Jack Ames, has succeeded in virtually eliminating the new \$250 fee for type approvals, by arranging for the S.A.C. to do the necessary work for the Department of Transport in the case of sailplanes in production in other countries.

The Southern Ontario Soaring Association, Brantford, Ontario, is looking for a new home—the Brantford airport operators and the S.O.S.A. don't seem to see eye to eye on everything.

S.A.C. now has 748 members, in 26 clubs, as of the end of 1964. This is an increase of about 10 per cent over 1963.

The Regina (Saskatchewan) Gliding and Soaring Club has offered to hold the 1966 Nationals. Highly successful meets were held there in 1959 and 1962.

A. D. KING.

FRANCE

THE third national military gliding championships were held at Saintes Thénac aerodrome from 20th to 26th June. Ranks represented were: Sgt.-Chef, 10; Lieut., 2; Sergeant, 3; Capit., 1; Aspt., 1; Adj., 6. (Oddly enough, this was the order in which they finished, i.e. each rank grouped together.) The 23 entries included 6 Wassmer 21, 4 Breguet-901, and 2 each of the Wassmer-22, M-100, A-60 and Fauvel AV-36 (tail-less).

After two poor days, three pilots completed a 171-km. triangle on the 23rd, and eight a 243-km. out-and-return on the 24th. On the 25th, in thundery weather, four exceeded 100 km. distance along a line. A double out-and-return of 192 km., first to Niort and back and then to Cognac and back, was completed only by Guillemin.

Top total scores, all by Sgt.-Chefs, were: Guillemin (Std. Austria), 3,748; Delvigne (Ka-6), 3,679; Marchand (A-60), 2,753; Avrin (Wa-21), 2,648; Tallaire (Breguet-901), 2,616.

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HOLLAND

AT our A.G.M. on 24th April Bernard Fokkinga, Chief town planner of Rotterdam, was chosen as our new chairman.



Mr. B. Fokkinga, chairman of the Gliding Section, Royal Netherlands Aero Club.

All flying this spring (if any) was influenced by the coming World Championships. We are quite contented about the results of our team; however, we hope again to improve our placings the next time.

One of the best days so far this year was 29th May. On this day Terlet instructor Jos Krols completed his Dutch Diamond badge No. 5 with a flight of 520 km. Elly Jungblut-Seyffert and Cees Guldemond completed their Gold C's with flights of 335 and 405 km. Also Piet Lodder flew his Gold distance (440 km.) and P. A. Schok made a goal flight of 315 km. All flights went into France, but thanks to the efforts of our Foreign Office this now is possible without more trouble than completing a form in triplicate.

The Easter Rally of Deelen Gliding Club was won by Ernst Sanders, the one-day contest on Gilze-Rijen on 1st May by Ed van Bree. The latter was also, together with Dick Reparon, winner of the Victor Boin contest, which was held this year on the Belgian airbase Brustem. They both flew to Lübeck-Blankensee, a distance of 505 km.

J. TH. VAN ECK.

HUNGARY

A new Hungarian two-seater for training and practice, fully aerobatic, is the Góbé (R/26s). It is all-metal apart from some partial fabric covering. Span 14 m. (45 ft. 11 in.), wing area 18 sq. m. (194 sq. ft.), aspect ratio 10.9. Best gliding ratio is 23.7 and min. sink 0.97 m./sec. (3 ft. 2 1/2 in.). Profile G.549. Empty weight 220 kg. (485 lb.); max. all-up, 425 kg. (937 lb.).

ITALY

FOR some years many pilots of the Centro Alpino Volo a Vela have been investigating the wave systems above north-west Italy. The most interesting systems arise with north-west winds. Until two or three years ago we thought that it was possible to have waves only during the winter, when the lower air was stable. Now, however, many flights have shown that waves can be soared throughout the year whenever the winds are north-west after a cold front has gone through. In this

case the cold stable air, arriving over Italy, becomes unstable in its lower layer because the ground is hotter than this cold air. This heating produces thermal convection that brings the sailplanes to 2,000-2,500 m. (6,600-8,200 ft.), where they can contact the waves.

In these conditions the thermal convection is organised by the rotors that form in the lower (and rough) layer. If this layer has sufficient moisture, the rotors are shown by a particular type of cumulus which is very useful for locating the lift.

It is possible to have a wave system only when the air following the cold front arrives from a high pressure zone that has subsidence above the 3,000-metre level. This subsidence stabilizes the layers that interest us, so they begin to oscillate, giving a wave system to the south of the Alps. These waves have been found many times by pilots starting from Calcinate, attaining heights of 5,000-6,000 m. (16,400-19,700 ft.); maximum height so far is 6,700 m. (22,000 ft.).

For these flights it is necessary to tow to 600-800 m. (2,000-2,600 ft.) at

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AIRTOUR SHORROCK	
NAME _____ DATE _____	
1. _____	
2. _____	
3. _____	
Take off	
Altitude	
Start time	
Landing	
LANDING PLACES	
1. _____ Time _____	2. _____ Time _____
Weather Notes	
Weather Class System	
Thermal	
THERMAL STRENGTH	
WIND	
PILOT	GUIDE
PLACE	
"AIRTOUR" GLIDER FLIGHT LOG	

5-10 km. north-west of the airfield. The pilot will climb with the rotors, going generally toward the north-west and contacting the principal wave above Lake Maggiore. We think this wave is produced by Monte Zeda on the other side of the lake. The wave-length is 7-8 km.; the cross-section of the climbing zone is small, say 2-3 km.

A greater wave-length is attained during the winter, when the wave system goes to the upper boundary of the troposphere, but this happens only when, after the cold front, we also have a jet stream from 330° in the upper layer of the troposphere. These winter waves have been exploited in many places, but the best results have been obtained near Como, at the end of the lake. Vertically above the town it is, normally, a strong rotor lift that permits the sailplane to attain the wave at, say, 3,000 m. (10,000 ft.). For these flights it is necessary to release above Como at 3,000 m.; the maximum height attained is 8,400 m. (27,560 ft.).

PLINIO ROVESTI.

MALAYSIA

THE 70th Standard Austria produced by Schempp-Hirth at Kirchheim, Teck, has been exported to Malaysia. No further details are given.

Der Adler.

NEW ZEALAND

THE summer season is over now in Zealand; a most successful season it has been. The most notable achievement was, of course, Dick Georgeson's world record Out-and-Return of 460 miles. This is the second time Dick has held this record, and he has also held the world altitude record. I should think that Dick would be one of the world's most experienced pilots in wave-system flying.

By the time this is read, Dick and the rest of the New Zealand team will have competed in the World Championships.

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This is the first time that New Zealand has entered an official team in the World Championships, although Dick Georgeson competed in 1956 in France. For the other members of the team, Alan Cameron, Rex Handley and Gerald Westenra, this has been their first look at a World Championship.

Gliding has really boomed in New Zealand over the last few years—so much so that I think we can safely claim to be one of the world's foremost gliding nations, on a population basis. Perhaps I should back this up with some figures. The New Zealand figures are for the year ending March, 1964, so the expansion that has taken place this last year is not taken into account. These figures say much for the average club member, when it is realised that gliding in New Zealand has absolutely no government subsidy but relies entirely on the members themselves. "Opportunity to fly", measured in members per glider, is: N.Z., 13.33; U.K. 13.3; W. Germany, 9.8.

R. MACINTYRE.

	Total Population	Gliding Club Members	Proportion Members to Head of Pop.	No. of Gliders	Hours Flown	Utiliz'n Hrs./Year
New Zealand	2,627,000	1,200	1 in 2,190	80	9,600	120
United Kingdom	52,250,000	6,534	1 in 9,374	491	44,437	90.5
W. Germany	56,300,000	24,277	1 in 2,320	2,468	187,655	76

RHODESIA (Bulawayo)

DURING the national championships E. P. Hodge made a flight of 500.8 km. (311.2 miles), putting up a national record.

Aerokurier.

SWITZERLAND

FORECASTS specially for glider pilots are obtainable by telephone from Zurich airport between 15th April and 3rd October at 8 a.m. daily and at 8 p.m. on Friday and Saturday and the eve of other non-working days. At 10 days' notice, a teleprinter can be installed at a gliding centre; special weather forecasts for gliding are then received in clear text at 8 a.m. daily; also, in code form, radio-sonde upper-air data twice daily, and, between 9 a.m. and 3 p.m., weather data from ground stations in Switzerland and neighbouring regions.

Aero Revue

U.S.S.R.

VIKTOR GONCHARENKO, who competed in the World Championships in Poland in 1958, has put up a national out-and-return record of 480 km. (298 miles), flying an A-15. He is now 44 years old. He started gliding while still at school, and during the last war flew transport gliders taking supplies to guerillas. In 1958 he was a baritone at Kiev Opera House; now he is a soloist in Kiev Philharmonic Society.

Novosti Agency.

During the recent Championships the Russian team told Christopher Wills that 700 Blanks have been ordered for the Soviet Union. At present they have 27 A-15's in the country and 4 or 5 KAI-19's.

WEST GERMANY

A gliding site has been established 13 km. north of Garmisch-Partenkirchen, the famous ski centre in the Bavarian Alps, after much negotiation. Normally at 9 a.m. a west wind starts blowing up a slope 1 km. away, and there is a 15-km. east-facing slope 2 km. away. Thermals are good from 1 p.m. During a 10-months' trial period last year, 251 hours were flown from 512

launches, including 16 five-hour flights, 12 climbs of over 1,000 m., 2 flights over the Zugspitze (highest mountain in Germany), and 95 km. distance to the Unterwössen gliding centre. The site is 624 m. (2,047 ft.) above sea-level.

Aerokurier

COLLISIONS WITH BIRDS.—Vogelschutzwarte, 6 Frankfurt/Fechenheim, Steinauer Strasse 44, is collecting full details of all accidents and incidents due to this cause, and asks pilots to co-operate.

Aviasport

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