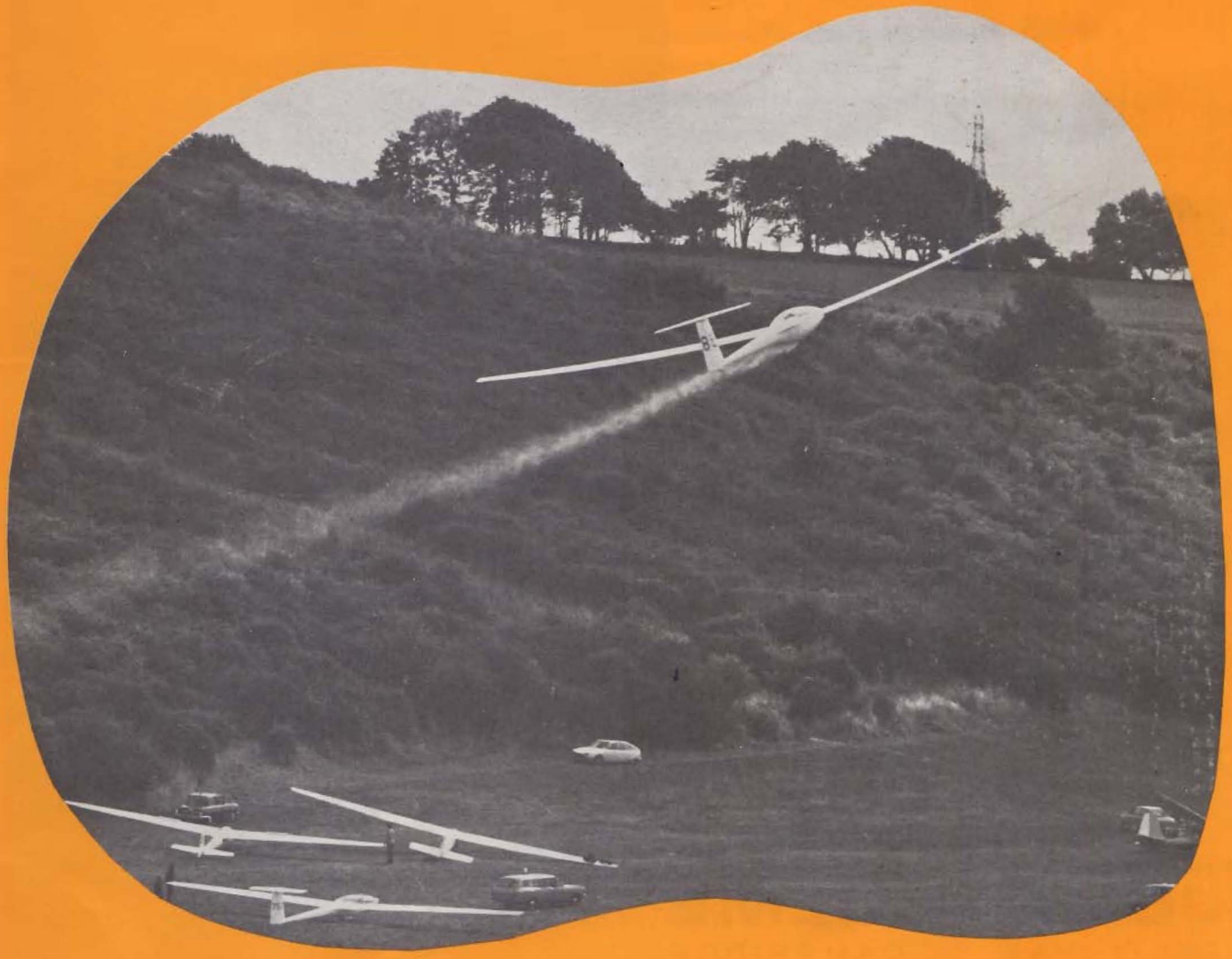
SAILPLANE & GLIDING

OCTOBER – NOVEMBER 40p



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SAILPLANE & GLIDING

Magazine of the BRITISH GLIDING ASSOCIATION

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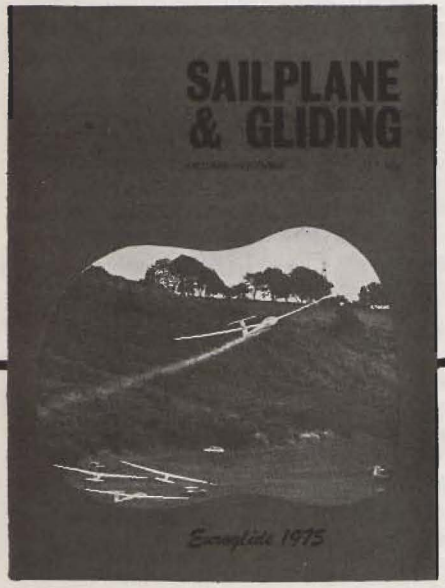
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Cover: Lemmy Tanner jettisoning waterballast from his Kestrel 19 at Dunstable during Euroglide. Photo by Hans Smit.



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Volume XXVI No. 5 OCTOBER—NOVEMBER 1975

Published by British Gliding Association
Kimberley House, Vaughan Way, Leicester. Telephone Leicester 51051

Printed by Creative Packaging, Eli Lilly & Co, Joule Road, Basingstoke, Hants.

CROSS-COUNTRY gliding weather

TOM BRADBURY



TOM BRADBURY

Tom, a valued Met man at countless competitions, is at the Meteorological Office headquarters at Bracknell, Berks. He is a member of the Bristol & Gloucestershire Gliding Club and flies a Std Libelle with the splendid base station call sign of Seaweed.

The aim of this article is to suggest some simple guides to good soaring weather. For this purpose a good soaring day was defined as one on which it was possible to make a closed circuit flight of 300km or more over central and southern England. For practical purposes the Lasham cross-country log was used to obtain a list of dates over seven years from 1968 to 1974. During this period there was an increase in the number of high performance glass-fibre gliders available. This made it easier for pilots to complete triangular flights in recent years and the number of such flights increased. The number of days on which such flights were possible did not show a significant change however, but this may be due to insufficient samples. All the years have been grouped together and the monthly total of good cross-country days is as follows:

April—16; May—20; June—24; July—23; August—16.

A few good days also occurred in March and September but they were rare enough to take most pilots by surprise and few people were able to take advantage of the conditions.

Weather Conditions for Closed Circuit Flights

(a) There should be an even distribution of thermals marked by small cumulus cloud. There should be no large areas of showers or regions of extensive layered cloud, nor should there be a complete absence of cumulus.

(b) The cloud base over level country should rise to at least 4000ft above the general ground level by early afternoon. (Mountain areas are excluded).

(c) The winds between the surface and 5000ft should not exceed 25 knots. A flat calm does not produce ideal conditions either and speeds between 5 and 15 knots seem best.

(d) Visibility should not be less than about 5 miles, and on most good days the visibility exceeds 15 miles.

Flights using wave lift require different conditions and have not been considered in this article.

Wind

The wind speed and direction is often the dominating factor in cross-country gliding which uses thermals as the source of lift. Wind speeds exceeding 25 knots appear to prevent successful closed circuit flying. The wind speed measured by one or more of the radio sonde stations in England on good cross-country days showed the following distribution of speeds at 5000ft.

Speed	*Percentage of days*
0— 4kts	17.5%
5— 9kts	25.4%
10—14kts	23.8%
15—19kts	12.7%
20—24kts	20.6%

The increase of good days with speeds in the 20—24 knot range may be due to the use of cloud streets for out and return flights. Cloud streets are more likely with the stronger wind speeds. However on such days triangles are difficult to complete.

Wind Direction

On a great many days the pressure gradient was so weak that no definite direction could be assigned for the wind over the area of cross-country flying. These days were listed under the "variable" class.

Direction	*Percentage of days*
Variable	45%
From 300—360deg	30%
From 030—060deg	7%
all others	18%

There was a surprising gap between 360 and 030 degrees due perhaps to lack of number sampled but also possibly because winds from this direction have often had a long travel over the North Sea and may be too moist. Winds from 030—060 degrees suggest that the air had travelled over Scandinavia and was still relatively dry when it reached England.

Track of Air Previously

Good thermals are more likely to occur when the air reaching England is relatively cold and also when this air has not previously been heated over the continent. Air which has once been heated over the continent usually arrives over England with a well defined inversion just above the surface. The heat necessary to break down this inversion takes several hours to accumulate and soarable weather is delayed till late morning or early afternoon.

Previous track	*Percentage of days*
Winds from WNW, through North to NE:—	55%
ALL others:	19%
Stagnant (Air which was over England the previous day)	26%

From the "Other directions" group there were no examples of good soaring days when the wind had come from SSE, south or SSW, and very few with SW to west winds. The critical feature of winds which had come from SW or west was how long the air had been at latitudes south of 50 degrees north. Most good soaring days in such air occurred when the SW winds had originally come from the north and were curving back after a brief stay over more southern latitudes. If the trajectory of the air passed south of latitude 44 degrees north the extra moisture picked up prevented really good soaring weather from developing over England.

Deductions from the Isobaric Pattern

The patterns of isobars on a weather map give no direct information about the depth of stability and amount of convective cloud, but there are some valid inferences one can make just by looking at a forecast weather map with its fronts and isobars. The general rules are as follows:

(a) Where there is an area of low pressure there is also likely to be an area of slowly ascending air aloft leading to extensive cloud cover. If the depression is moving the area of cloud generally extends forward in the direction of motion.

(b) Where the surface chart shows an area of high pressure there will probably have been large scale slow descent of air aloft. This descent warms and dries the air and makes it more stable.

This effect is not confined to the centres of pressure systems. Troughs and ridges in the pattern are also associated with rising or descending air aloft. A trough (in our latitudes) tends to have increased cloud cover near it, the cloud cover being extended ahead of it when the trough is moving. In contrast a ridge is usually a region where cloud cover decreases and the air becomes more stable. For good soaring only small amounts of cloud are desired, so ridges and regions near high pressure centres usually give the best conditions.

A simple test for good soaring weather is:— will the route be nearer to a high pressure system or ridge than to a low pressure centre or trough line?

86% of good soaring days occurred when the area was nearer to a ridge or anticyclone.

6% of the good days occurred half way between high and low pressure systems.

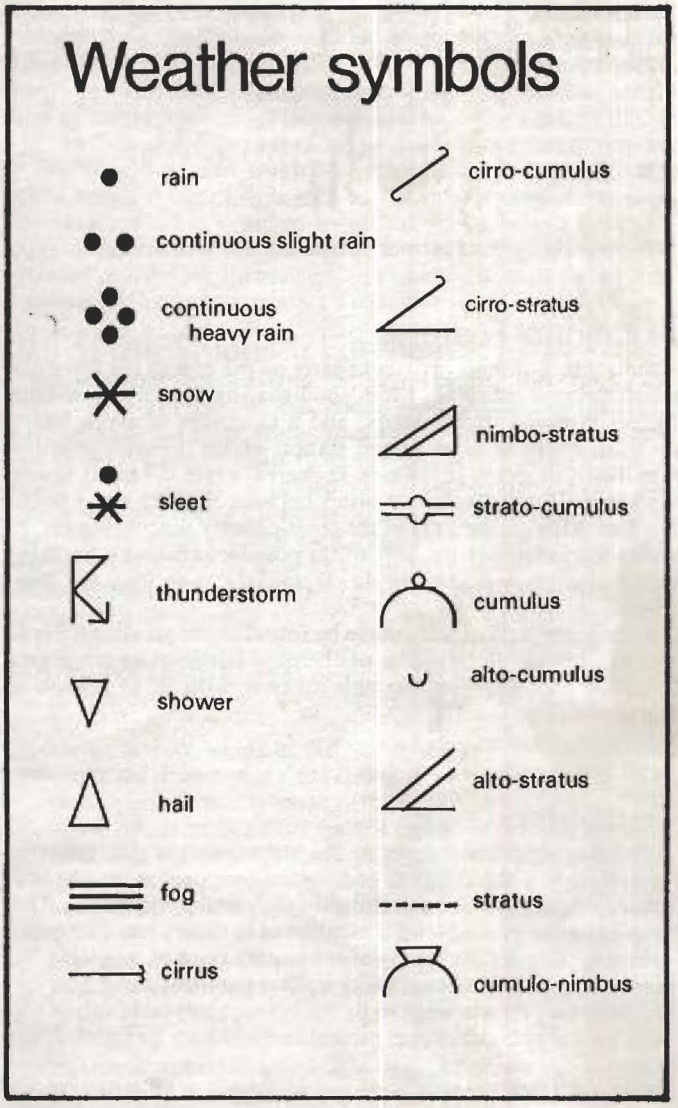
8% were actually nearer to a low than to a high pressure centre, but on these days the low was moving away.

Curvature of Isobars

It is not always easy to determine from a small weather map whether the area is nearer a trough or a ridge. A simpler test of good soaring weather is to look at the way the isobars curve. Isobars which (travelling downwind) turn to the right are said to have "anticyclone curvature". Curving to the left is called "cyclonic curvature". (In the southern hemisphere the reverse is true).

Good soaring conditions are more likely if the isobars have anticyclonic curvature.

78% of good soaring days had anticyclonic curvature of the isobars.



15% occurred when the isobars were straight.

7% of the days were good despite cyclonically curved isobars.

Summary of an Ideal Surface Chart

A number of outstanding soaring days had the following features in common:—

(a) During the period 12—48 hours previously a cold front had passed across the country.

(b) The air following the cold front had come from a region further north. The mean trajectory lay in a broad sector from WNW through north to NE.

(c) The depression associated with the cold front moved well clear of England and a ridge or anticyclone moved close to or over the country.

(d) The isobars showed anticyclonic curvature over the area of the cross-country flights. The spacing between isobars was wide enough to prevent the winds reaching 25 knots at flying levels.

(e) The surface pressure was above the seasonal normal.

Surface Pressure

The surface pressure is not usually a critical factor in good soaring weather but it was included because of its association with successful flights. The figures are:—

Pressure Range	*Percentage of Good soaring days*
1007 to 1011mb	7%
1012 to 1016mb	12%
1017 to 1021mb	25%
1022 to 1025mb	41%
1027 to 1031mb	13%
1032 to 1036mb	3%
above 1037mb	less than 1%

91% of occasions had surface pressure of 1013mb or higher.

Additional Features

Sunshine. Sunshine provides nearly all the energy for thermals which develop overland. Most good soaring days had sunshine figures in excess of ten hours, and a minimum of seven hours recorded sunshine at an inland station within the cross-country area seems essential. In latitude 52 degrees north the sun is above the horizon for more than 14 hours between April 21 and August 26. This is the greater part of the cross-country soaring season. It seems that unless at least 50% of the possible sunshine is actually recorded at ground level the day is unlikely to be ideal for long flights.

Strong thermals can of course be found under an almost overcast sky but the distribution of thermals is apt to be irregular. The wide gaps between thermals make it difficult to achieve a fast speed.

Temperatures

The most important layer of the atmosphere is that between the surface and about 5000ft and the temperatures at the top and bottom of this layer are a useful guide to soaring conditions. The temperature at ground level is mentioned in most press and radio forecasts. The 5000ft temperature is only readily available by telephoning a Met Office. Taking surface temperatures first:
The following figures seem to be the lowest acceptable values for maximum temperatures over central and southern England.

March	:	10°C
April	:	11°C
May	:	13°C
June	:	18°C
July	:	21°C
August	:	19°C
September	:	15°C

There is no similar upper limit, but very hot days are not necessarily the best soaring days. Hot days generally occur when air has come from the continent. This continental air often contains a large inversion at dawn. This takes time to break down even if the sun shines continuously and consequently thermals do not develop until late morning or early afternoon and are likely to die out well before sunset.

Temperatures Aloft

On good soaring days the temperature at 5000ft is at least 11°C colder than the maximum surface temperature. On days with strong thermals the difference in temperature can be about 16°C.

If the temperature continues to fall the same amount in the next 5000ft (that is between 5000 and 10000ft) the air is likely to prove too unstable for good soaring. A drop in temperature of 10°C between 5000 and 10000ft may indicate that there will be heavy cumulus development by the afternoon with consequent risk of showers cutting off parts of the route.

On an ideal soaring day the temperature falls at least 11°C in the first 5000ft but only 5°C in the next 5000ft.

Changes of Temperature with Time

On good soaring days the 5000 foot temperature remains constant or decreases slowly during the day. Days when the temperature aloft decreases with time are usually days when thermals last until late in the day. 80% of the good soaring days had constant or slowly decreasing temperatures at 5000ft.

In contrast rising temperatures at 5000ft usually result in weakening thermals which end earlier in the day. The maximum rise in the 5000 foot temperature on a good day was 4°C, but this was an exception.

Humidity

Humidity is important because as a general rule the more humid the air the lower the cloud base will be and the greater the cloud amount will be. Humidity is often reported as the difference between the actual air temperature and the "dew point". (The dew point is the temperature below which the moisture in the air condenses out as droplets of water resulting in dew, fog or cloud depending on the circumstances).

Volmet broadcasts of airfield weather often give the temperature and dew point. There is a useful (but not exact) relationship between the difference between air temperature and dew point and the base of convective cloud. This rule is only valid while the temperature is rising. Multiply the difference between dry bulb and dew point by 400 to get the cloud base in feet. For example if Gatwick report a temperature of 22°C and a dew point of 12°C the base of cumulus (if any) will probably be about 4000ft.

Humidity and the Spreading out of Cumulus

Cross-country pilots are often faced with the problem of cumulus which, within a few hours of development, spreads out to form an almost continuous layer of stratocumulus. This occurs when:—

(a) A well marked inversion or very stable layer acts as a lid to convective currents and the cumulus clouds all cease rising at a uniform height.
(b) When the air beneath this "lid" is moist for a depth of at least 1500ft.

There is no infallible way of detecting this from the surface chart. One must have access to a representative upper air sounding. As a general rule if the sounding shows there is a very stable layer beneath which the dew point is within 5°C of the air temperature than there is a risk of cumulus spreading out to form a layer.

The risk is greatest when the inversion begins at levels between about 4000 and 7000ft. If the inversion starts below 4000 there is a good chance of thermals stirring up the air enough to bring down the very dry air usually found above such inversions. This only occurs well inland however and coastal areas are particularly prone to persistent stratocumulus with onshore winds.

Inversions are of course a common feature of good soaring days. The difference between a good day and a poor one is often just a few degrees more between the dew point and the air temperature. The drier air results in well broken shallow cumulus instead of a continuous sheet of stratocumulus.

A Check List for Good Soaring Weather

1. After the passage of a cold front.
2. Near or ahead of a ridge or centre of high pressure.
3. When the winds up to 5000ft are (a) less than 25 knots and (b) from a direction between WNW through north to ENE. or (c) the wind direction is variable and speed less than 15kt.
4. When the air has come from a more northerly latitude the day before.
5. When the isobars are curved anticyclonically.

6. When the area is nearer to the adjacent high or ridge than to a low or trough.
7. Provided the afternoon temperature reaches the following values March 10°C; April 11°C; May 13°C; June 18°C; July 21°C; August 19°C; September 15°C.
8. When the mid afternoon dew point is at least 10°C below the air temperature.
9. Surface pressure above 1007mb, preferably in the range 1017 to 1031 mb.
10. The 5000ft temperature at least 11°C below the surface temperature by mid-afternoon, and not expected to rise.
11. At least 50% of the possible sunshine reaches the ground.

Conditions Actually Prevailing on a Good Soaring Day

May 31, 1975, was an outstandingly good day for cross-country flights over much of England except some eastern areas. The 500km triangle record was broken and one flight exceeded 600km. This is how the check list compared.

1. A cold front had crossed the country and was more than 100 miles south of Lands End at midday.
2. There was a ridge over England and Wales.
3. The 5000 winds at midday were reported as 355/13 near Liverpool, 320/19 near Great Yarmouth and 020/08 at Crawley (Sussex).
4. The air over Britain had come from north of the Arctic circle.
5. The isobars curved anticyclonically over the area of best conditions.
6. The area was nearer to a high than a low.
7. The afternoon temperatures ranged between 13 and 16°C.
8. The mid-afternoon dew points were reported from 11 to 17°C below the air temperature.
9. The MSL pressure was about 1020mb.
10. The 5000ft temperature was about 17°C below the mid-afternoon surface temperature.
11. Many places reported 10 hours sunshine, some had more than 14.

Making the Most of Weather Forecasts

The bulletins broadcast by the BBC are required to be brief since the majority of listeners do not wish to be confused by details. Glider pilots need to be alert to the significant points which can be covered before the announcer goes on to the trailers for forthcoming programmes.

Summary of the Situation. This is often the most useful part since it sets the stage for the forecast and often tells the listener or viewer if the weather has any promise. The brief glimpse of a TV chart is worth a lot of words. Use it for items 1 and 2 on the check list.

Assuming that there is no obviously adverse feature (such as a depression or trough moving towards the country) here are some pointers to good weather which can be picked out of a forecast.

Tonight's Weather

Decreasing winds and clearing skies are often a good sign especially if the pressure is rising and a front or trough is moving away. Are the night temperatures expected to be unusually low? This often means that the dew point is low, and a low dew point can mean a high cloud base next day. A night frost in the spring and early summer can precede a day of strong thermals.

Tomorrow's Weather

The cheering phrases here are "sunny periods" or "sunny spells". In contrast "sunny intervals" is not so hopeful, this phrase implies much more cloud than sun and to a glider pilot may mean overdevelopment of convective cloud.

Showers may not seriously spoil the day. If the term "isolated" or "scattered" is added it can still be a good day. However, if you hear the adjectives "widespread, frequent, heavy, or prolonged" used you should prepare for disappointment on any task which has pre-declared turning points.

If the winds are predicted to be light or moderate on the ground then the upper winds will probably be light enough for closed circuit flying. Terms such as "fresh to strong" mean that the surface wind is expected to exceed 16 knots and if so the upper winds may be too strong for triangular flights. The term "strong" is used for the range 22—27 knots, in such cases there is almost no hope of completing a triangle.

Use of the Shipping Forecast

The shipping forecast with its list of coastal reports can be almost as much use to the glider pilot as to the mariner. Wallington in his book *Meteorology for Glider Pilots* described how to draw a simple chart from the data broadcast in shipping forecasts. The bulletin is in two parts, the forecast for each sea area in turn and then a list of observations from coastal stations. Using the two parts one can draw a general pattern of the airflow over the British Isles. The 0633 broadcast is the one to listen to before setting out for the airfield while the 1755 issue can help in planning for the next day.

Some Hopeful Features

1. An anticyclone or ridge approaching or moving over Britain.
2. North or NW winds in the North Sea and Irish Sea. (NW winds are acceptable in late spring or early summer provided there is no mention of poor visibility or fog).
3. Wind speeds of Beaufort force 4 or less within 300 miles of your area. (Force 5 is probably near the limit, if all the nearest sea areas are predicted to have force 5 winds the wind speed at 2000ft may be too strong for closed circuits overland.)
4. Forecast of showers over the North Sea but not over the Irish Sea when the winds are north or NW.

Bad Signs

1. Nearby or approaching troughs or depressions.
2. Winds from a southerly direction, especially if the wind is expected to increase.
3. Winds of Beaufort force 6 or more in nearby coastal areas. (Mention of gales in Rockall, Bailey, Fair Isle, Faeroes and SE Iceland need not worry pilots in central England.)
4. Fog or poor visibility near the coast if winds are on shore. (This suggests a low inversion with very limited thermals overland; the bad effect of NE winds with fog in sea areas Humber and Thames can extend right across the Midlands to spoil thermals over the Cotswolds.)

Conclusion

The check list for good soaring conditions was intended to show the various weather features which go to make a day when a competition pilot with a "Nationals" rating could attempt a fast time round a triangle of 500km or better. Such days also offer the average club pilot a good prospect of completing a 300km triangle in a glider such as a Skylark 3 or K-6.

There are of course exceptions to almost every weather rule quoted and the check list has many limitations. It is generally true that the more items for which the criteria are satisfied the better the prospect of good conditions. However the list does not cover the occasions when narrow bands of very good conditions develop in an otherwise mediocre pattern of weather. This is an opportunity for the free ranging pilot, who is not restricted to a pre-declared task, to get the utmost out of a soaring day. Perhaps one of the experts will tell us how they do it.

NEW SAILPLANES

RIKA HARWOOD

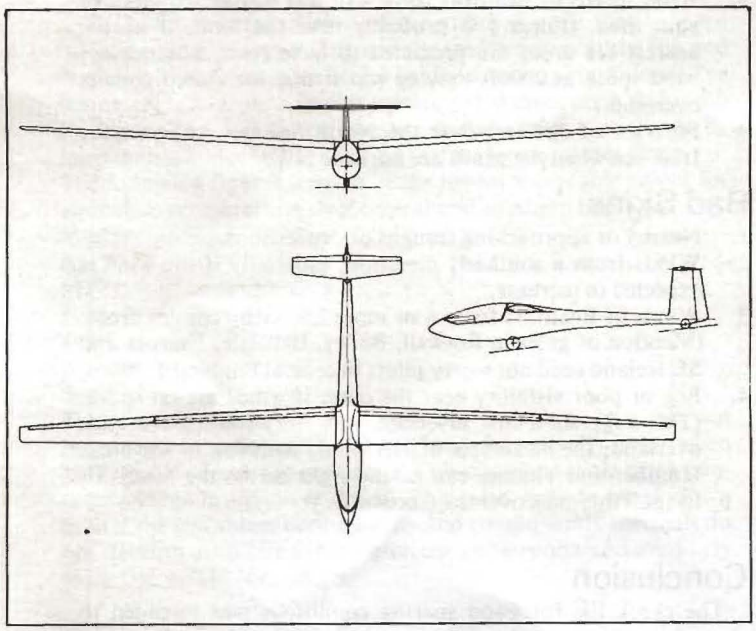
The uncertainty of what was happening, or not happening, to the Standard Class concept had been very unsettling for some time.

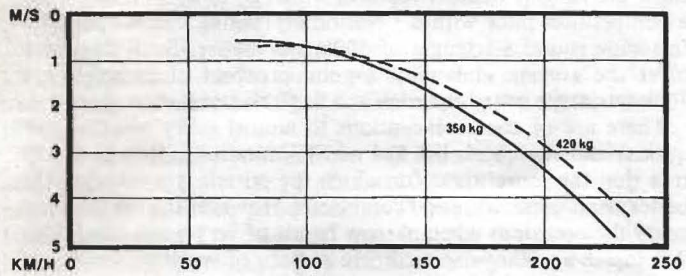
The March 1975 CIVV decisions have at last given definite directions and cleared the air considerably. This must have been more than welcome to competition pilots and manufacturers alike. (See CIVV report, S&G June—July, 1975, p109.)

Designers were ready to dig into their bottom drawer to show what had preoccupied them during the "wait and see" period, and "Formula 1" and "Racing Class" are rapidly becoming new household names for a new generation of sailplanes where the only limitation is a span of 15m.

The experience gained over more than ten years of glass-fibre production has led to many labour saving ideas in construction. One will probably find that everybody engaged in the sailplane industry has had a close look at their escalating production costs which, with the present state of inflation, would almost certainly put a halt to further expansion. Manufacturers thus hope that with better production efficiency the overall costs will be reduced so that they can still offer their products at a relatively competitive price.

Glasflügel
HORNET





With this machine the world-famous name of Libelle will experience a change as it will only be applied to the Club-Libelle of which about 100 have already been delivered since production started only last December.

Several versions of the new Hornet have been tested including a shoulder wing, and a mid-shoulder wing. The last version a mid-shoulder wing with reduced wing incidence finally gave Eugen Hänle the performance he was looking for and this is about to go into production.

One of the main attractions, apart from its performance, is the large dimension trailing edge flap brakes which give excellent glide path and landing control. The roomy cockpit will take pilots over 6ft tall, and with a re-designed instrument panel there is ample leg room.

It should, like all other Glasflügel products, please the most critical pilots. Deliveries are scheduled from early 1976.

Further details: Slingsby Sailplanes, Kirkbymoorside, Yorkshire.

Technical data—Hornet	
Span (m)	15
Wing section	Wortmann
Wing area (m²)	9.80
Wing loading (kg/m²)	
without w/b	35.7
with w/b	42.9
Aspect ratio	23
Empty weight (kg)	227
AUW with and without w/b (kg)	420/345
Min sink (350kg) at 75km/h (m/sec)	0.60
Max speed (km/h)	250
Glide ratio (420kg) at 103km/h	38:1

Burkhart Grob
ASTIR CS

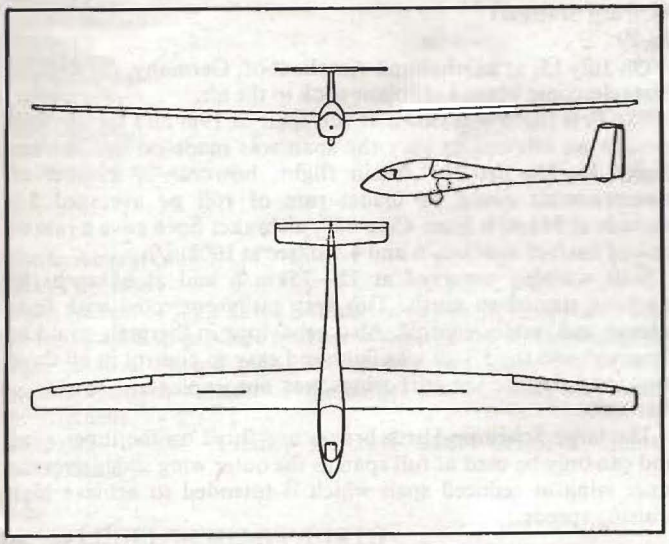
The firm Burkhart Grob, 8939 Mattsies, Flugplatz Mindelheim-Mattsies, W. Germany, who have been building about 150 Std Cirri under licence for several years, have now marketed a GRP Club/Standard Class sailplane. For clubs as well as private owners who desire a glass-fibre high performance sailplane, easy to fly and handle and catering for all shapes and sizes with a large roomy cockpit, this machine may well be of interest.

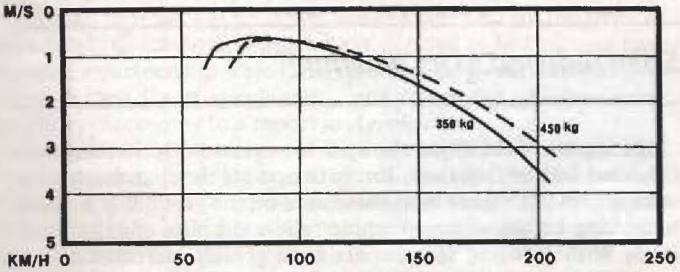
The makers claim that owing to its well thought out construction the production time has been reduced to such an extent that they can offer this sailplane at an interesting price (not however quoted).

The machine is built to the 15m restricted Class definition. It has a T-tail, large airbrakes, retractable undercarriage and can carry 90 litres of waterballast jettisonable from behind the undercarriage.

Further details: from the above address.

Technical data—Astir CS	
Span	15
Wing section	Eppler E603
Wing area (m²)	12.4
Wing loading (kg/m²)	
without w/b	25
with w/b	36.3
Aspect ratio	18.2
Empty weight (kg)	240
AUW with and without w/b (kg)	450/360
Min sink (360kg) at 75km/h (m/sec)	0.60
(450kg) at 85km/h (m/sec)	0.70
Max speed (km/h)	250
Glide ratio (360kg) at 95km/h	37.3:1
(450kg) at 105km/h	38:1







The Astir's roomy cockpit

Rolladen-Schneider
LS-1F and LS-3

Although one of the most successful Standard Class sailplanes the LS-1 series mostly stayed within Germany and only relatively few found their way abroad.

In order to keep delivery time for the home market at an acceptable level the export side of the business has been rather neglected, although there was no lack of enquiries. Recently, however, production has been increased to ten sailplanes per month and the back log of orders can now be dealt with and thus the firm is ready to follow up on export orders with the current LS-1F.

The LS-3 for the unrestricted 15m Class is about to come off the drawing board and it is hoped that production will be in full swing for delivery in early 1977.

Further details: Rolladen-Schneider, 6073 Egelsbach/Hessen, Mühlstrasse 10, W. Germany.

Schempp-Hirth
CIRRUS-75

The Cirrus-75 is a further development of the Std Cirrus of which about 600 are flying all over the world.

Improvements include a change in the construction of the wings to give more profile accuracy on the surface. A new pointed nose profile to give better high speed performance and a much improved wingroot/fuselage fairing should give better performance at the low end of the speed scale.

The waterballast tanks are completely separate from the wing interior and both wings are filled from one point. The jettison valve is housed in the fuselage.

Another major improvement will be the new tailplane fitting which was often troublesome unless one had acquired the knack.

To improve the landing characteristics the airbrakes have been increased by 10%.

Further details: Southern Sailplanes, Membury Airfield, Lambourn, Berks.

"FORMULA 1" sailplane in 1976

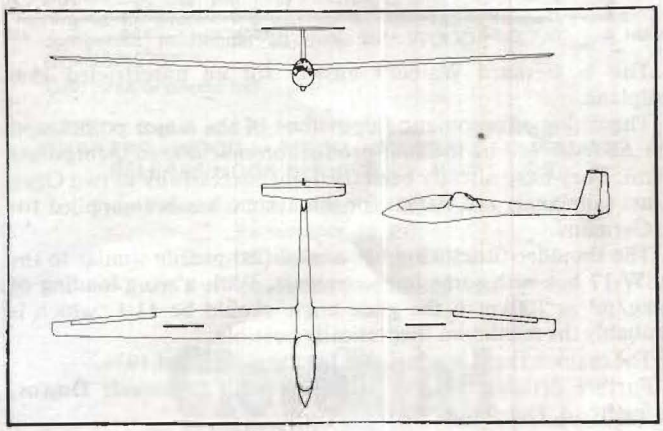
With the construction of Janus, the Cirrus-75, Nimbus 2M and a number of improvements on the Nimbus 2, the development capacity at Schempp-Hirth has been at full stretch. In a report in *Aerokurier* (May, 1975) Klaus Holighaus warns those who are making eyes at the new unrestricted 15m Class that they can't expect physically impossible and unrealistic performances.

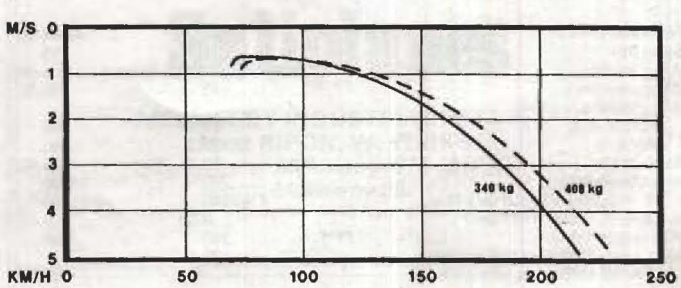
In his view one can only increase the performance *vis a vis* a conventional Standard Class machine either at the high or low speed end by about 10%, but not at both ends of the speed scale.

The main enemy of a 15m "Racing Class" sailplane is the span limitation which perforce keeps the Reynolds Number of the wing low. For this reason Klaus thinks that the maximum possible glide angle will be about 42:1.

Preliminary work on their project for a 15m unrestricted sailplane has already excluded any of the known flap profiles. To be in at the start of this new attractive Class one would be surprised if the "Formula 1" of Schempp-Hirth is not in the air by the spring of 1976.

Schleicher
ASW-19



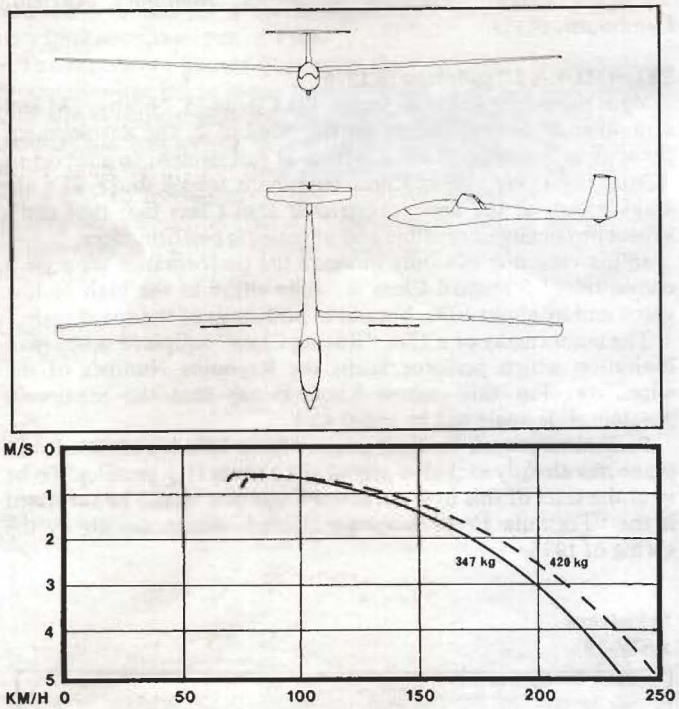


The idea to develop the ASW-15B by a simplified production technique could be realised when the CIVV directives became known. Also talks with a number of pilots confirmed that a hotted-up restricted 15m Class machine would indeed have a market and so the ASW-19 was born.

It has a mid-shoulder wing and is fitted with a T-tail. The fuselage is very slim but with a large cockpit and a pointed nose profile similar to that of the ASW-17.

To compensate for the mid-shoulder wing, ground clearance at the wing tip is maintained by increasing the dihedral by ½° (2.5° in total) this also increases the lateral stability. Enlarged airbrakes are fitted to the top surface only and ensure good field landing qualities.

ASW-20



This is Gerhard Waibel's answer for an unrestricted 15m sailplane.

The fitting of automatic flaps is one of the major points, and the ASW-20 will be the first production machine to incorporate them. They have already been tried out successfully in two Open Class sailplanes, and Patent for this system has been applied for in Germany.

The shoulder-fitted wing has a modified profile similar to the ASW-17 but with some improvements. With a wing loading of 33kg/m² at 100km/h the glide angle should be 43:1, which is probably the maximum theoretically possible.

The maiden flight is scheduled for the autumn of 1976.

Further details: London Sailplanes Ltd, Dunstable Downs, Tring Road, Dunstable, Beds.

Technical data	ASW-19	ASW-20
Span (m)	15	15
Wing section	Wortmann (mod)	Wortmann (mod)
Wing area (m²)	11	10.50
Wing loading (kg/m²)		
without w/b	27	30
with w/b	37.2	40
Aspect ratio	20.4	21.43
Empty weight (kg)	230	240
AUW with and without w/b (kg)	410/345	420/355
Min sink at 73km/h (m/sec)	0.65	0.60
Max speed (km/h)	240	250
Glide ratio (408kg) at 105km/h	38:1	
ASW-20 (346kg) at 100km/h		43:1

Akaflieg Stuttgart
FS-29

On July 15, at Bartholomä-Amalienhof, Germany, the world's first telescopic winged sailplane took to the air.

The first flight was flown at full span of 19m and for obvious reasons no attempt to vary the span was made on this maiden flight. During the 2hr 20min flight, however, a number of measurements could be made: rate of roll *pe* averaged 5.3 seconds at 95km/h from 45 to 45°; airbrakes open gave a rate of sink of 3m/sec at 80km/h and 4.5m/sec at 100km/h.

Stall warning occurred at 72—75km/h and at 68km/h the machine started to mush. This was easily corrected with light aileron and rudder control. Also behaviour in thermals could be observed and the FS-29 was light and easy to control in all three axes, and despite the stiff wings was not unpleasant to ride in thermals.

The large Schempp-Hirth brakes are fitted on the inner wing and can only be used at full span as the outer wing slides over the inner wing at reduced span which is intended to achieve high cruising speeds.

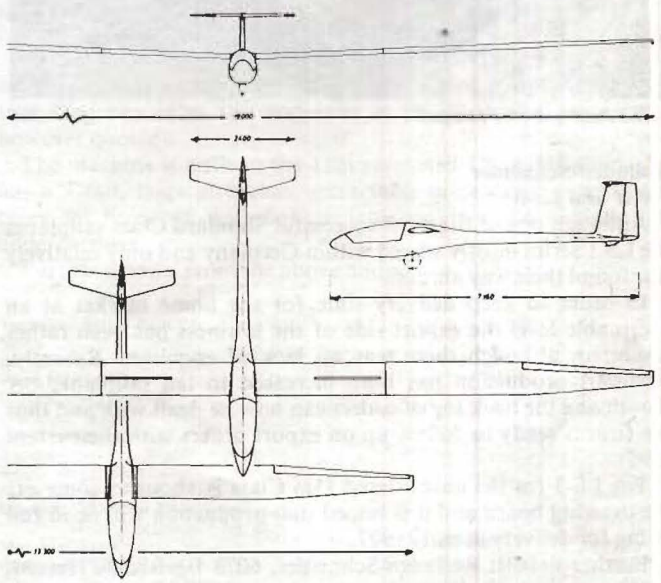
Span reduced to its minimum

During the third flight the span was reduced to its minimum (13.30m) for the first time; forces to operate the span mechanism were somewhat higher than those used on the ground. It is hoped to develop an automatic system to relieve the pilot of extra workload. With reducing span, apart from greatly increased aileron control, no large control movements were necessary and no extraordinary forces were encountered.

A total of 10½hrs were flown during the first three flights and at 19m it had the same flying characteristics as other sailplanes of this Class.

The flight test programme has only just begun and thus no predictions as to its overall performance can be given yet.

Like all other Akaflieg projects the machine is not intended for production. Apart from a year of research and preliminary planning, it has taken the students of Akaflieg Stuttgart 20000hrs and 43 months to develop this very interesting research project to its flying stage. After completion of its test flying programme no doubt time will tell whether or not they have found the right solution.



Technical data	FS-29	FS-29
Span (m) Max and Min	19	13.30
Wing section	Wortmann	Wortmann
Wing area (m²)	12.65	8.56
Wing loading (kg/m²) without w/b	35.6	52.6
Aspect ratio	28.54	20.67
Empty weight (kg)	357	357
AUW without w/b (kg)	450	450
Max permissible speed (km/h)	150	250

Pilatus Aircraft Ltd
PILATUS 18m

The success of the Pilatus B-4 has led to new developments and the first step is to produce an 18m version of the B-4 with a glide angle of 40:1. Also a high performance two-seater the PC-XS and a motorised version of the same, the PC-XM, are under development.

Further details: Pilatus Aircraft Ltd, CH-6370 Stans, Switzerland.

GLASFLÜGEL/SCHEMPP-HIRTH

Instead of what was no doubt healthy competition the firms of Glasflügel and Schempp-Hirth have decided to link up and have formed a partnership which will result in the world's largest production capacity of sailplanes:— one completed sailplane every workday, according to a report in *Aerokurier*.

In combination there are at the moment no fewer than eight types catering for all Classes of which only the Hornet and Cirrus-75 will be in direct competition, but Hänle and Holighaus felt rather than to axe one it would be better to leave a choice to the customer and thus both machines will be (or are) in production.

Independence and status unchanged

Both firms will keep their independence and their status has not changed. The bridging operation involves an essential interest by Klaus Holighaus in the Glasflügel concern. They will also keep to their own delivery programmes, and customers will find that their individual preferences on construction styles and flying characteristics will be maintained by both firms..

Bringing together their vast experience and manufacturing techniques should result in savings on production costs and the expectation of producing sailplanes of all Classes at competitive prices.

The export market should especially benefit; the goal being a close co-operation between the various agencies and a combined effort to expand further in the USA, a market which seems to favour flapped sailplanes considering the success the PIK-20 has in the States.

Further progress on existing types

The heart of the co-operation, however, will be on new developments and further progress work on existing types, and the first to go into production will be the new unrestricted 15m Mosquito which was in hand at Glasflügel before the CIVV came to their decisions.

Its glide angle will be in the region of 42:1 and maximum AUW 450kg. Although neither a Hornet nor a "mini" Kestrel it will have the easy control and rigging qualities of the Kestrel. First deliveries are expected in 1976.

All in all this "marriage" between the two firms will be watched with great interest.

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FLYING THE ASTIR CS



DAVID LIDBURY

During a recent visit to Germany, a small group of us from Oxford (myself, Peter Pratelli and Tony Taylor) had the good fortune of flying the Astir CS. Production of the glider had reached a rate of one a day by late July and a tandem two-seater version of the Astir CS is due to be test flown later this year.

The aircraft is somewhat "chunky" in appearance, although this is by no means displeasing to the eye. The most striking features on first sight are the enormous cockpit, the slender tail-boom, and the large wing area. All controls fall readily to hand. The undercarriage lever is operated by the right hand, as is the waterballast jettison. The trim lever and airbrakes are controlled with the left hand. The cable release is situated in the lower half of the instrument console, and to the left of the stick. The wheel-brake lever is mounted on the control stick. The rudder pedals are fully adjustable in flight. The large, hinged, cockpit canopy provides excellent all-round visibility, and the instrument console can accommodate a large number of instruments.

Some of the design features deserve special note, since they are unique to the Astir CS. The wings couple to the fuselage *via* a system of ingenious "snap-lock" connectors. In fact, rigging is achieved without the need for any removable parts. The fuselage has been designed for heavy club use, a vertical member is provided inside the fuselage shell and reaches down to the fin for extra strengthening. The undercarriage suspension is well sprung, immensely strong, and carries an extra large wheel. A neat plug-in tail dolley is provided, and this is designed to drop off should one inadvertently attempt to take-off with it on.

Some general conclusions

Time did not permit us to make an exhaustive assessment of the flight handling characteristics of this glider. However, the following represents some general conclusions drawn by all of us after having short aero-tow flights, each of approximately thirty minutes duration.

We were impressed with the glider's handling during the early stages of the take-off run (for all flights the wind speed was approximately 5kts), good lateral and directional control being obtained from the moment of wingtip release. Once airborne, the flying controls were found to be light, responsive, and well harmonised. No difficulty in keeping station behind the tug was experienced. The trimmer was found to be very effective, and the aircraft could virtually be trimmed to fly "hands off" whilst on tow.

Once off tow at about 500m, the Astir's thermalling ability soon became clear. With moderate angles of bank (up to approximately 40 degrees) thermalling turns were made in the speed range 35—45kts. The glider appeared to be happiest climbing, under the conditions of the day, at about 40kts. Only relatively small, and precise stick movements were required for centring. The rudder, being correspondingly sensitive, had to be used with some discretion to ensure that the yaw string remained centralised.

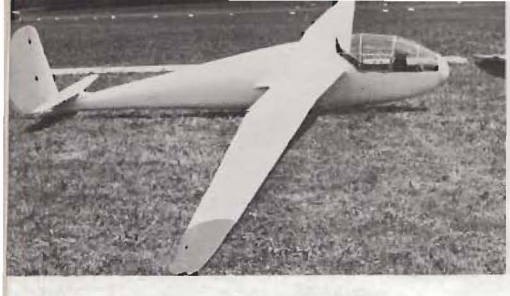
With some useful height gained from the thermal, a qualitative assessment of the glider's rate of roll was made. At 45kts, the standard change in angle of bank took approximately four seconds. Glides were conducted at various speeds in the range 40—100kts, and we felt it was certainly living up to its reported polar curve. The aircraft has a conventional tailplane-elevator arrangement, and it was found possible to trim "hands off" over the above speed range.

Immediate spin recovery

Next, stalling behaviour was noted. With wings level, the first signs of an approaching stall occurred at an indicated airspeed of about 32kts, with a general burbling of the airflow being apparent around the tail unit. With the stick held more fully back, the glider mushes, but remains controllable in a lateral and directional sense. If the stall is approached more rapidly, the nose will drop away, but any tendency for a wing to drop is easily controlled by use of rudder. On releasing the stick, the glider quickly returns to the normal flying attitude. We did not attempt to spin the glider. However, we later learned that with the CG position between normal limits, the aircraft will only enter a spin with aileron and rudder controls fully crossed, and with the stick held fully back. Recovery was said to be immediate, upon releasing the stick, and or centralising the controls. We also learned that it is possible to make turns in the mushed state at angles of bank up to 20 degrees, without a tendency of wing drop occurring.

Flying the glider in the circuit posed no special problems. The final approach was made at 45kts. The large top-surface airbrakes proved to be very effective, a slight nose-down change of trim occurring when they were opened. The wheelbrake enabled the aircraft to be brought to a rapid halt after a fully held-off, two point touch-down had been made. Directional and lateral control during the ground run were noteworthy, and should enable difficult crosswind landings to be accomplished without fear of ground-looping. The Astir was found to have pleasing side-slip characteristics, and the technique proved to be an effective approach aid.

In conclusion, we were all very favourably impressed with this aircraft. It is, to our way of thinking, well suited to the needs of both club and competition pilot alike.







Left, the Rheinland flown by David Jones; centre, the Swiss Minimoa and right, the German Weihe built in 1958 with the Dunstable Weihe, built in 1948, in the background. Photos: Francis Russell

Third International Vintage Rally

CHRIS WILLS

Switzerland (July 19—26)

Enthusiasts from Denmark, Holland, Hungary, Germany, Switzerland, America and Britain gathered in Gruyère, 3000ft asl, to fly 23 sailplanes designed before 1945 in Switzerland, Germany and the UK.

The meeting was lavishly backed by the Swiss Gliding Veterans' Association who gave £2000 in prizes alone. More than 70 of the veterans came to see their old machines and found many still in first class condition. In fact some of the visitors flew the gliders before and after an official lunch. Among the veterans was Mr Hug, the designer of the Spyrs, and Willi Bauer who flew in the Swiss team at the first International at the Wasserkuppe in 1937.

Two days were rained off, although some flying was possible. On the other days there were light winds, mostly from the south, and moderate to good thermals, weak hill lift and wave on one evening. Extended local flights were possible to the edge of lake Geneva and to the wilder mountains further from the site. But because of the uniqueness of the aircraft, it was decided not to set cross-country tasks and risk outlandings.

It was agreed that this was probably the first time such a collection of sailplanes had been flown from the same site at a meeting. Because of the international situation at the time they were being designed and made, it had been impossible for them to be in competition. That they were at last together after so many years seems to reveal something of the spirit of the new Europe.

The German and Swiss Weihes had the longest flights of the Rally, staying up for six and eight hours respectively and ending in wave after dark.

◆ O ◆

Chris, who writes highly of the organisation and hospitality shown at this Rally and was impressed by the beauty of the setting and the standard of the gliders, was presented with a superb trophy for his inspiration in starting the first International Vintage Rally and for his efforts in the Kranich. The trophy, the H-28 mounted on a beautiful piece of golden rock, was made by Eugen Aeberli's daughter.

The directors were Jost Frei and Willi Schwarzenbach who Chris said "made the Rally alive".

all pilots can read — but the BEST PILOTS read

Sailplane & Gliding

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THOSE VITAL ACTIONS

It ain't what you do, it's the way that you do it!

DEREK PIGGOTT

The article in the last issue of S&G ("Clunk-Click, every trip", p151) about leaving the airbrakes unlocked on take-off brings to mind several points about cockpit drills and the need for consistent and careful instruction about them.

What is the point of doing a cockpit drill systematically if at the end of it we still believe that we can have made a mistake in it and forgotten something? Why if you think you might have forgotten to lock the airbrakes do you ignore the possibility that you might have left the canopy unlocked?

The whole point about a drill of vital actions, or a check list, is that it is a systematic check so that there is *no* possibility of forgetting any item. Now that we have a universally adopted vital actions check for take-off in the UK, I find it strange that instructors at any club are advocating a re-check since this can only imply the acceptance of a half-hearted check in the first place.

There was a time when many instructors scorned the use of a rigid drill with a mnemonic and taught their students how to check everything logically by going round the cockpit from left to right. I used to demonstrate the disadvantage of this method by asking them as they finished if they were sure that they had not

Important to understand the philosophy

forgotten something. Of course they never could be sure and they would get into quite a state checking and re-checking. If you do a proper systematic drill every time, you can take-off with complete confidence knowing that all the vital things are all right for flight. This confidence is only justified when the check is done systematically and correctly. For example, checking the items in the wrong order is totally unacceptable because it can so easily lead to missing one out altogether.

The fact is that many instructors are not careful, or thoughtful, enough about either their initial teaching or subsequent monitoring of the student as he does his own cockpit checks. It is no use one instructor being very strict and another allowing the student to do these checks sloppily or out of sequence. It is important for the student to understand the philosophy behind having a rigid drill and the reasons for the precise actions, such as checking and locking the airbrakes and pushing up on the canopy, as well as checking the canopy locks.

Without a convincing reason and a consistent insistence of doing the checks properly, many students will become careless and slap happy when they are on their own and away from close supervision. The importance of the vital actions drill may even be undermined in the eyes of the student by insisting on a complete check of each control movement (stick to the left—left aileron up, right aileron down; stick to the right, etc),since the majority of experienced pilots only do such a check on the very first flight of the day. Many students think such detail on every flight is just that particular instructor's way of emphasising who is the boss.

I think it is important to differentiate between the first flight of the day and subsequent flights. A careless daily inspection after rigging may easily leave the glider with one aileron or the elevator disconnected, and this has happened many times. But this check is better done before the vital actions, perhaps even before getting into the cockpit when the control surfaces can be more easily seen.

Do not rush those vital actions

Pilots sometimes complain about being rushed through their cockpit drills. Ideally you need a few minutes to settle comfortably before going off, but you can usually blame yourself for not getting in before the cable or towplane arrives if you have to rush. Whatever happens do not rush those vital actions. They take less than 30 seconds to do and they should be left until the last moment before the cable or rope is attached. Long before solo you should have learned that mnemonic off by heart. Say the key words out loud to yourself every time and check each thing. This prevents you from skipping an item or becoming careless about the checks when you are solo and more experienced.

If the glider has already been flown that day or the controls have been checked for full movement in the correct sense, the control check need only be to see that each control surface is moving and that they are free to move all the way in each direction. At the same time check that you can reach full rudder and stick movements without undue stretching and that cushions or other objects are not limiting the movements of the controls. The canopy and the airbrakes are the other items for which an incomplete or sloppy check can be lethal. In addition to checking the canopy lock for security, it is essential to push up on the perspex itself to confirm that the hinges or pins are secure.

With the airbrakes, the method of checking is all important. Since the majority of modern machines have airbrakes which are held closed by a geometric lock, it is essential that the method must be foolproof for this kind of brake. If the basic training is being done on a Falke, or any other type fitted with simple spoilers or airbrakes which do not have a lock of that kind, the differences should be explained. However, the method taught for checking them should be just the same.

First open the brakes or spoilers fully, checking them visually whenever possible. Then close them with a firm push on the lever in order to establish the habit. When the student is converting onto a type of glider fitted with a gate for the airbrake lever, the student must also be shown how to check the brakes are locked visually by the position of the lever. The operation of the geometric lock should be explained and demonstrated, emphasising that the only certain way of telling that the airbrakes are properly locked is the feel of the geometric lock as it goes over centre and locks.

The cause of almost every incident where the airbrakes open during the launch is that the pilot has failed to lock them correctly. The amount of force required to lock them will vary considerably from aircraft to aircraft and even perhaps from day

to day. Merely pushing the lever is not enough since the lock may be a very stiff one requiring even more force to lock it. A geometric lock which requires no push at all to operate is seriously out of adjustment and may allow the airbrakes to open if the lever is knocked, or if one airbrake is out of adjustment so that it tends to unlock or open a little before the other.

Where there are separate geometric locks for each wing it is vital they both lock correctly. Otherwise the air loads tending to suck open the brake paddles on one wing may be sufficient to unlock and open those on the other side. On some machines such as the T-49 (Capstan) the bending of the wings during a car or winch launch reduce the strength of the lock so that any jar on the lever may result in the airbrakes opening themselves. The cure for this is to adjust the locks to be fairly stiff to operate and to provide a spring or bungey in the control circuit to keep the lock over centre. This was approved for the Capstan many years ago and I am sure would be approved for other types provided that a sensible system is designed and put to the Technical Committee.

No, you will not stop pilots leaving the airbrakes unlocked by reminding them before each take-off, it is the way that you check them that counts. Understanding what can happen and using the correct method of checking and locking them is what really matters.

1975 FRENCH NATIONALS

Angers (July 13—26)

JANE JONES

Angers 1975 was certainly memorable—good food, lots of wine, etc. The weather behaved itself—only one damp day for the fortnight we were there. Out of a possible 11 days, nine contest days were flown by the Open Class and eight by the Standard Class. One of the scrubbed days did, of course, turn out "stomping" very soon after it was cancelled.

Apart from the weather, the pilot standard was very high. The usual "Angers" Competition was combined this year with the French Nationals whose entry standard is tougher than ours. The foreign entry included pilots from Belgium, Holland, Switzerland, Germany and Great Britain. Nine of the competitors flew in the last World Championships at Waikerie. The Open Class entry was made up of 23 pilots flying four different glider types—ASW-17, Kestrel 17, Kestrel 19 and Nimbus 2. The 48 strong Standard Class were flying five types—ASW-15, Std Cirrus, DG-100, Std Libelle and LS-1.

The competition was marred on the fourth day by the tragic death of Georges Defosse, in a flying accident, he was one of the top Belgian pilots and represented his country twice in World Championships. His death was felt very keenly as many of the pilots at the competition knew him well. He also flew in the first Euroglide Contest in Britain; at Dunstable in 1972.

"Our own personal bit of glory on the second day"

After the usual opening ceremony the competition started the next day with a 306km triangle for the Open Class and a 237km for the Standard. The Standard Class tasks were four 200km triangles, three 350km triangles and one 400km triangle, whilst the Open Class flew one 260km triangle, four 300km triangles, three 400km triangles and one 500! We had our own personal bit of glory on the second day when Ralph won. The prize was a free pass to the local patisserie. I wish he'd won more days!

The speeds achieved by the pilots were very high. Open and Standard Classes flew speeds of 100km/h plus and 90km/h plus respectively on four of the days. These high speeds almost threatened to disturb our lunch-time peace. Mind you, lunch at Angers is not a meal to be hurried, but we barely had time to consume our regular midday diet of French bread, paté, cheese, fruit, wine, etc before it was time to dash out to the finish line. Very inconsiderate—these glider pilots!

The start line was different, mainly for the benefit of the observers, I think, although safety was muttered about. Instead of the usual "fast start", the pilots were required to fly at a speed not exceeding 120km/h from the gate to one kilometre after the start line. It certainly helped the start line people, but it left the pilots needing a thermal as they came out of the end of the start line box, instead of the usual pull-up to 4000ft or more.

The competition ended in style with presentations, gifts and more wine. The Open Class had been set a total of 3257kms and the Standard 2453kms an average of 362 and 306kms per day. Quite a competition!

Pilot's footnote

It was one of the most taxing competitions I have ever flown in. The techniques and strategies applied to top competition flying are very different from our own in UK. Only the first day had any real chance element in it due to a line of storms developing over the latter part of the course. The weather was not better than a good day in England, except that there was more of it! In fact, on our return, I flew *hors concours* on the last day of the Lasham Regionals and the conditions were as good as any we met at Angers.

All in all, I felt that as a relative sprog to hot international competition, a lot was learnt. However, to answer some critics, the game is still just as much an art as it was when Philip Wills won the World Championships. The only difference now is that we have glass-fibre gliders with higher performance and the techniques which increased performance allows us to apply. I haven't noticed either that having three Air Data computers on board makes the glider cover the ground any faster!

R.J.

Final Leading Results

Open Class

				Pts
1	Bert Zegels	Belgium	ASW-17	8644
2	Alain Mazalerat	France	Nimbus 2	8356
3	François Ragot	France	Nimbus 2	8170
7	Ralph Jones	UK	Nimbus 2	7327
12	George Burton	UK	Kestrel 19	6615
14	John Williamson	UK	Kestrel 19	6388
21	Con Greaves	UK	Kestrel 19	3155

Standard Class

1	Basil O'Brist	Switzerland	H-207B	7034
2	Michael Bluekens	Belgium	ASW-15	7000
3	J-C Lopitaux	France	Std Cirrus	6945
17	Ron Sandford	UK	Std Cirrus	6249

A POM IN PARADISE—

OR A GLIDER PILOT'S HELL

PAT LADD

Gentle reader and sprog pilot, as you munch your breakfast plastic submarine and read the doings of the pundits in your new S&G, do you dream of waves, Golds and Diamonds?

When you learn of Uncle Bill wafting around the skies of South Africa and Auntie Ann knocking off a casual 300km in Australia's booming thermals, do you turn green and sink your teeth into your coffee cup?

You do? Relax, unclench the jaw, allow the adrenalin to settle. I have a secret. It's all lies! Gliding is just as much a snarl up "over there" as it is here. How do I know? I took my little Silver C Badge (carefully kept dulled to look goldish) and went to see for myself.

This is the true story of a Pom in Paradise.

January 26

Arrived early at Drury, the site belonging to Auckland Gliding Club. Friendly greetings on all sides. "Check flight? Sure." Tow to 2500ft in the Blanik. Instructor and I thermal gently downward for 29mins. New Zealand is experimenting with Summer Time so the day was still young. Thermals would pop in about an hour and then for a K-6. The instructor dashed my hopes.

"Your flying is OK but you can't fly solo unless you join as a full member". There had apparently been insurance trouble when a day member pranged. I decided that a full subscription for one day was too expensive. After all there was no urgency. There was a full month's holiday left. The CFI went to some trouble to get me a copy of *Gliding Kiwi* which listed all clubs in NZ with officers' names and phone numbers and details of their fleets. Armed with this mine of information I started my rounds.

All my holiday movements were governed by the "weekend only" operation of Kiwi gliding. Each weekend I scheduled a different airfield.

Saturday February 1

A phone call to the Aviation Sports Club Auckland produced this conversation. "Delighted to have you fly with us. Unfortunately the new tug has an oil pressure problem. Tomorrow will be OK."

This friendly suggestion was of no use. On Sunday morning a commercial flight took me to Queenstown through skies of North Island popping with cu and the skies of South Island littered with lenticular.

The pilot, an ex glider pilot, pointed out Omarama 10000ft below. I looked forward to the same view from a glider.

Three days in Queenstown during which the wind blew and wave clouds formed every day. I pointed out these beautiful shapes to my wife so often that instant divorce was threatened if I mentioned wave again.

Wednesday February 5

Coach to Omarama. This is where I emerge from Chrysalis sprog to butterfly pundit. The coach driver gave a tremendous build up to passengers as we drew near to Mecca.

"Centre of NZ gliding . . . tremendous heights . . . Competitions etc." Sky waving like mad. Where are the gliders? Horror! Deserted airfield. Where is the super Lasham I expected? There is nothing. A flat field and a windsock. No one flies here on a regular basis. Visiting clubs merely camp. My expectations are shot. Roll on next weekend.

Friday February 7

Christchurch. The sky is still waving and I contact Wigram Aviation Sports Club.

"Visitor? Great. Come along tomorrow. Oh! I forgot. The tug is going to North Island to fetch the new Blanik. Winch only tomorrow."

I decided to spend Saturday on the beach and fly on Sunday. Saturday of course was a stomping thermal day, Sunday was clag and half a gale. The Sagitta I particularly wanted to fly was in for C of A.

Conversation piece:

Kiwi	"Sampling our NZ conditions are you? What are you after?"
Pom	"Gold height would be nice."
Kiwi	"How high is that."
Pom	"About 10000ft gain."
Kiwi	"I wish I had known that. I could have closed my brakes and gone on up a bit while I was doing my Silver C five hours."
Pom	"Aarrgghh!!!!"

I now had one more chance to realise my dream. We moved to Matamata. The only field that operated seven days a week.

Saturday February 15

Check in hotel at Matamata. "You've come for the gliding? My husband glides. I suppose you know the competitions starts on Sunday?" Oh no!!

I contacted the CFI. An ex Lasham instructor. "The two-seater will be competing next week so you had better have a check out now." We fought our way through a plague of black biting sand flies to the K-13. We closed the lid and killed most of the flies that had invaded the cockpit. Twitch to about 1800ft. Glory! Thermal! Weak, but thermal. Glide steadily on circular orbits getting slowly lower.

The machine lurched as the exasperated CFI stuffed the wing down. We started to climb.

My battered pride was salvaged somewhat as the CFI explained that he found most visiting English pilots, even of competition standard, do not thermal steeply enough in NZ conditions.

"Your flying is rusty but you can take the K-6 next week". Rusty! What does he expect? It's midwinter in the real world 12000 miles away.

Is the weather going to come good? "Well we have an extraordinary weather situation at the moment, there is a front lying just etc."

Sunday February 16

My last Sunday in NZ. Clag, rain. I decided to visit the beach at Manganui. We went through a mountain pass 15 miles away into stomping thermal weather, billowing cu. Spent the day surfing and sunbathing. Glorious. Returned to the hotel through the mountain pass. Matamata still clagged and heavy with rainstorms following each other up the valley.

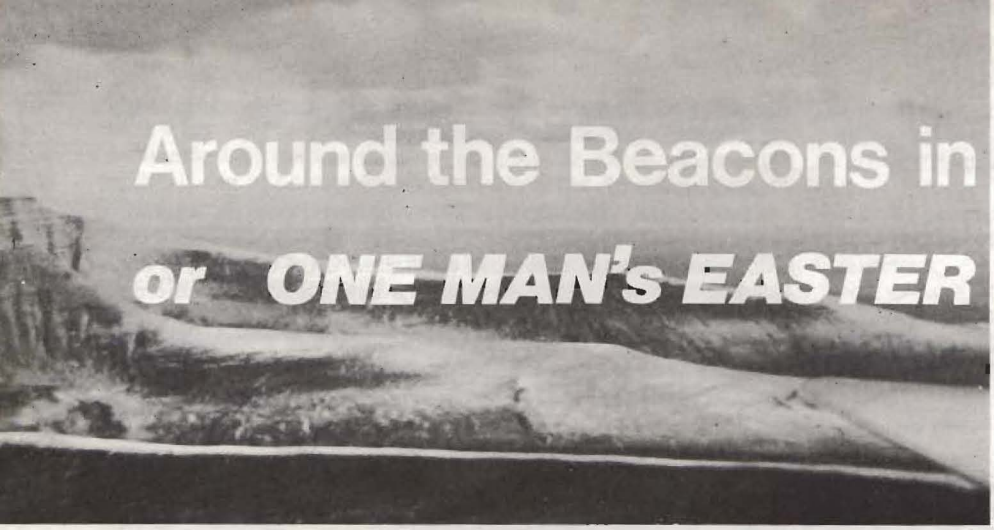
Monday February 17

Weather clagged again. I braved the sand fly plague to listen to the contest briefing. Glum faces. Short task set by stiff upper lip CFI. "We must do something chaps." Protest that it's too far from soggy upper lip pilots.

I weigh the chances of a lousy flight in the K-6 against the certainty of divorce from my wife who is losing a staunch rear-guard action against invading flies in the car.

I resign to the inevitable. I pay my dues and say goodbye to NZ gliding. The gliding in New Zealand is fantastic. There is wave at 30000ft plus. Gold height on demand. It's all lies I tell you. It is! It is!

Around the Beacons in many ways or ONE MAN's EASTER



IVOR SHATTOCK

Brecon Beacons from the east showing Pen y Fan

If I put pen to paper to describe "How I dunnit around the Beacons", I hope I don't provoke too many groans of "Oh gawd here we go again". At Compton Abbas I remember the winning pilot, on collecting his prize, was greeted with "Tell us how you did it R...h". We were jolly glad to learn . . . in my case, anything.

So when one has Lady Luck, the weather, X factor and all, on one's side and the fulfilment of a long standing ambition, I think it must be recorded to read and relive the excitement of a five hour flight above, below and beyond the Brecon Beacons.

To start with, it was a thermal day of mediocre strengths and ⅞ cloud in rough streets. I released the tug just north of the South Wales site at Usk at 900ft—laughing all the way to the bank at the saving on the tow fee until I discovered (a) the saving was 20p and (b) the thermal was half a knot.

After what seemed like 100 circles drifting over the field, it finally turned into four knots and a good position to start to explore the point where the thermals were feeding into the cloud street. The street led all the way to Abergavenny and beyond with mostly zero and lumps of two to four knots in it, so it wasn't difficult to fly upwind to a point where I could choose between soaring on the Skirrid or the Blorenge (1800ft). I chose the Blorenge as it led to bigger ridges and was the north facing side of a long valley. At this point I realise I should have explained . . . the wind was about 20kts almost due N at 2000ft. Not that I was at 2000ft, more like 1600 as I crossed Abergavenny heading straight at the hill. It gave a good lift, however, and I was soon weaving and circling my way to cloudbase.

Bröken line of hills

Crossing various gaps in the broken line of hills was exciting enough, but getting around the spurs upwind to get to the upwindside where each time one hoped to find the promised lift was very eventful.

Each ridge, some of them like enormous quarries with loose scree and vertical sides, had to be examined liftwise and turbulence rediscovered and hurdled. The sun didn't help much as only occasional patches were to be seen.

Plodding steadily westward in no time at all I was south of Langorse Lake at 3000ft, taking advantage of a temporary feeling of altitude. Another jump slightly upwind and I was ridge soaring a hill which was almost round, but the sun came out and then thermals streamed off the top getting me to 3000ft again, ready for the next jump to a long ridge leading on to the Black Mountains themselves.

Careful now not to be at risk of landing when so near the biggest mountain range in South Wales, I gust soared every lump of lift to the probable detriment of my upwind progress until I judged I could make it upwind to the next spur. Screaming along at 80 low over unlandable territory has its own special kind of thrill, not to mention the realisation on each jump that you are going to make it. This last upwind dash was to Tal y Bont, the eastern end of the Brecon Beacons range at 1800ft. Now the fruits of my labour really began to be realised. As I slid west along this ridge, which probably only a handful of people have ever soared in a glider, it got easier and better liftwise until I could feel the glider being flung upwards in lumps of six knots and I was high enough to turn left into the biggest mountain bowl I have ever seen. A look at the map will reveal two huge flat top peaks 2900ft and 2600ft guarding a huge bowl.

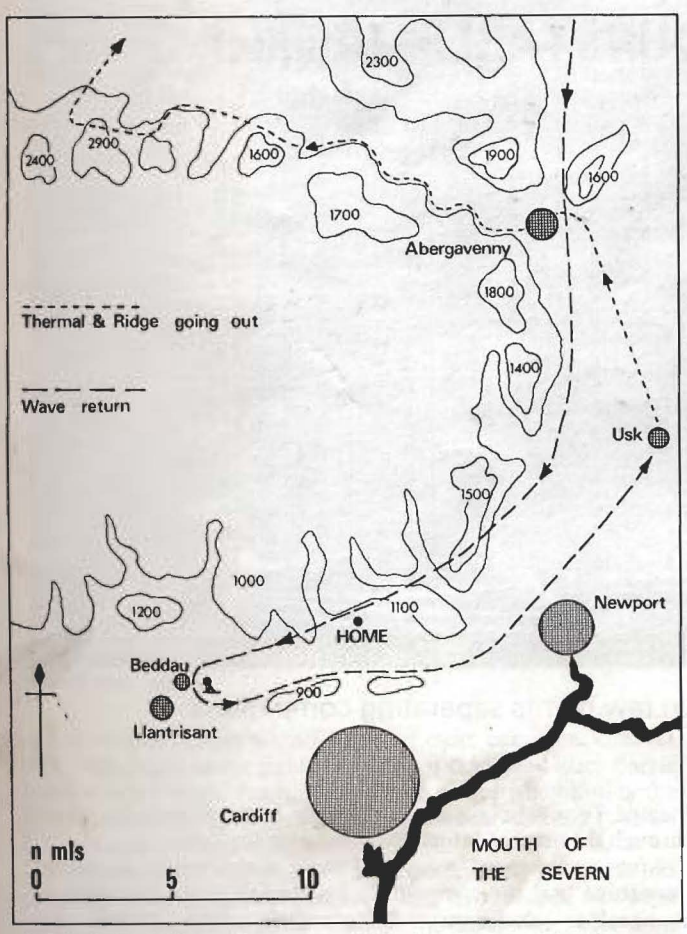
Without sight of a living thing

The sight was awe-inspiring. Flakes of snow streamed down the crevasses into V shaped gullies and percolated into streams tumbling down the near vertical sides. Almost black sides were capped with plateaux of lunar like landscape. Frozen peat bogs pock-marked the tops and the whole was without sight of a living thing. Not even the buzzards were to be seen, probably because of the cold and the cloud which lay at about 3500ft asl approximately 500ft above the highest peaks. Not to be tangled with at any cost. Although the lift thrust me to 3500ft in a matter of minutes, I was at times diving with full airbrake at 90kts to keep *well* clear and out into the clear air ahead. There was sun and a big area of sunshine on the ground to the north.

After going west to the better clearer sky, I looked back at the crossing in front of the peaks which I had traversed.

A huge cumulus cap cloud sat well in front of the Peny Fan peak and I wondered at its cause. Hill? Thermal? Wave? I decided it must be all three. I had heard Bravo Delta at 11000ft and the thermals were so strong and so turbulent I decided it must lead into wave. Keeping just under the leading edge at 3800ft, I was soon flying on a 330° heading with hand on airbrakes and turn and slip on. Thank you G. Burton for your mod idea—it works.

The whole area of lift soon became clear of cloud and smooth. At 4300ft I was in four knots steady and with the Brecon below in sunlight I knew it was safe to go on up into the obvious slots. I thought there was little chance of the slots closing in today. In addition to "my" slot I could see the whole of my route from the Blorenge developing wave slots. The flight was warming up.



Steady four or five knots soon lifted me up to 11000ft and Bravo Delta kept radio company while he set up his oxygen system. As a result of our conversation I later discovered that the one cloud mass that was higher than me was in fact nearer than I thought. Subsequent study of the map leads me to believe that it was in the lee of the Plynlimmon mountain range. By leaving my occasional one to two knots at 14000ft and pushing my speed up to around the 100 mark, I was able to jump upwind to the next wave. Starting again at 11000ft, the lift was stronger than at the same height in my last wave. Either it was stronger wave or I was in a better position. Either way I should go higher, which was the object of the exercise, or was it?

I was at least one wavelength downwind from the Big One which meant at least two climbs with the last one being dragged out to the bitter end to get the last few feet . . . no, you have enjoyed yourself a lot today. The X factor must be almost completely eroded by now and anyway the darkening shadows on the ground are getting longer and longer. Off we go to the east at a 110kts and the attendant navigational duties. At 12000ft we are over Hay Buff, or more precisely a hill with the improbable name . . . Lord Hereford's knob. Steering 180° the still strong N wind took me in no time to Abergavenny, where I started to descend. It was at this time I realised that our local wave off Cwmbran was working. There seemed to be a really good mound of sloping cloud to be tried and over local territory I shouldn't have any navigational problems. Let's soup it up along this wave and see if the lines of my lawn are straight.

Flying really fast along this wave in a SW direction I could travel at 90kts without sinking. However, my intended track didn't coincide with the wave trough so I chose a flatter area of cloud, or at least my compass dictated that this was my area of flight. A reassuring line of cloud and slot lay on my port, so that I wasn't deterred by the slight temporary rate of descent. A hole soon came under me through which I could peer at the ground. A colliery! A huge colliery with glowing coke ovens and usual coal tips. I had come out SW of Treforest and had "overshot" my house by some 15 miles.

Llantrisant. The hole with the mint in it, now came to be the hole with me in it. As I was close to the airway I turned to the NE and flew east over Caerphilly. Sapphire on the ground chatted to me as I passed over but time was pressing—it was 7pm and time to go home, ETA not later than 7.30 for fear of darkness.

Two pilots who would be needed

At Shobdon I could hear two pilots going to 11 plus and in their excitement confusing Ludlow and Leominster. I was to need them later. Meanwhile my wave extended from Llantrisant along to Newport and around the corner to Usk and, I should think, beyond Ross. This part of the flight was uneventful as I flew at 85—90 not sinking for 20 miles. Letting down to Usk I radioed ETA five minutes and to get down quicker tried to lower the wheel. VNE prevents a steep descent so I wondered how our 11000ft pilots were getting on.

My problem was I couldn't get the wheel down! Frozen or jammed? As I asked Usk for any tips—83 where were you?—someone at Shobdon was kind enough to explain the normal movements for lowering but my problem was a little different. I tried zooms and extra *g*. I tried mushing to get the warmer lower air into the wheel bay and I tried two hands. No luck. Flying low as possible as long as possible I finally gave up at 500ft and entered my crosswind leg and then down came the wheel. Another lesson learnt. Dry-out your wheel low down.

The map showed that 280km had been covered without even trying for distance. Next time I will try. The trouble is I'm addicted to height and the two interests conflict.

Easter Sunday was a good day too. The winds were still north but there must have been some east in it because this time I chose to soar the east face of the Black Mountains from Abergavenny around the NE corner to join the seven or eight hang gliders two of which were soaring a huge snow covered bowl on the NE corner.

Falling back to the Beacons the same awful scenery greeted me from above. I was at 2000ft and the highest peak 2900ft. More snow was on them, they were completely covered and had many groups of climbers and walkers as the cloudbase was again about 3500. I was soon up with the clouds at around 5pm. This time it wasn't waving so I had to wait. Once or twice a wave pattern seemed to emerge but I was never quite at the right height and place. Finally at around 6pm it began to improve and quite suddenly I had four knots at 5000ft. There seemed to be lots of cloud about at various heights. At 8000ft I had decided I had enough height to slide over the cloud to Abergavenny. Once or twice I brushed bits of cloud which hissed at me briefly and gave an instant opaque interior and exterior finish to the canopy and glider.

With a few anxious moments of this I was reassured to hear from 124 that cloudbase was about 4000ft. Still, I like to see where I'm going in wave.

The descent was normal this time, I'd taken the precaution of airing my wheel while climbing in thermals on the way up.

Flying Circus

"On our way towards the mountain barrier we were overtaken by a flying circus of migratory storks. For three hours the birds sailed overhead in flights of thousands, gliding east on outstretched wings until they lost height and slowly spiralled up the aerial staircase of another thermal."

From "Journey to the Jade Sea" by John Hillaby (Paladin)—an account of a foot safari to Lake Rudolf in Northern Kenya.

EUROGLIDE 1975 DUNSTABLE (August 16–25)



Photo: John Kirsch

Seven contest days, widely varying weather and often few points separating competitors

GILLIAN BRYCE-SMITH

Euroglide developed as a competition within a competition, the eight members of the British squad using this as their last opportunity to excel before the World Championships team selection. And within seconds of being launched on the first day Ralph Jones, the British Open Champion and in many people's estimation one of the leading contenders for a place, hit unexpected turbulence on take-off which cartwheeled his Nimbus (22m) into the ground.

The glider was almost a write-off—Ralph rolled himself into a ball before impact and escaped with a grazed shin. The Nimbus fuselage was split and shattered and the wings distorted.

Minutes later Ralph, shrugging off the concern and general shock wave of alarm from onlookers, dismissed the glider as "Only plastic," adding "If you can walk away from an accident, that's all that matters."

He said there was nothing he could do to stop the Nimbus, only half full of ballast, rearing up with the starboard wingtip at a dramatic angle before twisting round and breaking the tow rope.

While his crew packed the pieces away in the trailer, Ralph started ringing round for a replacement and the next day was launched in the Nimbus 2, (No. 90), kindly loaned by the owners, he flew to third place in Euroglide two years ago.

Ralph's only other accident was in 1965 when he bailed out following a mid-air collision—and the Nimbus damaged in this Euroglide was rebuilt after a mid-air collision in the 1972 World Championships at Vrsac, Yugoslavia, while on loan to the Swedish pilot, Ake Pettersson, who also jumped to safety.

The 45 competitors arrived on Friday, August 15, in some of the first rain they had seen for weeks—and the irony was that the London Gliding Club's water supply, which is pumped from underground springs, was virtually nil and stayed a problem for the next ten days.

I have printed the forecast weather maps in the centre pages as these give the clearest picture of the perverse conditions which bedevilled the contest and made Met man Tom Bradbury's job such a nightmare. At one stage two computors, one British and one American, were in strong disagreement—"and if machines can't make up their minds, what hope is there for men?" commented Tom, who got up in the early hours of each day to sift through the mass of information fed over the Telex.

After such settled weather for so many weeks, it seemed opportune that the competition should fall at the beginning of changeable conditions; unfortunately they turned out rather complex. In retrospect, it did mean more varied flying which asked for vastly different techniques from one day to another.

Respect, which is always enormous, increased still more for Tom's uncanny skill in determining exactly what would emerge from a leaden, hopeless looking sky. And there was appreciation for Geoffrey Stephenson's care and experience in setting the tasks.

—— Aim to make it a safe and fair competition ——

At the opening, Carr Withall, Director for the second time and efficiently calm despite all the domestic problems which included drought, floods and fire before the ten days were out, said the aim was to make it a safe and fair competition. John Hands was again Chief Marshal and used his own very individualist humour to overcome any irksome detail.

This year, with Euroglide unsponsored, only four foreign competitors entered and three arrived, all in the Standard Class. The multi-record holder and top Polish woman pilot, Mrs "Pela" Majewska (Std Cirrus), who came 13th, Arnold van Gelder (Std Cirrus) from Holland who was sixth, three places higher than in last year's Euroglide, and Wolfgang Gross (LS-1F) from Germany who took seventh place and won one day.

The foreign competitors all agreed it was an enjoyable contest but "Pela", a commercial pilot who instructs and ferries aircraft all over the world, had an unfortunate practice flight when the tail skid was damaged. This obviously put her off and it was some days before she appeared to settle down.

But whatever happened during the contest, attention was constantly on the British squad. They were flying together for the first time since selection and this in itself was interesting; other pilots naturally attempted to pitch themselves against the squad's performance and small conclaves at the bar and on site spent endless hours giving their own personal choice.

I rather admired the outward appearance of the detachment of the eight members and their frankness about their chances, although this atmosphere must have been a strain.

With Ralph Jones missing the first task, he didn't have a hope of winning, though won one day, was second twice and pulled himself up to a creditable eighth.

But the Open Class soon developed into a close battle between Bernard Fitchett (ASW-17) and George Lee (Kestrel 19). George Burton, John Glossop, Lemmy Tanner and Tom Zealley, all in Kestrel 19s and John Delafield (Kestrel 20m) had their share of the top three places. However, it was interesting to see how his usual consistent flying put George Burton third and kept Chris Garton (Kestrel 19) well up the scoreboard to finish fourth.

Con Greaves started with a flourish

The Standard Class wasn't quite so clear cut. Con Greaves (PIK-20), chosen as the eighth member of the squad after Barrie Goldsbrough's tragic death, started with a flourish, winning the first two days. Justin Wills (Std Libelle) was in the top four on five days and won two.

His performance was watched with particular care. Justin has competed successfully abroad, claimed UK records on what many pilots would consider impossible days, has twice won Competition Enterprise but has never before entered a British Nationals.

The reason? Basically, he explained, because of not being very competition minded. He also likes to fly abroad over new country and uses his holidays in entering foreign contests which give this opportunity.

"Much of my enjoyment in gliding comes from staying in weak lift and," he confessed, "in landing out."

Even so, as the contest developed it became a struggle for the lead between Justin and John Williamson (Std Cirrus), who has switched from the Open Class, with steady flying putting Simon Redman (Std Cirrus) in third place and flashes of inspiration allowing Leigh Hood (Std Cirrus) and Wolfgang Gross to win a day each. Ted Buchanan (Std Cirrus) twice worked his way into third place and was second once, leaving him fourth overall. John Cardiff (Std Libelle), Ron Sandford (PIK-20) and Ralph Dixon (Std Cirrus) also had their good days.

Day 1, Saturday—August 16

Tom Bradbury warned that the weak ridge was returning from the SW that night. Meanwhile there would be damp and energetic, unstable air with cu's up to 6500ft and the possibility of wave forming on top. The wind would be generally westerly but varying in speed from 15kts surface up to 37kts at 10000ft.

And this was just the picture. Competitors spoke of thermals where they weren't expected during the two triangles—205.1km, Stoke Dry Reservoir and Earith, for the Open Class and 156.1km, Kettering and Caxton Gibbet, for the Standard Class launched first just before noon.

Bernard Fitchett was the Open Class winner for the day at 75.69km/h with Con Greaves leading the Standard Class at 64.57km/h. They both gave almost identical descriptions of the flight—not very easy on the first leg but a cracking finish with thermals of 6 to 8kts.

Con was flying the PIK-20 owned by the UK agent, John Hulme, which didn't arrive from Finland until a few days before the start of Euroglide, so there was little chance for practice.

The second drama of this first day was a near collision when two competitors were sharing the same thermal before approaching the start line, manned again this year by Rika Harwood, the Chief Observer, and her team.

All things go in threes—Mike Carlton, in a borrowed Kestrel 19, had difficulty with the ailerons from the start but blamed his flying until he felt the controls go limp at the second turning point. He only then realised that one aileron pin wasn't home and landed immediately. This was the first time he hadn't checked them himself. His own Kestrel was on site for the following day.

Of the Open Class, 15 completed the course and only four of the Standard Class didn't get back. John Jeffries, Dunstable's CFI, was accused at briefing next morning of wanting to work up his hours—he had a theory about the weather which took him to the Wash during his flight in the Calif A-21 lasting more than seven hours.

John Williamson was dismayed to find his barograph hadn't been switched on. This lost him 35 points and brought him down from fourth to seventh. David Carrow (Kestrel 19C) made the same mistake.

LEADING SCORES

Open Class			km/h	pts	Standard Class			km/h	pts
1	Fitchett	ASW-17	75.69	1000	1	Greaves	PIK-20	64.57	1000
2	Lee	Kestrel 19	73.45	970	2	Redman	Std Cirrus	63.99	989
3	Delafield	Kestrel 20	70.49	931	3	Gross	LS-1F	62.58	964
4	Glossop	Kestrel 19	69.68	921	4	Wills	Std Libelle	61.75	949
5	Burton	Kestrel 19	67.62	893	5	van Gelder	Std Cirrus	61.14	938

At briefing the next morning, after bottles of wine were presented to the winners of Day 1, Carr Withall stressed the seriousness of the water situation. Despite attempts to get help from the local authorities including the Fire Brigade and Health Department, the drought was on and water conservation became a pattern of the ten days with limited times for showers and water cut off at given times.

Day 2, Sunday—August 17

It began in typical Dunstable murk but Tom Bradbury was cheerful about the prospects and a 350.3km out-and-return to the Long Mynd was set for the Open Class with a 287.8km triangle, Melton Mowbray, Chipping Campden, for the Standard Class launched second at 11.48.

Tom said the line of clag had been pushed further south by light north-westerly winds. Cloudbase would be up to 3500ft by noon and at the 5000ft level later in the day with quite good, strong thermals until early evening.

Karen Lysakowski perched on "Pela" Majewska's Std Cirrus *Photo: Hans Smit*





Arnold van Gelder (Holland) in his Std Cirrus *Photo: Hans Smit*

Conditions were excellent, "pure heaven" in George Lee's words, and Ralph Jones was first over the finish line 3hrs 20mins after launching and for 43mins he held the new speed record for a 300km out-and-return with an impressive 104.43km/h. George Lee, Open Class winner for the day and leading the Class by 18pts, didn't even know such a record existed when told that his 106.39km/h would make him the holder. Bernard Fitchett, in third place, flew at 102.97km/h. John Jeffries will be claiming the out-and-return two-seater record with 81.89km/h.

George, who considered the first day taxing, summed it up as "a very satisfying flight". For two thirds of the first leg there was streeting but after Gaydon strato cu was spread out, making the area near the Mynd more tricky, though he found the return straightforward with a slight tailwind.

Con Greaves stayed at the head of the Standard Class with a speed of 86.73km/h, despite losing ten minutes over the second turning point when he mistook Broadway for Chipping Campden and had to take two lots of photographs. He uses a half million map and found the yellow blob marking Chipping Campden was in the wrong place. It needed the turning point book of detailed maps to sort out his position—a problem to be experienced by others later in the day. The last leg was "absolutely booming" with 6 to 8kt thermals.

All pilots completed the task, although there were murmurs of weak wave over the Mynd making it difficult for some, while others in the Open Class appeared entirely content and claimed it was uncomplicated.

LEADING SCORES

Open Class			km/h	pts	Standard Class			km/h	pts
1	Lee	Kestrel 19	106.39	1000	1	Greaves	PIK-20	86.73	1000
2	Jones	Nimbus 2	104.43	972	2	Cardiff	Std Libelle	85.11	974
3	Fitchett	ASW-17	102.97	952	3	Sandford	PIK-20	84.36	961
4	Lysakowski	Nimbus 2	99.18	898	4	Wills	Std Libelle	81.38	912
5	Garton	Kestrel 19	97.16	870	5	Williamson	Std Cirrus	81.24	910

Day 3, Monday—August 18

The water situation was grim and those pilots wanting to use ballast sent their crews on a water hunt round Dunstable, taps on the site being forbidden for this purpose.

Tom Bradbury termed the weather as "a bit baffling." The front of grotty weather had fallen back with light north-easterly winds prevailing and the promise of thermals by mid-day, though with a tendency to over-convection.

A quadrilateral distance task of 297.9km, turning points at Earith Bridge, Melton Mowbray and Kineton, was set for both Classes with the Standard first off the grid at 11.43.

The sky over Dunstable stayed murky and dull for most of the day, trailers began streaming out from early afternoon and no one got back. But even so surprising distances were covered—a reflection on the standard of current competition flying and the performance of the machines.

Those who were still hanging on past the second turning point, turned the day into a stubble fire chase, Ted Lysakowski, Nimbus (22m), most thoroughly.

Mike Carlton raced for a promising fire only to find Ted in the middle of the field with men tearing round frantically putting out the stubble burning precariously near the glider. Mike had earlier found lift while actually about to land on a runway at Melton Mowbray.

More than 20 landed within a compact area on the second half of the last leg, four sharing Church Lawford airfield.

Lemmy Tanner, who described the day as "a low, slow fly round", benefitted from a cracking stubble fire which gave enough height to take him 260.2km and second in the Open Class for the day. John Delafield was third with 210.6km but there was still no word of Ralph Jones.

Rika eventually closed the finish line at 6.23pm and Ralph and his crew arrived back later, having completed a flight of 263.7km to take first place for the day.

Justin Wills headed the Standard Class with 205.9km, Ralph Dixon was second with 202.6km and John Williamson's 199.6km put him in third place and second overall behind Justin. Con Greaves had dropped to eighth overall.

Arnold van Gelder was the leading foreign competitor for the day in fourth place with "Pela" Majewska and Wolfgang Gross sharing 11th position.

Justin said he just plodded on, flying most of the day near John Williamson but just went a little further in the final stages.

—Used stubble fires and then "proper thermals"—

Ralph's companion for most of his flight was Bernard Fitchett. "I switched on the radio, something I rarely do, just to hear Bernard landing," he said. He stayed round Nuneaton in sun while ten gliders raced by, and eventually worked up to 4000ft and headed off to the west of a lake, used stubble fires and finally "proper" thermals.

LEADING SCORES

Open Class			Kms	pts	Standard Class			Kms	pts
1	Jones	Nimbus 2	263.7	1000	1	Wills	Std Libelle	205.9	1000
2	Tanner	Kestrel 19	260.2	986	2	Dixon	Std Cirrus	202.6	982
3	Delafield	Kestrel 20	210.6	782	3	Williamson	Std Cirrus	199.6	966
4 =	Lee	Kestrel 19	207.1	768	4 =	van Gelder	Std Cirrus	199.4	965
4 =	Waller	Kestrel 19	207.1	768	4 =	Benoist	Std Libelle	199.4	965
4 =	Brown	Kestrel 19	207.1	768	4 =	Buchanan	Std Libelle	199.4	965

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At briefing, after giving his account, Ralph commented on the danger when cloud flying of giving competition numbers, which can be misread for height. He thought it better to use call signs. *(The whole subject of cloud flying in competitions is currently under review.)*

Carr Withall began the day with a stern rebuke to the pilots who entered cloud near the gate area—this is absolutely forbidden on the site.

With Day 3 an intriguing task which completely changed the look of the scoreboard, the warm front was established and a task was impossible on Tuesday.

There were briefings and a tentative task for the Open Class later on Wednesday but a cold front was slow in moving and this was again a no-contest day.

Richard Aldous developed an arm infection and didn't fly for the rest of the competition.

Carr had a worrying session with turning point photographs which were only just in the zone—in fact only Ralph Jones had taken his exactly right. "This isn't a photographic competition but you have got to prove you were in the right place," the Director added.

In the hopes of an improvement, Ralph was asked to explain his method. He said he always picked a feature on the map before flight, such as a railway line, which is in the zone. Then it was a matter of doing a fairly tight turn and photographing. Also, he always uses two cameras having had four failures in two years.

Fickle weather with depressions and fronts

The difficult weather pattern of depressions and fronts continued into Thursday but was tantalisingly fickle. Tom thought there was a little hope of another task being possible in the afternoon and it actually got to the gliders being towed out before it was again declared a no-contest day.

Day 4, Friday—August 22

During the night another trough developed, pushing a belt of rain through in the morning but, after a delayed start, launching started at 11.36 with the Standard Class first, sent on a 173.8km out-and-return to Chipping Campden. The Open Class were given the alternative of an out-and-return to Melton Mowbray (203.4km) or to Markfield (209.9km).

The sky around Dunstable was at times far from encouraging and as pilots scraped round the course, having made a total of 125 start line crossings, it seemed extremely doubtful this would be a contest day, but eventually enough passed Y in the Standard Class, and the majority of the Open did likewise. The only sight we had of a glider nearing the finish line was Bernard Fitchett who briefly appeared on the horizon before landing a few kilometres short at Dunstable, making him the Open Class winner for the day.

Ralph Jones and several others came back for another try and this was certainly worthwhile for Ralph who worked his way further round on the second attempt.

Justin Wills, in the lead when he set off, landed near Y and dropped back to third overall. Leigh Hood won his Class and forged up three places to eighth with John Williamson coming in second to claim the overall lead.

Later Leigh, recalling his five hours flight, said a climb to 11000ft with lift of 10kts was a morale booster, if nothing else—ice on the wings soon lost him his height without giving any practical advantage.

Bernard said it was a day for "gritting your teeth and pressing on," and this he did with long delays waiting for conditions to improve.

John Glossop, third, said he had never taken so long to get such a short distance—84.1km in more than six hours, in two flights.

Crews started pulling out of Dunstable soon after launching, Mike Bird's team pranging the trailer so badly it was useless for the retrieve and a replacement had to be found—this is the second time for Mike that an empty trailer has been damaged.

LEADING SCORES

Open Class			Kms	pts	Standard Class			Kms	pts
1	Fitchett	ASW-17	198.8	955	1	Hood	Std Cirrus	127.5	227
2	Zealley	Kestrel 19	88.8	367	2	Williamson	Std Cirrus	112.6	196
3	Glossop	Kestrel 19	84.1	342	3	Buchanan	Std Cirrus	89.8	147
4	Jeffries	Calif A-21	81.4	328	4	Benoist	Std Libelle	58.9	82
5	Carrow	Kestrel 19C	79.0	315	5	Redman	Std Cirrus	57.4	79

Day 5, Saturday—August 23

The outlook for Saturday had been good and there were plans for a long task and an early start. But, typical of this week, the competition was again out of phase with the weather and instead unstable, moist air with a layer of strato cumulus pushed in from the north-west. However it was possible to set two triangles; 149.3km to Duxford and Earith Bridge for the Open and 124.6km, Duxford, St Neots, for the Standard, launched first at 11.44.



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The Calif A-21 on tow *Photo: Hans Smit*

After a short wait on the grid, cu's started developing and this became a reasonably satisfying day, if not the corker everyone had been hoping for.

It seemed by mid-afternoon that Simon Redman had won the Standard Class task with a speed of 80.60km/h with Justin second at 76.38km/h. But meanwhile Wolfgang Gross decided to go round a second time and clipped Simon's speed to take first place with 83.67km/h. This was a brave move as he already had 875pts on his first round but didn't think this good enough.

"I was very dismayed, fighting and shouting to myself to make a better time," he recalled the first attempt, and 50km out made up his mind to go round again.

George Lee, continuing to fight it out with Bernard Fitchett, headed the Open Class at 93.95km/h with Ralph Jones (92.10km/h) second and Lemmy Tanner (88.30km/h) third.

Later George Lee assessed the flight as "character building" and was grateful for finding 6 to 8kts on the last leg.

The rain mid week caused flooding in the clubhouse and washed away the appeal on the blackboard to save water! Then on Saturday a fire in the kitchen fused the electric circuit and caused brief alarm for the observers when the clock, radio and recording tapes went out of action for a few minutes as the finish line was at its busiest. There were protests from pilots who crossed during this crisis and the stewards adjusted some of the times afterwards.

LEADING SCORES

Open Class		km/h	pts	Standard Class		km/h	pts
1 Lee	Kestrel 19	93.95	1000	1 Gross	LS-1F	83.67	1000
2 Jones	Nimbus 2	92.10	972	2 Redman	Std Cirrus	80.60	947
3 Tanner	Kestrel 19	88.30	914	3 Wills	Std Libelle	76.38	875
4 = Burton	Kestrel 19	86.70	890	4 Hood	Std Cirrus	75.82	866
4 = Fitchett	ASW-17	86.68	890	5 van Gelder	Std Cirrus	74.90	850

Day 6, Sunday—August 24

A layer of alto stratus delayed the start until the afternoon when both Classes were given the same triangle of 156.1km, Caxton Gibbet, Kettering—originally the Open Class had been set a 187km triangle. And this was definitely John Williamson's day with a flash over the finish line to lead the field. His speed of 75.03km/h put him well ahead in the Standard Class.

Bernard Fitchett won the Open Class with 93.88km/h, beating George Lee (83.08km/h) and making an overall win seem almost certain. John Williamson said the flight was uncomplicated with cloudstreets and 6kts towards the end. "The guy who wins doesn't have much to say other than it just happened to work very well." Bernard knew he was making good time, but didn't realise it was that fast.

LEADING SCORES

Open Class		km/h	pts	Standard Class		km/h	pts
1 Fitchett	ASW-17	93.88	1000	1 Williamson	Std Cirrus	75.03	1000
2 Lee	Kestrel 19	83.08	835	2 Buchanan	Std Cirrus	65.63	854
3 Jones	Nimbus 2	80.45	795	3 Sandford	PIK-20	60.96	782
4 Brown	Kestrel 19	79.88	786	4 Cardiff	Std Libelle	58.20	740
5 Lysakowski	Nimbus 2	77.2	743	5 Dixon	Std Cirrus	58.07	738

Day 7, Monday—August 26

Tom Bradbury said there was the same air as yesterday, though a little moister. This was obvious from the sky and after triangles were set—178.8km, Pitsford Reservoir and Kineton for the Open and 161.9km, Olney and Kineton for the Standard—many thought that Tom had been rather optimistic with his promise of strong thermals later in the day.

An opportunity for high speed flying

As it happened, the weather was much better than envisaged and the tasks turned out to be rather too short for the splendid conditions which gave the opportunity for high speed flying. So Euroglide ended as it began, with a racing day.

Bernard Fitchett made the best time, 114.74km/h, and compared the day with Australian gliding. Ralph Jones, 111.96, was second with George Lee third at 110.14km/h. Four other pilots exceeded 100km/h:—George Burton (109.80), Ted Lysakowski (107.97), Frank Pozerskis (103.78) and John Glossop (103.01).

Justin Wills, first in the Standard at 95.44km/h, said "If you catch it right, it's no problem. And that's how it was today." He was followed by Wolfgang Gross, 92.12km/h, and Ted Buchanan, 90.97km/h.

LEADING SCORES

Open Class		km/h	pts	Standard Class		km/h	pts
1 Fitchett	ASW-17	114.74	1000	1 Wills	Std Libelle	95.44	1000
2 Jones	Nimbus 2	111.96	965	2 Gross	LS-1F	92.12	948
3 Lee	Kestrel 19	110.14	942	3 Buchanan	Std Cirrus	90.07	930
4 Burton	Kestrel 19	109.80	938	4 Redman	Std Cirrus	90.36	920
5 Lysakowski	Nimbus 2	107.96	915	5 Sandford	PIK-20	87.65	878

Dudley Hiscox, a founder member of the London Gliding Club, a competitor at the first World Championships in 1937 at the Wasserkuppe and still an active pilot at 81 years-old, presented the prizes with small presents to the three visitors. The Kemsley cup went to Bernard Fitchett for winning the Open Class and the Pan American cup to John Williamson, Standard Class winner. Bernard and John were also given a Dunstable Euroglide prize—silver salvers.

Bernard proposed a vote of thanks to the organisers and this was well deserved. The London Gliding Club were gracious, welcoming hosts and the team of helpers gave up ten days to make this yet another successful Euroglide.

FINAL RESULTS—Open Class

No	Pilot	Sailplane	16.8 1	17.8 2	18.8 3	22.8 4	23.8 5	24.8 6	25.8 7	Total Points
1	Fitchett, B.	ASW-17	1000(1)	952(3)	736(9=)	955(1)	890(4=)	1000(1)	1000(1)	6533
2	Lee, D. G.	Kestrel 19	970(2)	1000(1)	768(4=)	263(10)	1000(1)	835(2)	942(3)	5778
3	Burton, G. E.	Kestrel 19	893(5)	855(7)	664(15)	292(6)	890(4=)	737(6=)	938(4)	5269
4	Garton, C.	Kestrel 19	869(6)	870(5)	684(13=)	290(7)	883(6)	685(9)	813(8)	5094
5	Glossop, J. D. J.	Kestrel 19	921(4)	736(12)	736(9=)	342(3)	844(10)	655(12)	853(7)	5087
6	Brown, H. F.	Kestrel 19	731(11)	810(8)	768(4=)	265(9)	877(7)	786(4)	744(12)	4781
7	Lysakowski, E. R.	Nimbus (22m)	798(9)	898(4)	757(8)	64(19)	789(15)	743(5)	915(5)	4964
8	Jones, R.	Nimbus (22m)	DNF	972(1)	1000(1)	229(12)	972(2)	795(3)	965(2)	4933
9	Delafield, J.	Kestrel 20	931(3)	776(9)	782(3)	113(18)	813(14)	652(13)	790(9)	4857
10	Tanner, L. E. N.	Kestrel 19	556(14)	861(6)	986(2)	184(14)	914(3)	636(15)	527(21)	4664
11	Zealley, T. S.	Kestrel 19	674(13)	739(11)	736(9=)	367(2)	767(17)	650(14)	724(14)	4657
12	Carrow, D. D.	Kestrel 19c	833(8)*	679(15)	655(16)	315(5)	863(9)	671(10)	629(17)	4645
13	Pozerskis, P.	ASW-17	854(7)	656(17=)	222(21)	272(8)	815(13)	613(17)	863(6)	4295
14	Farmer, A. T.	Kestrel 19	754(10)	726(13)	368(19)	175(16)	780(16)	737(6=)	668(16)	4208
15	Waller, C. J.	Kestrel 19	690(12)	607(22)	768(4=)	120(17)	668(18)	480(18)	562(20)	3895
16	Carlton, M. R.	Kestrel 19	0	678(16)	761(7)	58(20)	871(8)	710(8)	673(15)	3751
17	Austin, D. C.	Kestrel 19	417(18)	687(14)	684(13=)	217(13)	838(11)	139(22)	730(13)	3722
18	Bird, M.	Kestrel 19	172(20)	741(10)	712(12)	21(22)	827(12)	451(20)	760(11)	3684
19	Simpson, C. R.	Kestrel 19	459(17)	656(17=)	380(18)	181(15)	528(21)	632(16)	613(18)	3449
20	Jeffries, J. R.	Calif A-21	500(15)	655(19)	500(17)	328(4)	652(19)	662(11)	120(22)	3417
21	Pope, M.	Kestrel 19	397(19)	611(20=)	282(20)	254(11)	593(20)	456(19)	593(19)	3186
22	Cousins, R.	Kestrel 19	469(16)	611(20=)	155(22)	50(21)	222(22)	420(21)	766(10)	2693

FINAL RESULTS—Standard Class

1	Williamson, J. S.	Std Cirrus	916(7)*	905(5)	966(3)	196(2)	834(6)	1000(1)	850(7)	5667
2	Wills, J.	Std Libelle	949(4)	907(4)	1000(1)	44(13)	875(3)	703(8)	1000(1)	5478
3	Redman, S. J.	Std Cirrus	989(2)	751(12)	934(10)	79(5)	947(2)	731(6)	920(4)	5351
4	Buchanan, E. J.	Std Cirrus	844(10)	742(13)	965(4=)	147(3)	768(11)	854(2)	930(3)	5250
5	Cardiff, J.	Std Libelle	872(9)	972(2)	945(9)	51(11)	822(7)	740(4)	813(9)	5215
6	§van Gelder, A. F.	Std Cirrus	938(5)	833(7)	965(4=)	15(18)	850(5)	713(7)	786(10)	5100
7	§Gross, W.	LS-1F	964(3)	731(14)	896(11=)	78(6=)	1000(1)	456(17)	948(2)	5073
8	Hood, L. S.	Std Cirrus	757(13)	808(8)	806(14)	227(1)	866(4)	689(9)	847(8)	5000
9	Sandford, R. A.	PIK-20	935(6)	959(3)	432(20=)	50(12)	743(13)	782(3)	878(5)	4779
10	Benoist, B.	Std Libelle	765(11)	670(16)	965(4=)	82(4)	771(10)	656(12)	711(14)	4620
11	Burton, A. J.	Std Libelle	695(14)	658(17)	948(8)	0	793(9)	667(11)	730(12)	4491
12	Greaves, C. M.	PIK-20	1000(1)	1000(1)	483(18=)	36(15)	803(8)	211(20)	862(6)	4395
13	§Pela Majewska	Std Cirrus	613(16)	648(18)	896(11=)	58(9)	737(14)	647(13)	730(12)	4348
14	Dixon, R. T.	Std Cirrus	126(22)	802(9)	982(2)	77(8)	755(12)	738(5)	671(17)	4151
15	Rollings, C.	K-6E	891(8)	561(22)	960(7)	57(10)	543(19)*	251(19)	703(16)	3966
16	Watson, A. J.	Std Libelle	533(17)	783(10)	796(15)†	0	684(16)	176(21)‡	580(18)	3552
17	Cole, R. A.	Std Cirrus	674(15)	763(11)	432(20=)	43(14)	721(15)	17(22)	726(13)	3376
18	Brownlow, J.	Std Cirrus	257(21)	722(15)†	179(22)	0	628(17)	642(14)	711(14=)	3139
19	McLuckie, R.	Std Cirrus	DNF	646(19)	827(13)*	27(16)	264(22)	671(10)	571(19)	3006
20	Aldridge, K. R.	Std Austria	305(20)	598(20)	531(17)	78(6=)	284(21)	543(15)	559(20)	2898
21	Ellis, C. A. P.	Dart 17R	420(18)	405(23)	611(16)	0	497(20)	457(16)	379(22)	2769
22	Cole, R. T.	Std Libelle	403(19)	571(21)	104(23)	26(17)	617(18)	315(18)	511(21)*	2547
23	Aldous, R. F.	Std Libelle	762(12)	855(6)	483(18=)	(pilot fell ill)		—	—	2100

DNF = did not fly; *asterisk = 35pt penalty (barograph); † = 100pt penalty (photographic); ‡ = 200pt penalty (photographic). § No 6 (Holland); 7 (Germany) and 13 (Poland)

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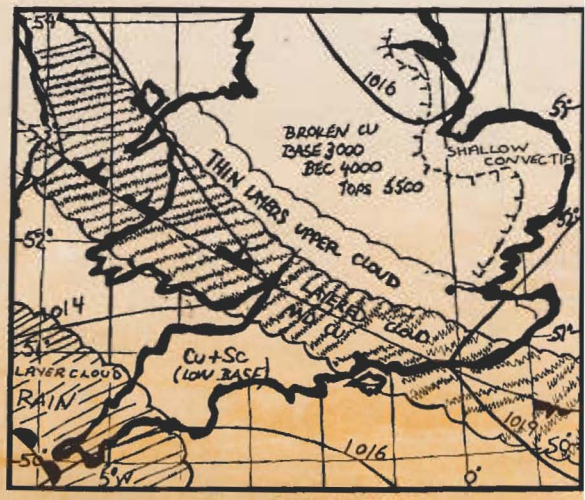
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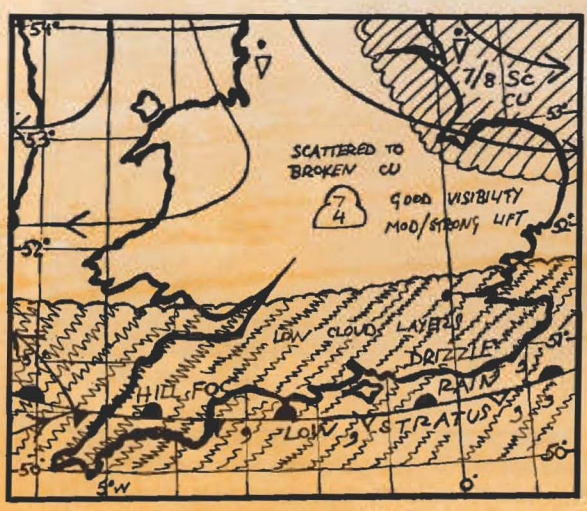
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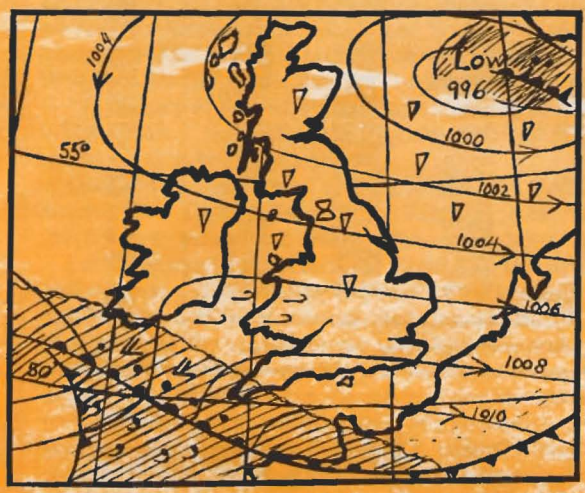
Day 3—Monday, August 18



Day 2—Sunday, August 17



Bernard Fitchett, Open Class winner who won Day 1, 4, 6 and 7



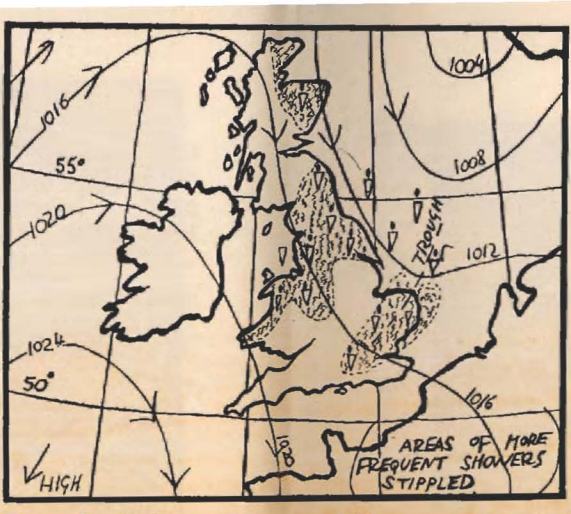
Day 1—Saturday, August 16



Ralph Jones gained most points in the Open Class on Day 3



Con Greaves won the first two days in the Standard Class



Day 4—Friday, August 22

Day

EUROGLIDE

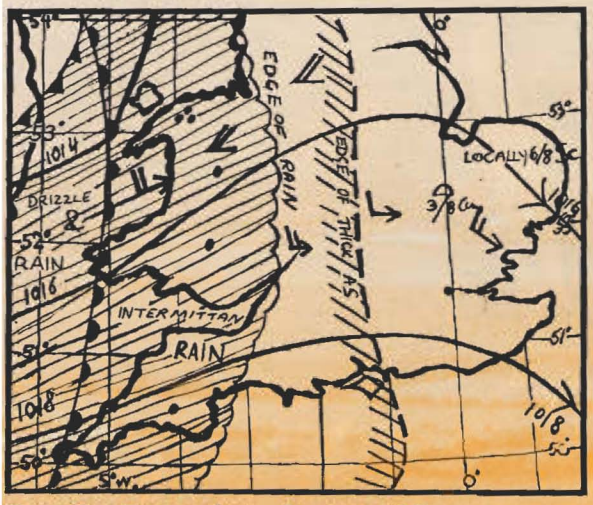
WEATHER and WINNERS



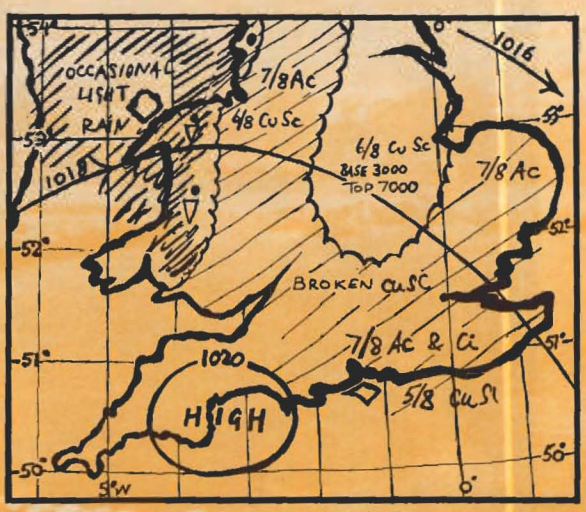
Justin Wills, first for Day 3 and 7 in the Standard Class



Wolfgang Gross won Day 5 in the Standard Class



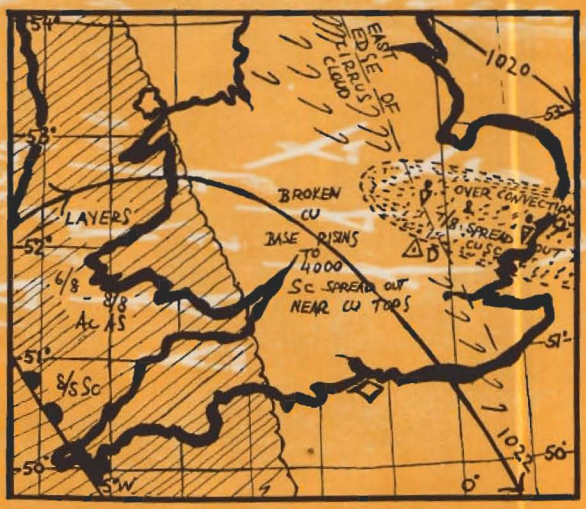
Day 5—Saturday, August 23



Day 6—Sunday, August 24



John Williamson, Standard Class winner and first on Day 6



Day 7—Monday, August 25



George Lee who won Day 2 and 5 in the Open Class



Leigh Hood, first in the Standard Class for Day 4



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The Royal Aero Club of The United Kingdom

PHILIP WILLS (Chairman)

At an Extraordinary General Meeting held on June 18, it was agreed that The United Service & Royal Aero Club is to become part of the Naval & Military Club, who have offered membership to all members, with the Royal Aero Club of the United Kingdom floated off on its own from August 1, and as soon as possible to be generously re-endowed with all our awards (including the Schneider Trophy and the King's Cup), library and memorabilia.

Our first instinct, and our first decision, is to keep our bit of the flag flying—our membership of, and work for, the Fédération Aéronautique Internationale. The cost will be heavy, for the dues are in French francs, and meetings are in Paris, whilst the Annual General Conference can be as far away as Sydney. Our second responsibility is the custody and award of the Royal Aero Club trophies and medals.

Reborn as we are in a moment of national crisis, we do not yet see our way to forming a new Social Club, this may come later.

Arrangements are being made to house our memorabilia, our trophies, and our library, including pilots' licences back to No. 1, achieved by J. T. C. Moore-Brabazon in 1910.

The Royal Aeronautical Society has kindly offered us the use of a meeting room, and the Schneider Trophy will be displayed at 4 Hamilton Place.

From August 1, the British Gliding Association undertook to carry out our need for a Post Office, from its new offices at Kimberley House, Vaughan Way, Leicester—telephone 51051. John Blake, the Secretary of the Aviation Council, retired on July 31, but remains available as Secretary of our club meetings. We have slimmed ourselves to the very utmost, until the sky ahead looks clearer.

Operating under our Letter of Authority

Full members consist, in the main, of member bodies operating in each specialist field under our Letter of Authority. These are: Society of Model Aeronautical Engineers; Formula Air Racing Association; British Light Aviation Centre; British Gliding Association; British Parachute Association; Helicopter Club of Great Britain; Popular Flying Association and the British Balloon & Airship Club.

We are restructuring ourselves, and will probably offer Individual Associate Membership to well-wishing individuals, who would get a newsletter.

His Royal Highness Prince Charles, the Prince of Wales, has honoured us by accepting appointment as our President.

The main officers of the club are: Chairman—Philip Wills; Vice Chairman—Sir Peter Masefield; Chairman FAI Committee & Vice Chairman of FAI—Ann Welch; Chairman Medals & Awards Committee—Ian Scott-Hill and Treasurer—John Large.

Since it left 119 Piccadilly in 1961, the club has been through a succession of mergers with first the Lansdown, next the Junior Carlton, and finally the United Services Club—the august Senior. None has been successful, and not because of the defects of the members of either party—all of whom have on each occasion done their utmost to make us feel at home.

The failure, as is often the case, has been one of structure—to recognise the difference in what the members of the two parties look for in a London Club.

I joined the Aero Club in—I think—1928. It had just moved from Clifford Street, and Harold Perrin was its bluff Secretary. The membership was naturally fairly young, and the purpose was to get together and talk about and organise everything to do with flying, particularly sporting flying.

It has always been the extremely wise policy of the club to spin off each new branch of sporting flying, delegating full powers of control to a specialist body. Thus the club became surrounded by numbers of independent offspring, such as the British Gliding Association. When Lord Londonderry died he generously left the club the use, for a number of years, of Londonderry House, just round the corner in Park Lane.

The offices of the associate bodies naturally moved in there, so that after all meetings numbers of enthusiasts would clatter round to the club, occupy the bar and public rooms, and sit in flocks round tables scattered with bits of paper talking of organising the next King's Cup race or the aerodynamics of the latest glider. This was life—this was our club.

A bit of the Union Jack

Now I come to the next difference—the Aero Club was (and is) more than a club, it is a little bit of the Union Jack. It is the United Kingdom representative of the Fédération Aéronautique Internationale, of which it is one of the five founder members.

The FAI is the international body controlling all world air sporting championships, records and awards. Its structure consists of a number of specialist committees, one representing each sport, which lay down the detailed regulations for each; these in turn are responsible to a policy making Council, heading up to the General Conference, which meets annually in delectable places to present its awards.

Thus whilst the specialist members of the club work on their relevant Special Commissions, only the club itself can take part in the overall work of the Council, and appoint its representative (a Vice President of the FAI) to the General Conference. Lord Brabazon was at one time President of the FAI and the UK has always played a most important part in its work at all levels.

Now alas I must come to the decline. Lady Londonderry died, and Londonderry House was put up for sale. The various Associations dispersed, to relatively distant offices, and the flow of new young enthusiasts to the club was cut off by the inexorable limitation of logistics.

The club left 119 Park Lane, and started its wandering around clubland. Occasionally a party of gliding or other enthusiasts would meet in their new premises, but a polite tap on the shoulder, and a steward advising that it was against club rules to display "business" papers in the public rooms, soon put us off.

The Senior did its best. It spun off an Aviation Council composed mainly of members of the affiliated bodies, of which Prince William of Gloucester was Chairman. After his disastrous death, I was appointed his successor. It built us a special and excellent Committee Room in the basement, for our meetings, but could not allow its use by large numbers of non-member devotees of say the Society of Model Aeronautical Engineers, wishing to attend one of their own meetings—or of course to let them use its bar or dining rooms, which would have contravened the Licence Laws anyway. We thought of affiliated membership, but the ambience was wrong. Everyone—but everyone—meant well, but the structure was wrong.

The original club was formed in 1901 in the basket of a balloon. Its new edition is formed without even this exiguous protection.

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FILM STAR FLIES AGAIN FROM TIBENHAM

CHARLES HALL

Currently starring in "Harvey" at the Prince of Wales Theatre, and laconic hero of a multitude of screen dramas, James Stewart paid a private visit to the Norfolk Club at Tibenham on Sunday, June 29.

Back in 1943, Captain Stewart took command of the 703rd Bombardment Squadron at Tibenham in Norfolk and flew 20 combat missions in B24 Liberators.

He squeezed his 6ft 3½in frame into a K-13 and made his first ever glider flight, soaring over his old base with CFI Joe Podolski.

Later they took an aerotow to Coltishall, where he inspected the Lancaster and Hurricane, and a Spitfire obliged with a low-level personal salute.

We now look forward to his next visit when he has kindly offered to start the programme at our open day.



Norfolk Club Chairman, John Wood, watches the preparation for the flight with CFI Joe Podolski lost for words.

Book Review

Man's Dilemma. By Latymer de Needham. Published by Volturna Press and Marsland Press, Wellington Place, Peterhead, Aberdeenshire, AB4 7JH, Scotland. Price £3.00 or $8.00.

The thinly disguised *nom de plume* is that of the first Chairman of the BGA Technical Committee, C.H. Latimer-Needham, who held that post from 1930 to 1935, doing an enormous amount of work in getting British gliding safely on its feet. He was then an instructor at the Halton Aircraft Apprentices' School, where he designed and built a glider with a wheeled undercarriage called the Albatross, which he brought over to Ivinghoe Beacon during the London Club's camp there in July 1930.

Then in 1932 he published a book "Sailplanes, their Design, Construction and Pilotage". Later, he joined W.L. Manuel and Gurney Grice in setting up a glider factory in Dunstable and produced his re-designed version of Manuel's Wren, which they called "Kestrel". During the Flying Flea craze he produced a safer but more conventional light aeroplane, the Luton Minor. Then he joined Sir Alan Cobham's firm for developing refuelling in the air.

This must be Needham's second book—but how different from the first! It covers an enormous field, starting with the beginning of the Universe, passing through the development of life on the Earth and settling down to the major part of the book, about the human species, the development of its civilisation, its idiosyncracies, its future and goodness knows what else about it. The list of references at the end contains 128 books and scientific papers, including two by the present reviewer on the improbability of intelligent life, or even life itself, evolving on a planet (most unpopular with space fans, who imagine they have refuted the arguments by pretending that "improbable" means "impossible").

Needham's main function in the book has been to distil the most relevant and important ideas from this vast amount of reading matter and so save his readers from the vast effort of doing the same; though he rarely discusses the relative merits, in his opinion, of the ideas he quotes. For instance, what of our future? The Huxleys are quoted as pointing out that civilisation causes the deterioration of man's genetic make-up by keeping people alive who would otherwise die. But I cannot find any suggestion that we will shortly destroy ourselves in a nuclear war.

The original draft of this Review included a suggestion that Latimer-Needham's next book should describe the many forms of airborne life, both plant and animal, throughout the earth's geological history—a subject on which so many scientists have gone wrong through ignorance of gliding meteorology. But now the sad news has come of his death in Canada on May 5 (see Obituary notice p227). However, his last letter to me showed that he was still pursuing the study of human evolution, with two articles in the magazine *Humanist in Canada.* Yet he had not forgotten his first love, for his letter also describes the flight of birds he saw on a voyage through the Panama Canal and up the west coast to Acapulco; and he enclosed a press cutting mentioning his part in starting a new gliding club at Okanagan, BC, near which he lived.

A. E. SLATER

REGIONALS RESULTS

Western Lasham and Northern

WESTERN REGIONALS—Nympsfield, July 5—13

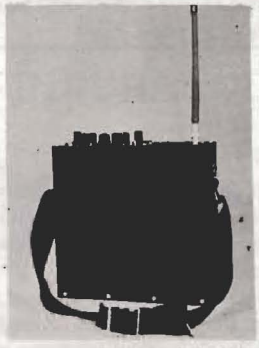
No.	Pilot	H'cap	Sailplane	5.7 1	6.7 2	7.7 3	9.7 4	11.7 5	12.7 6	Total Points
1	Wood, R. A.	116	Kestrel 19	828	1000	625	913	36	14	3416
2	Davis, A. J.	100	Std Cirrus	892	880	126	1000	161	11	3070
3	Randle, M.	104	Phoebus 17	598	803	564	887	90	16	2958
4	Tull, V. F. G.	116	Kestrel 19	665	767	597	740	73	2	2844
5	Coombe, W. G.	74	Bocian	981	568	0	835	375	0	2749
6	Findon, D. E.	96	Std Libelle	738	803	205	897	0	0	2643
7	Vennard, D.	116	Kestrel 19	772	828	0	957	73	1	2631
8	Woodhouse, I. C.	96	Std Libelle	785	911	0	791	117	14	2618
9	Murdoch, I.	90	K-6E	1000	970	186	343	92	16	2607
=10	Davis, D. W.	104	Cirrus	576	800	625	437	100	13	2520
=10	Webster, J. W. A. Brown, K.	90	K-6E	779 –	– 861	319 –	– 457	104 –	0	2520
12	King, P. A.	110	Diamant 18	737	884	0	851	32	2	2506
13	Roberts, D. G.	116	Kestrel 19	666	822	134	727	31	0	2380
14	Hill, M. B. Winning, E. J.	100	Std Cirrus	497 –	– 824	103 –	– 746	43 –	– 5	2218
15	Rowland, C. D.	84	Skylark 3B	535	601	604	269	193	7	2209
16	Crawshaw, G. H.	108	Diamant 18	605	77	594	788	73	14	2151
17	Throssell, M. G. Southwood, A. M.	100	SHK	727 –	– 275	239 –	– 804	95 –	– 4	2144
18	Simmons, T. K.	96	Std Libelle	557	841	205	253	110	3	1969
19	Robertson, R. A.	100	Std Cirrus	748	120	253	808	0	0	1929
=20	Murdoch, M. L.	98	Std Libelle	764	266	331	501	60	5	1927
=20	Taylor-Beasley, M.	98	Std Libelle	636	909	84	196	102	0	1927
22	Atkinson, G. B.	116	Kestrel 19	785	158	188	687	34	0	1852
23	Walker, Anne	96	Std Libelle	608	358	574	300	0	3	1843
24	Roberts, D. W. H. Gibbons, J.	90	K-6E	647 –	– 409	209 –	– 338	149 –	– 6	1808
25	Cowderoy, R. I. Grant, I.	102	Phoebus 17	– 567	– 117	– 173	814 –	89 –	– 0	1762
26	Hancock, A. R.	90	K-6E	671	409	128	334	147	3	1692
27	Corrick, D. W.	84	Std Austria	691	434	0	544	0	0	1669
28	Munday, M.	86	Skylark 4	192	203	384	741	100	0	1620
29	Duke, A. Davies, M.	104	Cirrus	– 557	436 –	– 0	377 –	11 –	2 –	1383
30	Harmer, T. J.	96	Std Libelle	513	308	0	378	95	1	1295
31	Haddon, R. C.	94	Dart 17R	276	322	0	263	0	2	863
32	Benton, D. A.	94	Dart 17R	508	81	0	0	0	4	593

Tasks: Day 1, 153.8km △; Day 2, 165.8km △; Day 3, 138.4km dog leg; Day 4, 96.2, 103.2, 101.4km alternative ↔; Day 5, 139.3km △.

FINAL RESULTS—LASHAM REGIONALS, July 19—27

No.	Pilot	H'cap	Sailplane	21.7 1	23.7 2	25.7 3	26.7 4	27.7 5	Total Points
1	Lysakowski, E. R.	116	Kestrel 19	967	138	1000	826	986	3917
2	Wells, M. D.	98	Std Libelle	861	86	915	1000	873	3735
3	Lovell, C. D.	102	Phoebus 17	785	129	899	964	906	3683
4	Carlton, M. R.	116	Kestrel 19	766	130	850	796	892	3434
5	Stafford Allen, P. R.	100	Std Cirrus	675	33	847	944	826	3325
6=	Watson, A. J.	98	Std Libelle	724	27	968	597	1000	3316
6=	Crouch, R.	100	Std Cirrus	639	33	817	993	834	3316
8	Hunt, R.	98	ASW-15	1000	0	816	663	781	3260
9	Green, G. D. A.	98	Std Libelle	660	29	817	956	741	3203
10	Orth, W. T., Fleming, A. M.	98	Std Cirrus	935 –	– 17	913 –	– 450	834 –	3149
11	Burns, Anne	120	Nimbus (22m)	686	124	817	739	664	3030
12	Cousins, R.	116	Kestrel 19	677	127	739	553	832	2979
13	Foot, R. A., Marriott, S. H. C.	120	Nimbus (22m)	766 –	121 –	897 –	– 356	830 –	2970
14	Warminger, A. H.	116	Kestrel 19	710	123	830	485	775	2923
15	Hanfrey, A. W.	100	Std Cirrus	673	8	829	491	876	2877
16	Keogh, B. F.	98	Std Libelle	527	3	969	640	714	2853
17	Costin, M. C.	102	Cirrus	751	16	883	474	711	2835
18	Linee, T. E.	116	Kestrel 19	791	1	795	379	799	2765
19	Watson, Patricia, Watson, B. B. C.	96	Std Libelle	839 –	– 128	– 298	– 749	741 –	2755
20	Burgess, F., Harrington, T.	96	Std Libelle	449 –	– 0	841 –	– 749	700 –	2739
21	Seth-Smith, M. P.	100	ASW-15B	601	30	735	398	908	2672
22	Duffin, E. R.	100	Std Cirrus	566	47	839	574	615	2641
23	Dimock, H. R.	118	Nimbus (20m)	538	0	855	538	684	2615
24	Young, J. R., Morland, N. C.	102	Cirrus	685 –	– 9	867 –	– 379	641 –	2581
25	Rood, B.	116	Kestrel 19	722	0	839	379	623	2563
26	Harper, M.	96	Std Libelle	725	11	828	178	727	2469
27	Vann, E. J. C.	90	K-6E	893	0	154	343	858	2248
28	Horne, P. R. Cole, R. T.	96	Std Libelle	443 –	– 53	242 –	– 749	689 –	2176
29	Docherty, T. P.	116	Kestrel 19	638	72	210	379	723	2022
30	Levi, A.	96	Std Libelle	647	0	717	180	455	1999
31	Gee, M. I.	116	Kestrel 19	751	0	68	467	680	1966
32	Whitfield, G. R., Procter, R. G.	94	IS-29D	109 –	– 19	– 569	– 686	– 518	1901
33	Cranfield, N. W.	86	Skylark 4	482	0	0	677	677	1836
34	Walker, R., Hall, E. J. F.	76	K-13	586 –	– 7	237 –	– 349	538 –	1717
35	Dripps, D., Charnell, P.	100	Std Cirrus	428 –	– 30	– 238	294 –	– 725	1715
36	Cooke, C. E.	116	Kestrel 19	483	1	624	287	315	1710
37	Paul, I.	100	Std Cirrus	98	36	208	491	723	1556
38	Docker, B., Partington, J. H. D.	102	Cirrus	607 –	– 2	– 280	264 –	– 315	1468
39	Macpherson, G., Burne, A. G.	96	Std Libelle	0 –	– 0	270 –	– 320	597 –	1187
40	Marczynski, Z.	82	Pirat	117	26	294	275	438	1150
41	Morison, S. M.	94	IS-29D	30	21	0	547	538	1136
42	Mason, E. J.	94	Dart 17R	102	0	0	387	519	1008
43	Johnson, R. E. B. Foyle, W. R. C.	84	K-6CR	15 –	– 8	– 43	240 –	– 611	917
44	Wilks, E.	92	Pilatus B-4	58	0	237	62	391	748
45	Bryan, D., Thomas, S.	90	K-6E	3 –	– 19	232 –	– 460	DNF DNF	714
46	Sampson, D. L., Hunts, J. P.	96	Cobra 15	58 –	0 –	305 –	0 –	– 315	678 678
47	Verkroost, P. J. V.	94	Dart 17R	58	0	165	149	32	404

Tasks: Day 1, 181km △; Day 2, 127, 129, 133km alternative ↔; Day 3, 324km ↔; Day 4, 255km △; Day 5, 147km △. DNF = did not fly.



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FINAL RESULTS—NORTHERN REGIONALS, Sutton Bank—August 16—25

No.	Pilot	Sailplane	H'cap	2.8 1	3.8 2	6.8 3	9.8 4	10.8 5	Total Points
1	Lilburn, D. W.	Kestrel 19	116	876	707	951	754	976	4264
2	Austin, D. C.	Kestrel 19	116	526	730	929	1000	926	4111
3	Bacon, G.	Std Cirrus	100	914	696	991	470	922	3993
4	Wells, M. D.	Std Libelle 201B	98	962	666	969	490	599	3686
5	Pozerskis, P.	ASW 17	118	871	621	929	206	990	3617
6	Kenworthy, A. T.	Diamant 18	108	860	677	871	284	888	3580
7	St. Pierre, A. H. G.	SD-3	90	946	348	660	382	926	3262
8	Mitchell, R. V., Crawshaw, G. H.	K-6E	90	614	136	629	578	922	2879
9	Kilcoyne, D. A.	Std Cirrus	100	0	648	1000	695	476	2819
10	Barrett, R. V.	Cirrus	102	785	621	404	450	435	2695
11	Phillips, D. M.	Std Libelle	96	460	651	396	675	480	2662
12	Wilson, C.	SHK	100	865	230	497	548	517	2657
13	Torode, H. A.	K-6E	90	DNF	631	536	578	888	2633
14	Elliot, E. G.	SHK	100	431	295	933	392	557	2608
15	Smith, J. D.	Cobra 15	96	806	277	303	509	484	2379
16	McLane, J. L. C., Hart, J. B.	K-6CR	84	292	366	571	470	615	2314
17	Bleaken, L.	Kestrel 19	116	475	42	906	353	394	2170
18	Herringshaw, G.	Kestrel 19	116	146	654	857	127	377	2161
19	Woodford, J. M.	ASW-15B	100	146	0	951	539	517	2153
20	Stoddart, R. C.	Dart 15	88	607	23	357	607	410	2004
21	Roberts, Patricia	K-6E	90	482	354	458	353	345	1992
22	Lazenby, P.	K-6E	90	73	312	490	578	525	1978
23	Mortimer, R. G.	Jantar 19m	116	898	177	256	617	0	1948
24	Ellis, C. A. P.	Dart 17R	94	424	0	591	255	492	1762
25	Russell, F. K.	Kestrel 19	116	512	53	132	597	410	1704
26	McLean, G.	Pilatus B4	92	855	218	85	480	25	1663
27	Ramsden, P. R.	Kestrel 19	116	817	236	124	411	0	1588
28	Purves, J.	Blanik	76	168	0	412	343	648	1571
29	Andrews, P. W.	K-6CR	84	241	0	466	617	107	1431
30	Greaves, C. M., Simms, J. A.	Blanik	76	1000	12	0	411	DNF	1423
31	Mawson, J. J.	Kestrel 19	116	80	0	186	411	262	939
32	Ellis, J.	Std Libelle	96	828	100	DNF	DNF	DNF	928
33	Giles, E. E. F.	Foka 5	94	322	171	210	0	0	703
34	Foster, B. A.	K-8B	78	0	212	381	DNF	DNF	593
35	Gregson, I. B., Hill, J. D.	Consort	82	80	71	179	0	189	519
36	Bray, P. C.	Std Cirrus	100	0	177	249	0	0	426
37	Taylor, C.	Gypsy	82	66	42	54	20	164	346
38	Riddell, J. G.	Torva	92	0	0	194	0	123	317
39	Terrett, R.	Std Cirrus	100	0	283	DNF	DNF	DNF	283
40	Upson, G.	Std Libelle	96	146	DNF	DNF	DNF	DNF	146

Tasks: Day 1, 197km □; Day 2, 116km ↔; Day 3, 116km ↔ followed by 180km ↔; Day 4, 170, 178, 182km alternative ↔; Day 5, 116km ↔. DNF = did not fly.

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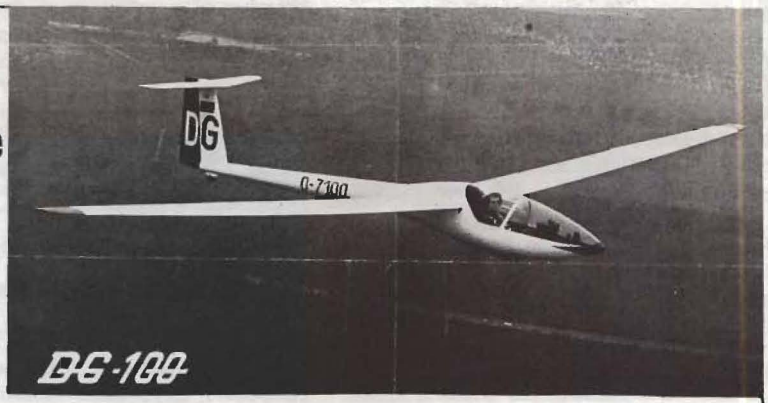
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Best glide angle at Max A.U. weight	39 at 55 kts.
Min sink	1.2 kts. between 38 & 43 kts

1st Place Austrian National, flown by Harro Wödl
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BGA & general news

LONGER LADDERS

Both National Ladders have lengthened considerably since the last issue with a lot of new names near the top.

Private Ladder

Leading pilot	Club	Pts	Flts
1 P. L. Sears	Cambridge Univ	4612	4
2 M. Costin	Coventry	3853	4
3 L. Bleaken	Cotswold	3865	4
4 L. E. Beer	Thames Valley	3802	4

Club Ladder

Leading pilot	Club	Pts	Flts
1 P. Löwenstein	Surrey/Hants	4230	3
2 A. B. Crease	Imperial College	3279	4
3 R. Brisbourne	Surrey/Hants	2827	2
4 C. C. Rollings	Airways	2277	3

S&G TO COST MORE

It is with considerable reluctance that we have to increase the price of S&G to 50p per copy from the February—March 1976 issue, due to higher printing costs and postage, having held the present rate for exactly two years since the introduction of the larger format.

The annual subscription by post will be £3.90, US $8.50. This means that all subs expiring in December will be renewed at the higher rate.

VALUABLE TROPHY FOR ANDY

Andy Gough, CFI of Bicester RAFGSA Centre, was presented with a beautiful trophy valued at £1000 after giving aerobatic displays in a Blanik and a Fauvel at the Popular Flying Association's meeting at Sywell, Northants, in July.

It wasn't until landing that Andy learned the Association had chosen him for the Roderick Turner trophy, presented annually in memory of a flying instructor.

VAT CHANGES

As a direct result of representations from the BGA and other aviation bodies, an order has just been made in Parliament exempting further items from the higher rate of VAT.

First, VHF receivers and transmitters used solely for aircraft and of a type approved by the CAA now revert to 8% VAT. Secondly, the classification and surveying of aircraft is exempted from the higher rate which means that the fee for a C of A reverts to 8% immediately. (BGA charge is now £5.00 plus 8% VAT—total £5.40.)

Please note that any stocks of BGA Form INSP 2 (application for renewal of C of A) should be amended to show the correct fee of £5.40p.

Barry Rolfe
General Secretary

WHITBREAD AWARDS 1975

We are delighted to announce that Whitbreads have donated a sum of money again this year to enable us to make £10 awards to young pilots. Any member of a BGA or RAFGSA club (not ATC) achieving the Bronze C before their 19th birthday is eligible, but application must be made to the BGA Office at the same time as application for the endorsement to the certificate.

BRUNT TROPHY

The Brunt Trophy is awarded annually for the best gain of height by a student member of a university gliding club. The flight must have been during the period October 1, 1974, to September, 30 1975, and the pilot must have been a *bona fide* student for a substantial part of that period. Claims should be sent to Dr A. J. Stone, Emmanuel College, Cambridge, to reach him by December 1, 1975. The best gain so far this year is about 7500ft, by a member of the Cambridge University Club.

TECHNICAL NEWS

SF-25/T-61 Falke propellers. Six propellers have been smashed recently and there is now an acute shortage. Hoffmans have been on holiday and industrial action has resulted in a massive wage award, which will be reflected in future prices.

The only authorised propellers are those detailed in the Special Category C of A document, namely, HOCO-F-Hz/PII/150-70-7 8L and HOFF-HO 11-150B-70L. The BGA are discussing with PFA alternative sources of UK supply in particular types RWG 101 and RWG 101/C manufactured by Roy Watling-Greenwood. These types are not CAA type approved for SF-25/T-61 motor gliders, at this time, but application to conduct tests has been made to CAA.

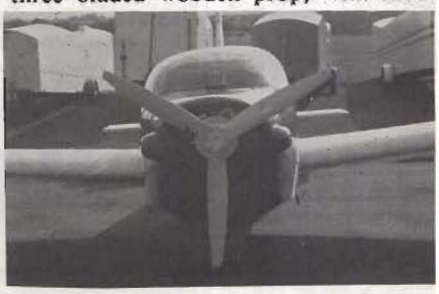
Tug propellers (Gypsy engined tugs only). Both UK sources of wood and metal propellers have ceased production (Permalpi and Fairey-Reed). There are, therefore, no new replacements available, nor are there effective repair facilities at this time. Propellers eligible for Gypsy major installations are listed in CAA notice No. 4, but Hoffman propellers are also approved for a range of Gypsy installations, and approval is being sought for the Chipmunk (Contact Mr D. Bianchi, Personal Plane Services, Booker. Tel High Wycombe 29432).

However, face up to the fact that there is no future in damaging or neglecting propellers, and props with clocks in club bars are likely to be hi-jacked! Please sort out your old bits and pieces and declare any useful surpluses to the BGA.

NB A secondhand Chipmunk prop changed hands at £750 recently! Hoffman props for Chipmunks with special ballasted spinner backplate, are likely to cost £650! Rollasons at Shoreham may be able to help with wooden prop repairs.

Motor glider propellers

The BGA are seeking approval for UK manufactured wooden propellers for motor gliders. Our photograph shows a three bladed wooden prop, with much



increased ground clearance, on test at RAFGSA Bicester. This propeller and a similar two blade version were manufactured by Roy Watling-Greenwood of Uckfield, Sussex, who makes props for the Popular Flying Association.

This is good news but performance differences, if any, have not yet been established.

Dick Stratton,
BGA Chief Technical Officer

GOLD AND DIAMOND CLAIMS

A number of pilots who flew distance flights qualifying for Gold or Diamond badges in the Nationals at Husbands Bosworth have not yet submitted their claims to the BGA. Pilots wishing to claim should submit a claim form, showing their name and address. No supporting evidence is required, as this is already held by the BGA, but pilots must indicate on the reverse of the form which badge leg they are claiming. Claim should be accompanied by gliding certificate and the registration fee of £1.50 per leg.

BGA GENERAL MEETING

All members of the BGA are invited to a General Meeting which will be held at the London Gliding Club on Saturday, November 22, 1975. Full details of the programme will be circulated to all clubs.

WORLD CHAMPIONSHIPS FUND

The BGA acknowledges contributions to the 1976 World Championships Fund from the following (up to and including August 12).

Mrs A. Almond	T. Oliver
M. Benson	I. L. Patterson
Bristol/Glos GC	J. T. Pope
M. Carter	E. M. Rees
M. E. Carter	D. G. Roberts
K. Chichester	E. W. Room
F. Clark	Rotary Precision
R. T. Cole	R. Sandford
L. A. Crawford	G. Sheard
P. L. Cyster	C. R. Simpson
R. Davidson	J. H. Stanley
H. Doktor	Mrs D. Tanner
C. E. Entwisle	M. Thomas
J. A. Findon	R. Thomas
N. Forman Hardy	C. J. Vincent
M. P. Garrod	Nigel Wardle
F. L. Hardy	C. J. White
R. D. Jackson	Mrs C. D. Whittaker
J. Jeffray	F. G. Wilkins
C. G. Masterman	G. Wilkinson
A. McFadden	G. M. Wilkinson
R. M. Nady	J. H. Wilson

TOTAL — £264.61

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GLIDING CERTIFICATES

ALL THREE DIAMONDS

No.	Name	Club	1975
44	C. R. Simpson	Coventry	31.5
45	M. C. Costin	Coventry	31.5
46	M. J. Cowburn	Surrey/Hants	31.5
47	D. W. Lilburn	Yorkshire	29.6
48	J. D. Pickett-Heaps	in USA	23.6

DIAMOND DISTANCE

No.	Name	Club	1975
1/79	C. R. Simpson	Coventry	31.5
1/80	C. J. Woodier	Four Counties	31.5
1/81	M. D. Wells	Enstone	31.5
1/82	M. C. Costin	Coventry	31.5
1/83	M. J. Cowburn	Surrey/Hants	31.5
1/84	B. W. Rood	Coventry	31.5
1/85	D. J. Robertson	Coventry	31.5
1/86	W. A. H. Kahn	Surrey/Hants	31.5
1/87	P. S. Whitehead	in South Africa	1.1
1/88	G. W. Camp	in France	9.6
1/89	R. P. Brisboume	Surrey/Hants	31.5
1/90	S. Easton	Norwich Soaring	29.6
1/91	D. W. Lilburn	Yorkshire	29.6
1/92	B. T. Spreckley	Buckminster	3.7
1/93	H. Cook	Thames Valley	30.6
1/94	K. R. Aldridge	Bristol	31.5
1/95	R. D. Hunt	Inkpen	30.6
1/96	J. D. Pickett-Heaps	in USA	23.6

DIAMOND GOAL

No.	Name	Club	
2/597	E. J. B. Davern	Essex	30.12.74
2/598	I. D. MacFadyen	Cranwell	4.5.75
2/599	T. J. Harmer	Bristol/Glos	31.5
2/600	R. W. Smithers	RAE	31.5
2/601	D. T. Howard	Bristol/Glos	31.5
2/602	R. P. S. Montague-Scott	Surrey/Hants	31.5
2/603	C. J. Woodier	Four Counties	31.5
2/604	R. I. Lloyd	Chilterns	31.5
2/605	D. B. Walker	Imperial College	31.5
2/606	R. J. Lucksford	Swindon	31.5
2/607	S. J. C. Parker	Bath/Wilts	31.5
2/608	J. M. Gentry	Imperial College	31.5
2/609	N. G. Hackett	Coventry	31.5
2/610	C. J. Backwell	Southdown	31.5
2/611	R. V. Barrett	Bristol/Glos	31.5
2/612	D. West	Imperial College	31.5
2/613	A. R. Hancock	SW District	31.5
2/614	D. C. Pentecost	Cornish	31.5
2/615	J. H. Welsh	SW District	31.5
2/616	E. D. Burke	Cotswold	31.5
2/617	A. J. Davis	Bath/Wilts	31.5
2/618	C. F. H. W. Cooke	Surrey/Hants	31.5
2/619	S. Mulholland	Four Counties	31.5
2/620	R. Hindle	Bristol/Glos	31.6
2/621	R. I. Cowderoy	Oxford	31.5
2/622	A. F. Butcher	Swindon	2.6
2/623	G. P. Plunkett	Southdown	31.5
2/624	J. R. Frampton	Southdown	31.5
2/625	J. E. New	Surrey/Hants	2.7
2/626	C. Dews	Cambridge Univ	12.6
2/627	N. Gaunt	Yorkshire	29.6
2/628	A. D. W. Mattin	Inkpen	31.5
2/629	J. W. Rice	Trent Valley	29.6
2/630	R. A. Wood	SGU	29.6
2/631	L. Bleakin	Cotswold	29.6
2/632	A. M. Fleming	Surrey/Hants	31.5
2/633	J. J. Mawson	Ouse	29.6
2/634	R. M. Spreckley	Buckminster	3.7

GOLD C COMPLETE

No.	Name	Club	1975
466	G. D. A. Green	SGU	23.5
467	R. I. Lloyd	Chilterns	31.5
468	S. J. C. Parker	Bath/Wilts	31.5
469	H. B. Walrond	London	26.5
470	J. M. Gentry	Imperial College	31.5
471	D. West	Imperial College	31.5
472	C. F. H. W. Cooke	Surrey/Hants	31.5
473	S. Mulholland	Four Counties	31.5
474	A. F. Butcher	Swindon	2.7
475	J. E. New	Surrey/Hants	2.7
476	N. Gaunt	Yorkshire	29.6
477	R. A. Wood	SGU	29.6
478	L. Bleakin	Cotswold	29.6
479	A. M. Fleming	Surrey/Hants	31.5
480	J. J. Mawson	Ouse	29.6

GOLD C HEIGHT

Name	Club	1975
F. K. Wilson-Clark	Clevelands	19.4
H. M. Pantin	Hambletons	19.4
G. E. Wright	Hambletons	19.4
R. Fort	Yorkshire	14.6
E. H. A. Norman	Fulmar	25.3

GOLD C DISTANCE

Name	Club	1975
T. J. Harmer	Bristol/Glos	31.5
G. D. A. Green	SGU	23.5
R. W. Smithers	RAE	31.5
D. T. Howard	Bristol/Glos	31.5
R. P. S. Montague-Scott	Surrey/Hants	31.5
R. I. Lloyd	Chilterns	31.5
D. C. Pentecost	Cornish	31.5
D. B. Walker	Imperial College	31.5
R. J. Lucksford	Swindon	31.5
S. J. C. Parker	Bath/Wilts	31.5
H. B. Walrond	London	26.5
J. M. Gentry	Imperial College	31.5
N. G. Hackett	Coventry	31.5
C. J. Backwell	Southdown	31.5
R. V. Barrett	Bristol/Glos	31.5
D. West	Imperial College	31.5
A. R. Hancock	SW District	31.5
E. D. Burke	Cotswold	31.5
A. P. Moulang	Kent	31.5
C. F. H. W. Cooke	Surrey/Hants	31.5
S. Mulholland	Four Counties	31.5
R. Hindle	Bristol/Glos	31.6
R. I. Cowderoy	Oxford	31.5
A. F. Butcher	Swindon	2.7
G. P. Plunkett	Southdown	31.5
J. R. Frampton	Southdown	31.5
J. E. New	Surrey/Hants	2.7
C. Dews	Cambridge Univ	12.6
N. Gaunt	Yorkshire	29.6
A. D. W. Mattin	Inkpen	31.5
J. W. Rice	Trent Valley	29.6
R. A. Wood	SGU	29.6
L. Bleakin	Costwold	29.6
A. M. Fleming	Surrey/Hants	31.5
H. H. I. Wolf	Dorset	31.5
J. J. Mawson	Ouse	29.6
R. M. Spreckley	Buckminster	3.7

SILVER C

No.	Name	Club	1975
3929	I. G. Carrick	SGU	1.5
3930	W. R. Mayo	Avro	3.5
3931	T. G. Armstrong	Highland	30.3
3932	J. J. Barry	South Wales	11.5
3933	M. A. Adam	Humber	11.5
3934	R. C. Searle	Heron	4.5
3935	N. G. Hackett	Coventry	19.5
3936	R. J. Jeffries	Bristol/Glos	3.5
3937	R. P. Gittens	Cambridge Univ	31.5
3938	Susan Frampton	Southdown	26.5
3939	R. A. Munday	Devon/Somerset	18.5
3940	P. F. Whitehead	Wrekin	16.5
3941	D. A. H. Short	Cornish	27.5
3942	P. W. Lees	Enstone	3.5
3943	A. O. Bourne	Four Counties	30.5
3944	R. St. B. Wayne	Lincolnshire	29.4
3945	H. J. Eva	Wrekin	31.5
3946	T. A. Johnson	Heron	31.5
3947	I. A. Wright	Surrey/Hants	31.5
3948	F. P. Bois	Surrey/Hants	31.5
3949	D. A. Pearce	Shropshire	31.5
3950	R. Brown	Cotswold	31.5
3951	P. R. Johnson	Essex	31.5
3952	A. R. Newberry	RAE	31.5
3953	R. M. Grout	Bannerdown	31.5
3954	W. N. Ferguson	Borders	31.5
3955	B. Lord	Derby/Lancs	31.5
3956	N. P. Chorley	Surrey/Hants	31.5
3957	R. W. Watson	Southdown	31.5
3958	C. J. Hadley	Inkpen	1.6
3959	H. H. K Jefferson	Shropshire	31.5
3960	J. A. Hopgood	Lasham	31.5
3961	B. Lumb	Ouse	31.5
3962	R. J. Fox	Portsmouth Naval	31.5
3963	S. Hurt	Lincolnshire	31.5
3964	J. L. Craven	Lakes	3.6
3965	J. M. Lovell	Southdown	31.5
3966	R. Jones	Derby/Lancs	31.5
3967	D. I. Vernon	Shropshire	11.5
3968	R. H. Barry	Lasham	31.5
3969	P. M. Barnes	Humber	30.5
3970	T. E. Lestrille	Surrey/Hants	1.6
3971	G. J. Burley	Cranfield	4.6
3972	J. H. Odell	Kestrel	3.6
3973	D. J. T. Nunn	Surrey/Hants	31.5
3974	P. D. Eaton	Buckminster	31.5
3975	J. M. Smith	Cornish	31.5
3976	R. A. Davey	Thames Valley	31.5
3977	R. G. Weaver	Inkpen	31.5
3978	J. G. Allen	Bicester	7.6
3979	P. L. Clifton	Midland	31.5
3980	R. D. Jackson	Surrey/Hants	31.5
3981	W. J. F. Chipperton	618GS	31.5
3982	C. M. Chapman	Cambridge Univ	4.6
3983	J. C. Francklow	Inkpen	31.3
3984	I. D. Moss	Wrekin	10.6
3985	D. A. Pybus	Thames Valley	7.6
3986	A. S. Raffan	Chilterns	8.6
3987	F. J. Hill	Bristol/Glos	9.6
3988	K. B. Davey	Mawgan Vale	31.5
3989	C. Borrensen	Bath/Wilts	3.5
3990	G. J. Markham	Enstone	31.5
3991	R. W. Gordon	Blackpool	15.6
3992	P. T. Clayden	London	14.6
3993	A. S. Brodrick	Cambridge Univ	9.6
3994	E. J. Wren	Inkpen	3.6
3995	G. R. Wills	Coventry	17.6
3996	R. D. Carter	Swindon	31.5
3997	F. K. Wilson-Clark	Clevelands	15.6
3998	J. R. Wiseman	Heron	8.6
3999	G. P. Hibberd	Portsmouth	15.6
4000	M. C. Boik	Bicester	7.6
4001	G. P. Emsden	Surrey/Hants	7.6
4002	J. R. Jennings	Surrey/Hants	15.6
4003	H. M. Pantin	Hambletons	14.6
4004	A. Maufe	Yorkshire	14.6
4005	J. B. Taylor	Inkpen	31.5
4006	P. A. Reeves	Bicester	16.6
4007	A. W. Ramsey	Surrey/Hants	17.6
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4009	D. J. Whyte	Bicester	24.6

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WINNING on the wind

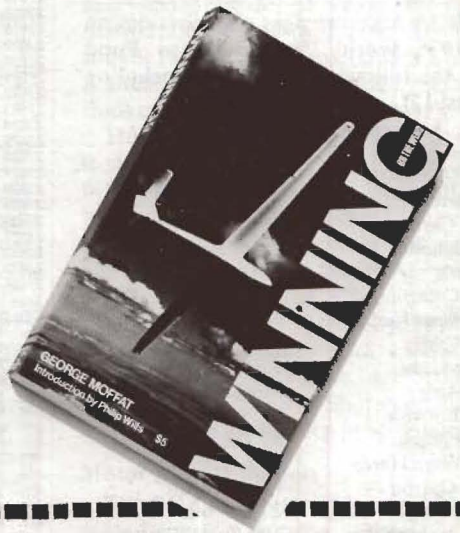
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4035	M. S. Parkes	SW District	6.6
4036	D. W. Beard	Heron	29.6
4037	J. R. Wood	Norfolk	18.6
4038	I. B. Kennedy	South Wales	5.7
4039	J. B. Street	Swindon	25.6
4040	D. W. Guest	Cambridge Univ	18.6
4041	R. Riley	Kent	4.6
4042	D. L. Wilson	Bicester	3.7
4043	C. J. Chapman	Imperial College	26.6
4044	A. L. Houseden	Cotswold	5.7
4045	P. G. Croskin	Coventry	29.6
4046	F. Eaton	Buckminster	3.7
4047	T. I. Masterman	Buckminster	28.6
4048	A. N. Maurogordato	Herefordshire	30.6
4049	J. Whittle	London	20.6
4050	G. C. Warner	Norfolk	30.6
4051	N. F. Collier	Highland	5.7
4052	J. C. Dinsdale	Ouse	1.7
4053	K. Hynes	Surrey/Hants	6.7
4054	J. A. Blacklin	Cotswold	6.7
4055	J. B. Cameron	Ouse	6.7
4056	R. Forrest	Enstone	29.6
4057	G. W. Sturgess	SW District	21.6
4058	W. I. C. Ewart	Ulster	28.6
4059	D. Whiteley	Doncaster	29.6
4060	K. Wressel	643GS	1.6
4061	N. D. Leak	Imperial College	30.6
4062	J. R. Frampton	Southdown	31.5
4063	L. R. Russell	Bicester	8.6
4064	R. F. Harvey	Bicester	26.6
4065	L. M. Peters	Bristol/Glos	31.5
4066	R. T. White	Cotswold	6.7
4067	P. Rawlinson	Two Rivers	19.6
4068	R. B. M. Henderson	Deeside	6.7
4069	M. Solosky	London	2.7
4070	P. D. Lutley	SW District	15.6
4071	A. V. Day	Buckminster	16.6
4072	J. M. Luke	SGU	6.7
4073	Heather Tooley	London	2.7
4074	R. Marsden	Southdown	21.6
4075	D. C. W. Sanders	London	3.7
4076	J. W. Tilford	London	-2.7
4077	M. Stott	Northumbria	29.6
4078	R. C. Drewell	London	16.7
4079	J. R. Melling	Buckminster	29.6
4080	P. H. Bayley	Oxford	6.7
4081	B. B. Wickens	Kent	31.5

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OBITUARIES

C. H. LATIMER-NEEDHAM

Captain Latimer-Needham, as he was known when he came into gliding at the beginning of 1930 with the formation of the BGA, played a very active part in the first five years of organised gliding in Britain, and many of his activities at that time are mentioned in the review of his last book on p00.

Latimer-Needham obtained the first British C Certificate, and he described in S&G for August 1969 (p281) how, at a rally at Firle Beacon during Whitsun 1930, he soared a Prüfling for 66min and then an open Dagling Primary for 22min (this may still be the British record for a completely unfaired Primary). He also got the first British B Certificate, at Ivinghoe, but missed getting the first A at the London Club's site near Tring on March 18 because C. H. Lowe-Wylde, producer of the BAC series of gliders, got his A there earlier the same day. So Latimer-Needham's gliding certificate was therefore No 2.

Four years ago Latimer-Needham wrote an article for S&G on bird flight observations in North America, with drawings, but unfortunately sent it to an old address and it must have gone astray. Some of it was about pelicans alternately flapping and gliding very close to the sea, suggesting lessons which might be applicable to man-powered flight, in which he was intensely interested, as he was in all unconventional forms of aviation. He died on May 5.

A.E.S.

H. S. BROAD

Hubert Broad, who died recently, learned to fly at Hendon in 1915 and was a leading aviator for many years thereafter, flying in the Schneider Cup race of 1925, was a flying participant in the first British soaring contest of 1922 at Itford. His glider, entered by De Havilland, was described on the entry form as "Braced monoplane 50ft span with pedals for starting only", but a contemporary drawing of it, reproduced in S&G for Oct 1962, p309 (top), does not show any pedal mechanism. He made one flight of 2min 10sec on the opening day, soaring first but then landing below.

A.E.S.

G. A. LITTLE

Early glider pilots will be sad to learn of the death of Andrew Little early in July.

I first met Andrew Little at the BGA Competitions at Barrow in Furness in 1932. As he was an early member of the Southdown Club when I joined him as a lowly apprentice at Vickers Aviation at Weybridge where he was design engineer, I accompanied him on many weekend expeditions to the South Downs, and through him met many unforgettable gliding characters like "Steve" Stevens, Bill Dunning and Sam Youles, etc.

In 1936 or thereabouts Andrew Little left Vickers to join Airspeed Limited at Portsmouth, where he naturally became involved with the Portsmouth Gliding Club, and in due course he acquired one of the original Tern sailplanes which he owned and flew for many years.

Andrew Little was one of those largely unsung background chaps who are so indispensable in the gliding movement. A most unassuming and gentle chap, an experienced aircraft design engineer, I remember him for his kindliness and sound engineering judgement.

J.S.S.

overseas news

Please send news and exchange copies of journals to the Overseas Editor: A. E. Slater, 7 Highworth Avenue, Cambridge, CB4 2BQ, England.

GETTING HIGH IN THE SAVOY

WILLIAM MALPAS

writes about another French Gliding Club

In June of this year I introduced S&G readers to the French club at Buno Bonnevaux near Paris (p128). This month, meet Centre Savoyard de Vol-a-Voile Alpin (a club of mainly young people) at Challes-les-Eaux near Chambery. Instead of the vast flat plains southwest of Paris, the playground for Challes is the northern Alps, including the massif of Mont Blanc.

Here is a club where visiting foreigners are welcome to use club equipment, and the costs are on a very reasonable level. A visit would serve very well as an *hors d'oeuvre* before undertaking an expedition to the gliding paradise further south. I will write about the southern Alps later.

The place for mountain flying

The gliders at Challes share the airfield with an advanced training centre for power pilots (aerobatics, mountain flying, etc). The field lies at the foot of a hillside which is fed by the prevailing valley wind, so it is possible to stay up most of the time. The club is open every day except Tuesdays; so for anyone who wishes to learn mountain flying, or who wishes to put in many hours practising, this is the place. It is also good for cross-countries, with landing possibilities more in evidence than in the high mountains to the east and south. An important feature for nervous beginners, even if you never need to use them.

From 3000kms in 1970, the total cross-country kilometres rose to 34000 in 1974, which lifted the club to fifth position in the *Coupe Federale*. The *chef du centre* is Monsieur Carre, a human dynamo who makes the whole thing turn over. He is there when the hangar doors open in the morning; he tows; he instructs; and he is still there when the last glider is stowed away—usually in the dark; and you may find, if you are low at a turning point, that he is there too in the two-seater with some timely advice on how to get home!

The area is very beautiful, with plenty to see if you don't want to fly all the time *(La Grande Chartreuse,* Annecy, etc) There are many hotels nearby and there is a bunkhouse with all mod cons and camping possible on the field. There is no problem in finding a solo glider to fly during the week, but a checkout to fly club gliders is probably easier during the weekend, when there are more instructors available.

For the glider-pilot-ornithologist the area abounds in soaring birds; my favourite bar-room story of Challes concerns an indignant eagle which made threatening gestures to frighten me away from the Tete du Parmelan overlooking Lake Annecy. He finally succeeded by flying about one yard behind my right aileron as I spiralled up in weak lift. He flapped slowly to maintain his airspeed and position and kept his beak open as though to bite the trailing edge; and all the while he seemed to cast a malevolent eye on the cockpit.

For a stay of up to one month by a visitor using club gliders, the cost of enrolment is about £16. Tows cost about £1 and an hour's flying time £3 (with the pound equal to 10 francs). There are substantial reductions for pilots less than 22 years-old and for pilots paying a £50 deposit in advance. For details write the club: CSVVA, Route de Barby, 73190 Challes-les-Eaux, France.

In all cases, with glider or without, it is necessary in France to arrive with all the paperwork in order. For a pilot this means his logbook brought up to date, signed by the club Chairman or other local dignitary and if possible garnished with an impressive-looking rubber stamp; and he should send his pilot's licence or FAI Certificate to: *Service de la Formation Aéronautique, 246 rue Lecourbe,* 75015 Paris, asking for *"une equivalence francaise de ma licence pilote-planeur"*. It costs nothing.

Local knowledge is vital in the mountains and it is essential to listen carefully to briefings on clutching hands, landable areas, hidden cable car wires, etc. Even a little French is better then none.

VINON MOUNTAIN CONTESTS

This year two British pilots flew in the 12th International Mountain Soaring Contest in Southern France, held from June 28 to July 9, with eight contest days and task routes which added up to over 2000km. Among 31 in the Standard Class, Huerta (France) won in an LS-2 with 6319pts. Teunisse of Holland (Cirrus) was second with 6773, Gerard (French Air Force, Cirrus) third with 5280, and Malpas (Gt Britan, Cirrus) fourth with 5278. In the Open Class Humphry Dimock competed with his Nimbus 2 and finished seventh among nine entrants. Ragot of France (Nimbus 2) won; other competitors in this Class were four Germans, one Italian and two from the French Air Force.

The Air Force had its own Vinon contest in May. Pilots were classed as 12 "Montagne", who were confined to the home "zone", and 15 "Plaine", who flew triangles along specified valleys. Markings were for shortest total duration. S. C. Gérard (LS-1) won the "Montagne" with 13hrs 55min, and Lieut Detoc (Phoebus C) won the "Plaine" with 25hrs 57min.—*Aviasport.*

DANISH NATIONALS

With eight contest days, these were flown by 15 pilots in the Standard Class, all with Std Cirrus, Std Libelle or LS-1 types, and 18 in the Club Class, mostly with older Standard types such as K-6, Vasama, etc, while two flew in a "Free Class", each with an Open Class Cirrus. Sig Oye (Std Cirrus) won the Standard with 6804pts, winning the task on four days. O. Sorensen came second with 5729 and N. Tanhoj third with 5445pts. The Club Class was won by Johs Ling in an Uhu.

Denmark has now 776 Silver C pilots.—*Flyv.*

FINLAND'S FLEET

At the end of 1974 Finland had 212 sailplanes, 191 of which, plus 21 motor gliders, were registered during that year. The most numerous types are K-8B (23) and K-6CR (18). The motor gliders include 11 RF-4D.—*Flyv.*



A SMALL CLUB IN WEST GERMANY

A description by Rudolph Hartog who had his first experience of gliding at Bicester 12 years ago.

Our club, Luftsportgemeinschaft Lippe-Sudost, is near Blomberg at the remote eastern end of Northrhine-Westfalia, ten miles away from the Eagle Service Club at Detmold. It started 40 years ago and was re-established after the war when a Dagling and a Grunau Baby were built.

We were not able to build a hangar and clubhouse until 1964, with more facilities three years later—now we are adding a second hangar.

We have 35 active pilots, a total membership of nearly 100 and possess a K-6, K-8, ASK-13, K-7, Bergfalke and a Motorfalke. We rely on winching because this is the cheapest, but do have the opportunity of some aerotowing.

Members can pay their annual subscriptions in cash or in man hours worked in repairs, building, winch-driving etc. In this way we try to avoid the feeling that some members only work and others only fly. We repaired three gliders in this manner last winter, including the ASK-13 we bought as a wreck.

The worrying thing is that gliding is becoming increasingly complicated. Airspace is more restricted and last year it was seriously considered establishing zones over the gliding centres for glider flying, with the rest of the airspace closed to them. These "game reserves" would have killed long distance gliding. We sometimes feel we are eternally up against bureaucracy and officialdom, fighting a losing battle—much more so than in England.

Then the actual business of gliding is becoming more expensive with the high performance "super orchids" out of reach for a club like ours. Finally there is the threat to gliding in the development towards rationalisation—bigger airfields, better (and paid) organisation and the take-over by powered flying with its different interests and requirements.

We aim to attract youngsters and have contact with the local school where a teacher and interested pupils build model planes. Enthusiasts from this group go on to train with us, some from the age of 14. Last year we organised a three day competition for young pilots up to 24 years and 16 took part.

What does the future hold? I know many will think our club hopelessly out of date for we are not always able to find the right people to do the many chores. Some clubs in Germany have combined, but we are wary of this for we know it will make for higher costs. Others have tried to shift the burden on to the local authority but then there is always someone who wants to turn the field into a big commercial airport to gain local prestige. Some have simply allowed powered flying to take over as this brings in more money.

But all such developments will kill gliding the way we think it should be—within the reach of everyone and cheap into the bargain.

SOUTH AFRICAN TEAM CHOSEN

For the 1976 World Championships in Finland the South African team is announced as: Open Class, Klaus Goudriaan (National Open Class Champion and first S. African to officially exceed 1000km distance) and Tim Briggs; Standard Class, Robert Clifford and Wesley Shields; reserve, Brian van Niekerk; team manager, Brian Stevens; assistant, Mike van Ginkel. *—Wings over Africa.*

WASSERKUPPE LANDMARK THREATENED

The "Ursinus-Haus", named after the founder of the German gliding movement, which has stood on the Wasserkuppe for 50 years and is the last building left from the pioneer days, is threatened with demolition by the "State building authority" of Fulda, which wants to replace it with a weather station. The old building is not too delapidated to be capable of renovation for many years of further life. Letters of protest should be sent to Professor Gottfried Klessow, 82 Wiesbaden 12, Biebricher Schloss. He is head of the Land Office for "Denkmalspillage" (memorials pillage). *—Der Adler.*

MUSSOLINI'S GLIDING RESCUER

The death is announced of Otto Skorzeny, whose exploits in charge of a German Commando unit for unorthodox warfare, during the second World War, included the rescue of Mussolini by glider from a mountain-top hotel where he had been confined by a new Italian government intent on negotiating an armistice. In September of 1943 Skorzeny and a force of 90 men landed by gliders on the mountain-top, overpowered the more numerous garrison, and enabled Mussolini to be flown away in a light aeroplane. Skorzeny was 35.

GLIDING IN KENYA

The excellent climatic conditions make gliding an attractive all the year round proposition, particularly in the higher plateau area of Kenya, but due to a general shortage of interest, only one centre is currently active. This is at Njoro airstrip, approximately 12km west of Nakuru, under the enthusiastic leadership of "Bim" Moleneux. Aircraft available include two T-21s, Tutor, Hütter 17, K-6E; also privately owned a K-13 (ex German world record flights), and K-14 (motor glider).

Excellent facilities are available, at very reasonable terms, at the Njoro Country Club adjoining the airfield, including also golf and tennis.

Club secretaries are recommended to consider arranging "Winter Gliding Safaris"; contact Mr A. Moleneux at PO Box 181, Nakuru, Kenya.

Ken Crack

SMIRNOFF SAILPLANE DERBY

The two reigning World Champions competed in this 2900 mile race from Los Angeles to Washington DC, USA, starting on June 10, including 11 stops. George Moffat, USA (Open Class Champion) beat Helmut Reichman, W Germany (Standard Class Champion) by 383pts, both flying PIK-20s.

your letters

WOMEN PILOTS ARE NOT AS GOOD

Dear Editor,

Please, oh please don't take our mini records away! It's lovely of John Dickins to suggest that all we have to do is "exert that supreme effort of will that is needed to establish their true equality of superiority". But, damn it, that's just what I, personally, can't do. And there's the difference. In gliding, world wide, the best women pilots are not as good as the best men pilots.

I wrote an article about it some time ago and got my knuckles severely rapped by women's libbers. But it is a fact of life, and it's a great encouragement to have mini records to try for. I've got two and they give me a warm glow of self satisfaction. So don't be mean. Let us keep them.

Cardigan, West Wales. RHODA PARTRIDGE

THEFTS FROM GLIDERS

Dear Editor,

Certain members of the public have become aware that glider trailers contain interesting and valuable objects which can be readily removed since the trailers are easy to enter and are often left unattended for long periods on deserted sites. The fact that instruments and radio sets cannot be sold does not appear to be a deterrent.

There are obvious measures which can be taken to prevent this such as the removal of equipment from the cockpit when not in use, the fitting of proper locks and other simple security measures. One matter which might be considered is an audio deterrent. Most ships chandlers stock an aerosol can fog horn which gives a very loud noise for a few minutes. With a little ingenuity one of these can be rigged up within the trailer so that when a suitable trip wire is triggered a deafening sound is let loose within the confines of the trailer to the confusion of the thief.

To catch a thief, a mixture of vaseline and gentian violet powder can be smeared on points which he may rub against. This is quite innocuous until any attempt is made to wash it off when the skin and clothes are dyed quite vividly. This can be a greater nuisance to the owner than to the thief if he forgets where he has put it. However, it is fairly easy to rig a bar across the trailer suitably smeared in the centre against which the thief will stumble in the dark; this can easily be removed by the owner if handled only by the ends and wrapped in polythene.

There is obviously plenty of room for ingenuity but it is better for owners to make their own plans and keep them to themselves.

Marlow Common, Bucks. BRENNIG JAMES

NO ROOM FOR MISTAKES

Dear Editor,

During a recent re-pack of our syndicate Thruxton parachute, the packers, RSA Parachute Club Ltd, reported that if it had been used it would almost certainly not have opened through being wrongly packed by the previous packer. However, if by good luck it had opened, several of the top panels were rotten and would have split. The nylon had deteriorated so badly you could poke your fingers through, due to contact with dirty oil during a previous re-pack. Oil apparently attacks nylon.

The parachute, a McElfish, was bought as new 2½yrs ago and has been treated very carefully. The case is still in a new condition.

It is evident that it had previously been re-packed by someone who shouldn't have been permitted to do it and that the canopy had been allowed to come into contact with a dirty oily surface, such as a garage workbench.

I'm writing to make this experience available to others and to suggest that anyone sending a parachute for re-packing should make sure it is going to a properly qualified packer, working in a properly equipped parachute packing room. I also wonder whether the BGA might consider that the growing number of people using parachutes might justify the preparation of a BGA list of authorised or approved packers, so that innocents like myself can avoid the incompetent and unscrupulous.

The insidious aspect of all this is that one can't oneself ensure that a parachute will work and so one's life is absolutely in the hands of the packer.

Rickmansworth, Herts. HARRY COOK

J. S. WILLIAMSON—A PROUD RECORD

Dear Editor,

Your announcement in the August—September issue of the United Service and Royal Aero Club Aviation Council's medal award to John Williamson does not do him full justice, and I feel I must jump to the defence of my RAF colleague's record. As well as your true statement that John was a British team pilot in the 1963 and 1974 World Championships, he also flew for Britain in the 1965 and 1968 contests. Indeed, in 1965 at South Cerney he achieved a highly creditable 6th place in the Open Class, flying an obsolescent Olympia 419 against the emergent designs of the plastic era. In each of the 1963, 1965 and 1968 World Championships he was placed the higher of the two British entrants in his Class.

Many pilots have learnt to fly the "Williamson Way", and several may match his results in competition, but how many British pilots can claim to have spanned nearly two decades of National Championships and still be at the top?

RAF High Wycombe, Bucks. GORDON CAMP

CALL SIGN CONFUSION

Dear Editor,

We were recently asked very nicely by an experienced pilot whether we would be kind enough to alter our call sign from "Three Six" to "Thirty Six". We were busy at the launch point with no time for a debate.

In contest flying the BGA requires the use of numerals, competition numbers in fact, and this is greatly to the advantage of start line observers. I do not believe that they have laid down how such numbers should be enunciated.

The use of numbers is also very useful when one sights an unknown glider aloft and wishes to communicate.

We think it would be advantageous to adopt a uniform method of calling the number. The pilot who spoke with us believes that "Three Six" could be confused with a call indicating that a glider is entering cloud at 3600ft asl. There seem to be powerful objections, however, to such a change.

1 Verbosity. Compare "three hundred and sixty five" with "Three six five". This makes seven syllables against three.

2 Comprehension by visitors from abroad. A sequence of digits is the easiest deal for them.

3 International consistency. One has only to imagine a French pilot in a French contest announcing himself over the start line as *"Trois cent quatre-vingt-dix-huit"*.

Walton-on-Thames, Surrey. HAROLD DREW

TWO LETTERS ANSWERED

Ian Strachan, Flying Committee Chairman, replies to Simon Redman's letter in the last issue, p178, on Standard Class Team Selection.

Simon's basic point that separate work-up and selection should occur for the two Classes was argued in the Flying Committe, and by the eight potential team pilots, before a decision was taken and approved by the BGA Executive in early 1975.

Although to some Standard Class pilots Simon's argument may seem conclusive, an equally forceful view is held by many pilots that soaring ability is the prime consideration for team selection and the glider flown before selection is of less importance. This view states, for instance, that if No. 3 seed on an Open Class selection is a better soaring pilot than No. 1 and 2 on a Standard Class selection, then it is the No. 3 Open man that should fly in the British Team and so a dual list selection is not required. Gliders flown should then be chosen by the pilots in order of seeding.

I can assure Simon that his view was discussed, but rejected in favour of a continuation of single list selection. Incidentally, he may remember that before the Marfa World Championships we had a two list selection (in which your Flying Committee Chairman appeared as No. 3 Standard Class seed), but this proved unpopular and a return was made to a single list. If Simon wishes to write a more comprehensive paper on future team selection, the Flying Committee will be very glad to discuss it.

And to Mogens Buch Petersen's letter, "The Standard Class Is Dead," p179 in the same issue.

Morgens Petersen thinks that the Standard Class is dead. But the 1972—Rule Standard Class (without flaps) is very much alive, albeit renamed the International Restricted Class to avoid confusion with the last generation of Standard Class gliders which, under 1974 Rules, were allowed to have a limited type of flaps. Std Libelle and Std Cirrus owners should not think that their gliders have been consigned by CIVV and the BGA to the competition scrapheap. They will fly as the Restricted Class at International level until entries for the Class cease. And at National level, the BGA can structure its own contests as it wants in accord with UK demand. So the 1000 or so world owners of unflapped Standard gliders are certainly not forgotten, but it is up to them to ensure that their Class continues on a permanent basis by maintaining enthusiasm and entries for the Class.

The addition of the new 15m Class (with no other restrictions) is a function of many factors which include:

1 The increasing size and complexity of the world gliding movement leading, as in other sports, to more Classes being formed.

2 The vehement arguments that ensued after the institution of limited types of flaps in the Standard Class. These flapped 15m gliders now form the basis of the new unrestricted 15m Class, and the very Class Mr Petersen wants, the unflapped Standard, has been preserved as the Restricted Class.

BLOOD TRANSFUSION MINDED

Dear Editor,

It was by chance that I bought a copy of your April/May issue of S&G—I think it was the new A4 size publication which promoted my interest. I found the magazine very interesting indeed and being both "aviation" and "blood transfusion" minded I focussed my attention on the article on page 65 "Medication and Flying".

The selection of blood donors and what blood donors should or should not do after donating has always interested me. Certainly blood donations would not be acceptable from those who voluntarily, or because of medical advice, subject themselves to the list of medicines in the paragraph under "Medicines to Watch" and, in this way, the "rejection" of blood donors is similar to the "rejection" of aviators. However I am unable to agree with the statement "that blood donation and flying do not mix".

I think that most medical opinion would favour the view that 24hrs should elapse between blood donation and flying and possibly a more conservative opinion would say seven days between blood donation and piloting an aeroplane. The statement "the disturbance to the circulation following blood donation takes several weeks to return to normal" is essentially true, but I think gives slightly the wrong emphasis of the effect of blood donation on normal individuals.

In this country where blood donations are collected by the National Blood Transfusion Service it is a national policy to bleed volunteer fit blood donors at intervals of approximately six months. Surely in such a period it must be possible for even the most active fliers to find a week during which they could contribute to about the only thing which can be given voluntarily these days without interfering with their aviation activity or putting others at risk?

RONALD FIRTH

(Senior Chief Technologist,
Regional Blood Transfusion Service, Sheffield.)

ANYONE INTERESTED IN THIS PROJECT?

Dear Editor,

It is with obvious interest that I read the Vintage Club news in S&G because I have a partially built SG 38, for the simple reason the manufacturers changed from producing gliders to furniture etc.

Some mandatory mods have been completed and the majority of cables, initial parts and data are available, but unfortunately the overall ship lies dormant. I am hoping that someone may be interested to help or take over its completion. I should be happy to hear from anyone with sincere thoughts about this project.

Hillcrest, North Moreton, Didcot, Oxon. JOHN HOBBS

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club news

The Culdrose Club Chipmunk and Pirat over St Michaels Mount, Penzance. *Photo: Peter Packanas*

Copy and photographs for the December—January issue should be sent to the Editor, S&G, 281 Queen Edith's Way, Cambridge CB1 4NH, tel Cambridge 47725, to arrive not later than October 14 and for the February—March 1976 issue to arrive not later than December 4.

August 12, 1975 **GILLIAN BRYCE-SMITH**

BORDERS

We have been busy over the winter on C's of A and overhauls to our T-21, Tutor and Skylark 3. The Tutor was taken out of service last autumn due to the condition of the fabric. The wings were stripped, inspected and re-covered by various members under the supervision of our CFI.

It now looks quite smart and relieved of the weight of layers of paint, patches and pigeon droppings, it performs better. Ken Fowler completed his Bronze C in this machine in conditions of almost non-existent lift and other club members have made thermal flights of up to an hour. Before its restoration we could measure the Tutor's flights with an egg timer.

Our Bocian is now repaired, following its mishap, but we cannot fly it until a team of experts from Poland rectify the other problems experienced with this glider and some of its sister shjps.

The lack of north-easterly winds this year has restricted our hill soaring but we are hoping to get the use of a west facing ridge a mile or so from the site.

Neither winch can be taken to this new site so Alan Irwin is starting work on something more portable, using a Jaguar motor. He is also putting a new diesel motor into our spare winch.

We have just finished our annual camping week. The weather was foul but John Marshal managed his Silver height. We now have seven gliders, the club's T-21, Tutor, Bocian and Skylark 3 and syndicate owned K-6, Dart 17 and Oly 2B.

J.T.F.



CAMBRIDGE UNIVERSITY

The soaring season has so far proved to be a disappointment with few days on which long tasks were possible. Paul Sears (Dart 17R) and Sigfrid Neumann (Kestrel 19) have both achieved 500km flights. John Glossop (Kestrel 19) and David Evans (Cirrus) have made 400km while Steve Longland (Skylark 3G) and Colin Dews have flown 300km.

Our three weeks flying at Duxford was also less than we hoped for. Long cross-countries were few, but the period saw contributions to Silver Cs gained by Chris Chapman, Steve Broderick and David Guest. A number of Bronze C legs and first solos were also flown.

Aerotow courses are again being run and are as popular as ever, though the weather has not been as co-operative as it might have been.

D.W.G.

CORNISH

The annual migration to Inkpen at the end of May was again highly successful. Dave Short was the first to claim a medal when he completed his Silver with a distance flight early in the first week. The following Saturday was the best day, and this resulted in a spate of badge claims. Congratulations to our CFI Dave Pentecost who claimed a Diamond goal for a 300km triangle in his newly-delivered IS-29D. He becomes the first club pilot for many years to complete a 300km task. Cherry Sincock flew 200km of the same triangle.

The Silver legs also came thick and fast. Colin Mackenzie flew the Oly 463 to Tarrant Rushton for his distance and duration and Arnie Lambe flew to the same goal and collected his Silver height on the way. John Smith floated a generous 135km to North Hill for his distance and Roy Pentecost, who was retrieving the 463 from Tarrant Rushton, took a wire launch before derigging and climbed to 6100ft for his height.

Back at Perranporth, June and early July provided some excellent thermal and sea breeze soaring in predominantly E to NE winds, but our tug has been unserviceable for most of the soaring season and this has reduced opportunities. At the end of June, Ian Sincock flew 170km of a 300km attempt from a wire launch.

Apart from a few vacancies at the end of September, our courses are fully booked and most of them so far have been flown in blistering sunshine.

T.L.J.

DEESIDE

John Milne's workshop is now weatherproof and was "launched" with due ceremony at the barbecue which ended our local competition week. The first week in August gave us six days of sunbathing, swimming and squash and two days of competition flying. About 15 pilots took part sharing six gliders. The club K-6E gained most National Ladder points with a declared Silver distance in thermal by Willie Stephen, on his honeymoon, and a declared

108km triangle by Robert Henderson which started in 12000ft wave and ended in a 1200ft thermal. Second was Les Joiner of Angus GC (K-6E) and third was Alastair Raffan of Highland GC (K-6CR).

A ten mile radius Special Rules Zone is to go round Dyce (Aberdeen) airport in October but we do not expect that this will inconvenience us unduly.

R.H.

DEVON & SOMERSET

The weather has been much kinder this year, resulting in two completed Silver Cs for Tim Parsons and Robin Munday and Silver legs for many others. Rod Hobbis and Robin Munday are claiming Gold distances flown during the Club's very successful task week, won this year by Mike Lee from the Essex & Suffolk Club. Second place was taken by the Cobra, with the Eagle hanging on grimly only three points behind.

The extension to our clubhouse, a fully equipped lecture room, is now complete, and we are looking forward to a series of lectures arranged by our CFI for the winter months.

So far this has been a marvellous season. There have been several good height gains and the total distance flown cross-country (to the end of July) amounts to some 18958km.

J.R.H.

DUNKESWELL

Hugo Irwin completed his A and B and C within a few days of his 67th birthday. At the other end of the generation gap, 16 year old Chris Dunn has his A and B.

First solos have also been achieved by Dave Parker and Brian Johnson; Frank Buttery and Ian Widger have got their Cs and Steve James his first Bronze leg.

The visiting Pilatus demo-team provided an interesting day's flying and we have also enjoyed the visits of many pilots from other clubs.

The heatwave has provided pleasant holiday conditions for our summer courses, yet has not detracted from thermal activity with climbs of up to 6000ft being made out of cloud in the T-53 on June 30.

B.H.F.

ESSEX

The recent activities of the club have been so overshadowed by one incident that it will be our only news item for this issue. We very much regret the tragic death of Frank Rodwell in a gliding accident.

He will be sorely missed by every member of the club.

Since 1971, Frank had been a member of the Essex Gliding Club, but he first learnt to glide at Carlton Bank. In the early sixties he flew at the Long Mynd, Lasham and Hornchurch. After a break of several years, when his leisure time was devoted mainly to sailing, a chance meeting brought him to North Weald where he recommenced gliding.

Frank's contribution to the club was considerable. He was an able and popular instructor, as well as a keen pilot in his syndicate K-6E. An electronic engineer by profession, he was invariably engaged in some project concerning instruments or other gadgetry—wether simply checking and zeroing every altimeter in North Weald's gliders, or building an electronic timer for the launch signalling lamps. In the past he had been reported to be the first (and only?) pilot to install an electronic direction finder in a Swallow. Perhaps Frank's best loved characteristic was his sense of fun. That same Swallow, which had been an earlier syndicate aircraft, was also the source of some hilarious stories. But Frank was more than a raconteur: he seemed to treat every new experience with a combination of scientific curiosity and infectious enjoyment. He also had that rare gift of making a friend of every one he met and in times of need he was a wise and kindly counsellor.

Frank will always be remembered with great affection by his friends and colleagues and we extend our deepest sympathy to his family.

C.J.N.

EAST SUSSEX

We are on the map and in the air with the first launch on January 26 in our K-2B. This is just 18 months since the first exploratory meeting to see if it was feasible to form a new club and keep a gliding site in East Sussex—it was only a few miles away at Itford that Britain's first gliding meeting was held in 1922.

After a slow start in February mud, Dick Pitman, our CFI, hit wave at the end of an 800ft winch launch. It was in a 15kt south-westerly wind (our prevailing condition) and the wave extended 15 miles from Lewes to Eastbourne and up to our 3500ft asl ceiling.

Good convection conditions also prevail with the sea breeze never showing up before 4pm. Northerly winds produce ridge lift—this has been used to fly to and from the Southdown Club at Parham and we have had visitors from Kent and Lasham, all of whom are most welcome. If you want to find us we are called Ringmer on the ½ million map and are four miles north-east of Lewes in Sussex.

Our fleet consists of the K-2B two-seater (a single-seater should be available soon) and two syndicate aircraft, an Oly 460 and a Pirat. We get good launches from our ex Albatross Club's petrol winch down our 1000 yard field. By mid-June we had several A and Bs and Michael Baker got both legs of his Bronze C, thanks to our seven instructors. We are also running courses.

F.K.

LAKES

Congratulations to Dick Redhead and Nigel Harrison on going solo, to John Craven on his Silver distance and Roger Kerr for gaining his five hours.

Peter Jackson has taken over as acting CFI from Ron Hawkes. After many years of sterling service, Ron has decided to step down for a period but will keep a watchful eye as deputy CFI.

During the annual expedition to Shobdon, Pete Redshaw completed his customary marathon by flying more than 500km in the new Club Libelle. Unfortunately his photographs didn't come out.

June gave us excellent thermals and with four hot ships on the site, it has been possible to penetrate much further into the hinterland within the brief soaring period before sea breeze effects become established over the Furness peninsular. Out-and-return flights of 50km each way, to the Kendal—Lancaster area, are feasible in reasonably good easterly conditions, provided an early start is made. But large areas of strong sink have been reported on the way back.

Another Kestrel (series 4) has replaced the Std Libelle. A 50% grant towards the Super Cub is promised by the Sports Council.

A decline in the weather coincided with the start of the summer courses but, unlike some clubs, we are still open to new members prepared to travel from further afield who wish to take advantage of our domestic facilities.

D.J.C.

LONDON

The incredible weather over June and July was utilised to the absolute full. John Jeffries has been running very successful high-performance soaring courses for pre and post Silver C pilots.

Under John's close supervision, thousands of kilometres have been flown by comparatively inexperienced pilots. Bob Drewell was one—with a very newly acquired Bronze C, he raced his IS-29D round a 200km triangle in three hours. Martin Overstreet completed his Silver and gained Gold distance while attempting a 500km triangle.

These courses have certainly stirred other club members to go cross-country as well. Tony Pozerskis completed his Diamond goal in 3½hrs on his first attempt, flying his father's ASW-17.

Geoff Love in his IS-29D also gained his Diamond goal. However, having failed by a few kilometres a couple of times before, he took things a little more cautiously and did the flight in 7½hrs.

Robin Davidson now knows how Geoff felt as he tried on two consecutive days to complete a 300km out-and-return, both times landing just short.

Silver legs have been collected almost daily. Carol Margrath achieved her height on her sixth solo with less than 30mins solo flying-time to her credit. Several other girls have also been achieving great things. Jane Jones obtained her Silver height and duration, Heather Tookey completed her Silver and Dilys Yates, with help from John, her Diamond goal.

D.Y.

MIDLAND

The seaside weather and unusually accident-free spell came to an abrupt end in August. The most violent thunderstorms in years flipped one of our member's caravans over and on to it's neighbour. The following day the club K-13 suffered severe damage on landing. The K-13 went off to Dunstable and the duty instructor to Codsall Junior School.

Three days later the trilogy was completed when the K-8 failed to round out and had to join its big brother in the agents workshop.

There has been some good cross-country flying, encouraged by the new Sleap, Leominster speed triangle, plus Silver distances to Long Marston by Ron Hawkes and Dave Bryans and a really switched on performance

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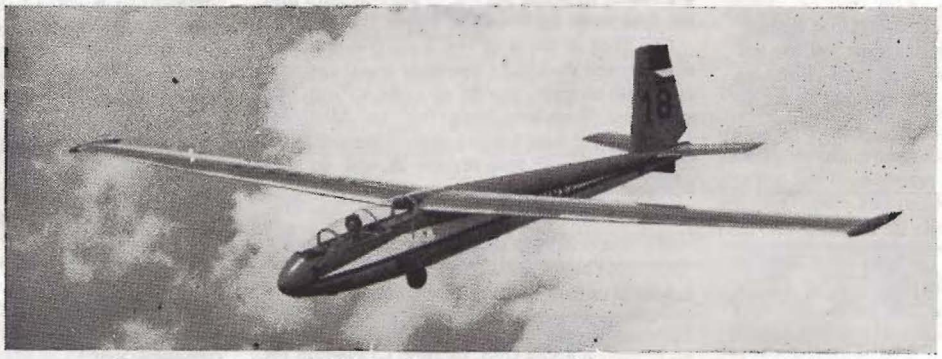
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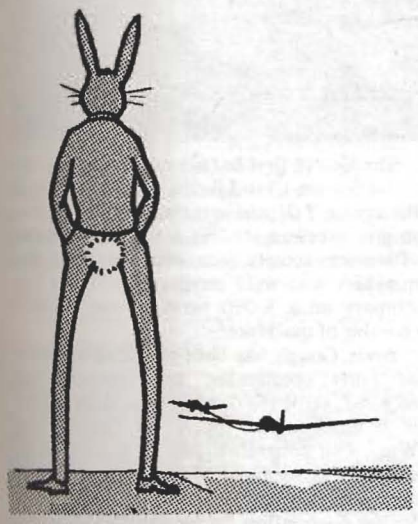
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by Don Brown (Dart 17R). He flew an out-and-return to Spitalgate to give him Diamond goal.

G.C.

NORFOLK

Our most interesting item of news occurred on Sunday, June 29, when film star James Stewart spent a day with us to renew acquaintance with his old wartime base



James "Harvey" Stewart at Tibenham

Now that we have established our summer Falke courses, a one year training cycle seems to be emerging—the 1974 course members are mostly flying solo now and logging Bronze legs.

One of the weeks was booked for a BGA Instructors' course, four of the six in this group being from our own club.

On June 18, thanks to perfect soaring conditions over the flat fields of Norfolk, four five hour flights were completed simultaneously.

Sunday, September 14, is the next big event on our calendar, the air show and open day—when our guest of honour will be our new honorary life-member, James Stewart.

C.E.H.

OXFORD

The K-6E and two Phoebi entered the Western Regionals this year. Congratulations to Mike Randle who came third in Phoebus 666. On July 6th, Paul Bayley and Brian Evans completed their Silver Cs with distance legs to Aston Down. Brian Gregory flew his five hours on July 30. There have been several attempts at Gold C distance but, as yet, none successful.

Paul Bayley had flown his height and duration from Underwossen in Germany earlier in the season.

Derek Robson and Roger Harris have recently gone solo. Roger took a mere five weeks from first flight and has since achieved a Bronze C leg.

We anticipate some good flying for our "flying three weeks", one of which will be spent at Enstone because of the National Parachute Championships being held at Weston. We have planned a small task week for the last week in August.

J.R.

SLEAP

The weekends in June and July have produced excellent soaring conditions. John Lloyd gained his Silver height and duration in his syndicate's newly acquired Std Libelle.

Sleap were represented at the Lasham Regionals by Ian Paul (Std Cirrus) and Alan Levi (Std Libelle). During the Regionals, Alan completed his Gold C and gained a Diamond goal with an out-and-return to Leicester on July 25. Two days later Vic Carr (Kestrel 19) attempted a 500km triangle from Sleap and landed just 20 miles short.

D.V.

SOUTHDOWN

Thanks to the help and kindness of Mr Paddy Tritton, of Parham Estate, we are now able to add another runway to our site. Crossing our existing SW—NE strip we now have a W—E strip, of similar length which will give much more flexibility.

On Saturday, August 2, we were honoured with a visit from the famous aviation and motor car pioneer Gordon England, and his wife. Mr England, who first soared off Amberley Mount in 1909 in a glider built by José Weiss, was also accompanied by José's daughter, Mrs Moseley Williams. Unfortunately it was not soarable, but all three had a circuit in the Blanik. BBC—TV (South) filmed the event and interviewed Mr England.

Flying training progresses well, with new solo pilots in the K-7 being Ted Palmer, Robert Fisher, Peter Holloway and Keith Anscombe. Welcome back to Ray Funnell and Alan Curry who have returned to their previous rôles as instructors.

Stephen Brodrick, in a Skylark 4, completed all three legs of the Silver C in one flight from Duxford, and Mike Smallridge, our Transport Officer, has completed his Bronze. We are delighted that several of our pilots feature in the upper echelons of the National Ladder—these are changed days indeed, from those at Firle!

I.D.B.

SOUTH YORKSHIRE & NOTTINGHAMSHIRE

This entry in S&G is the first of what we hope will become a regular contribution to these columns.

This Club was formed from a nucleus of about a dozen South Yorkshire (née Rotherham) Gliding Club members, after relations with the landowner finally broke down completely at Aston following seven years hard work and frustration, struggling for survival. After months of searching for a new site, terms were finally negotiated with Newark Show Society for the use of Winthorpe Airfield, which boasts two good tarmac runways and adjacent grass strips.

We currently launch with a diesel winch, but by the time these notes appear we shall have added reverse pulley launching, utilising Parafil and a Rolls engined towcar, and aerotowing should also have become a regular feature of our operations.

The club fleet now consists of a T-21, K-4 and Capstan. The private gliders based at Winthorpe are Tutor, Krajanek and Skylark 2.

We began operations on June 1, and already Eddie Bury has gained his first Bronze leg on his first solo flight from Winthorpe. John Cawrey gained his C with a first soaring flight of 26mins in his Skylark in difficult conditions.

On our first day's flying we were visited by an Olympia 2 from Lindholme, completing a Silver distance and a Dart 17R from Husbands Bosworth. This was followed on June 22 by a courtesy visit of a Kestrel from Four Counties new site at Syerston.

Our membership has doubled over the past month, but many more new members will be needed before our facilities can be kept fully engaged. At present we fly on Sundays only, but it is hoped to add Saturdays in the near future.

A warm welcome awaits visiting pilots, whether airborne or not, and we can be found one mile north-east of Newark at the junction of the A1 and A46. Our CFI Tony Faulkner will be pleased to clear visiting pilots who would like to bring along their own aircraft to fly from our site.

J.M.

STAFFORDSHIRE

Our expedition to Shobdon with the K-13 proved a great success with beautiful weather, good soaring for everyone and some useful aerotow experience. On a separate visit our Treasurer, John Graham, gained his second Bronze C leg.

At Morridge the new diesel winch has had some of its bugs ironed out and is now giving encouraging performances. Foraging and draining of the field continues, resulting in a slow but steady overall improvement to the site.

Early summer flying has resulted in David Jones going solo and Peter Lowe gaining his C certificate.

The bulk of our instructing load is being carried by two fully rated and one assistant instructor, a situation which makes an unfair demand on the services of these three members. If there are any qualified instructors in the district who would like to exercise their skills at our interesting site why not get in touch with us?

F.B.

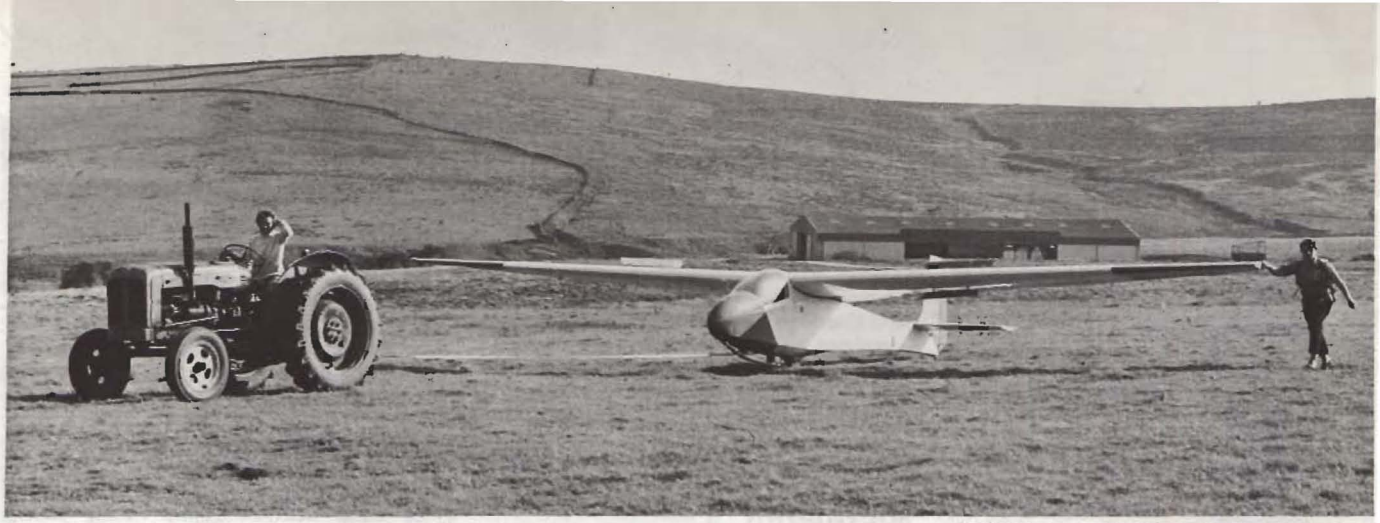
SURREY & HANTS

Apart from the Regionals with its usual weather, Lasham has turned into the Mediterranean Gliding Club with sunbronzed bodies decorating the lawns (?) outside the bar and trailer rigging area. We have also done a little gliding.

Our Regionals were a great success. A poor start was soon forgotten as the thermals improved near the end of the week with a final blast of Texan weather allowing all but one competitor to get round the 147km triangle well in time for prizegiving at 18.30. Many congratulations to Ted Lysakowski and Martin Wells for their fine performances.

Portmoak is our next objective and a mass assault on Diamond height is likely to complete the badges following badge flights done in the heat of the summer thermals—it's 33°C, 91°F, as this is written!

C.L.



Towing out the Staffordshire club's Swallow at Morridge

TRENT VALLEY

We have had fantastic weather for the last two months and the club appears to be composed of pundits with many Silver and Bronze legs gained.

Our Chairman, John Rice, and Secretary, Bob Baines, obtained their Gold distance and Diamond goal on the first attempt; Denis Snowden and Fred Johnson completed their Bronze C; our senior member, "Judge" Johnson at 71, has his C and Dick Pickles got his C and then on his following two launches gained his Bronze C.

A new club Pirat for advanced flying joins our fleet together with two private aircraft, a Blanik and an Oly 2B, bringing our total to 12 gliders.

Congratulations to Sid Mason, Frank Jackson, Steven Slater and Martin Bontoft on going solo. Our thanks again to Georgina Stewart for organising a successful supper dance.

Our ex CFI, Ray Parkin, is visiting us from Singapore and enjoying the soaring—he is normally restricted to flying below flight paths in Singapore.

J.P.N.

WOODSPRING (Weston-super-Mare)

We suffered our first set-back in June when the syndicate K-7 was written-off. The pilot was seriously injured but fortunately is now well on the road to recovery.

The set-back has proved only temporary as we now have a Bocian 1E as a replacement. An Oly 2 is also in the offing, plus the possibility of one or two syndicate aircraft. We now have the use of a Rallye Commodore for tugging so we will be able to get back to the sea breeze front.

With the demise of the Mendips Club RAFGSA we now have sole use of the hangar, but expect it to be full by the end of the year! Our grateful thanks to the Mendips men for the invaluable assistance they gave us and, indeed, are giving us having joined Woodspring.

Congratulations to our President—David Driver—who became our first *ab-initio* solo pilot and Lyn Cheater on becoming our first female *ab-initio* solo pilot. We have had eight other *ab-initio* solos, a first club solo, a Bronze leg and a Silver distance—all in the last two months.

P.T.

YORKSHIRE

The club has taken on the appearance of a Mediterranean holiday resort. In spite of the haze associated with the persistent inversion, the "scenery" at Sutton Bank has been quite spectacular as shorts and bikinis have replaced the more usual sweaters and anoraks.

Flying has continued with enthusiasm and a number of notable flights have been made. David Lilburn, flying a Kestrel, achieved Diamond distance with a flight of 510km and there have been Diamond goal flights for Jon Hart in a K-6CR and Nick Gaunt in his Diamant. Long flights have been made when there has been an easterly component in the wind. Usually we associate easterlies with poor soaring conditions and perhaps this year has shown we have more opportunities than have previously been recognised. On one easterly day a visitor flew 496km, which shows what can be done.

After many years Fred Knipe has stood down as Chairman of the Board. He has done much to further the fortunes of the Yorkshire Gliding Club and we are very grateful for his efforts. We are fortunate Geoff Crawshaw takes over as Chairman.

Presumably this wonderful summer won't last for ever and we will see the return of westerlies once the weather becomes more unsettled.

We welcome visiting pilots who would like to share our wave from the Pennines expected once the westerlies return.

P.L.

SERVICE NEWS

BICESTER (RAFGSA)

June and July were extremely productive months at the RAFGSA Centre with 12 first solos. Messrs Boik, Allen, Harvey, Russell and Reeves completed their Silver Cs, and on one course, in addition to passing out 12 instructors, the u/t pundits managed to obtain six Silver legs, making a total of 17 Silver legs in addition to five Bronze Cs in the eight week period.

The Centre fleet has been enhanced with the arrival of the Club Libelle: a K-4 has replaced the ageing T-21 and our four Blaniks continue to give excellent service. A recent exhilarating afternoon activity was provided for a few members who were privileged to fly the Eon Primary on a 3000ft aerotow—not the most soarable of machines!

Andy Gough has been providing a number of fairly spectacular, and extremely well received, aerobatic displays around the country in Blaniks and in the AV-36 Fauvel Flying Wing. Our congratulations go to Andy on his selection as recipient of the Roderick Turner memorial trophy, presented by the Popular Flying Association for his meritorious service to the light aircraft movement.

The future location of the RAFGSA Centre, consequent to the closure of RAF Bicester as a result of the Defence Review Plan, is still undecided but it is possible that it may remain at its present location.

W.T.

CHILTERNS (RAF Weston on the Green)

July and August have been interesting months. Two of our keenest members, Malc Norris and Sue Freddi, became engaged—Malc proposed in true gliding fashion by taking Sue up in the K-4, pushing the stick forward to VNE and refusing to pull out until she accepted. Anyone who has flown a K-4 at VNE will know she had to say yes!

The Doppelraab, which has been refurbished at Abingdon, flew on August 1 at Weston. This glider, the only one of its type flying in the UK, is a somewhat unusual tandem two-seater having only one control column but two sets of rudder pedals! The instructor leans over the pupil's shoulder to fly by means of a cranked extension on the control column. Its performance seems to be about K-4 standard but when put alongside, the K-4 looks as sleek as a K-13 by comparison. Its handling qualities are quite good although the rudder system seems to lack "feel"—modifications are under consideration. But it has superb visibility from the cockpit, an advantage almost unknown in two-seaters of similar vintage.

All pilots who flew it over the first weekend in August were impressed. The bulk of the restoration work was carried out by Tony Blythe with help from John Holloway, Mike Aherne, Dick Lyon and others.

In 1974 the RAE Gliding Club at Farnborough were faced with the prospect of nearly a year with nowhere to fly because of airfield

maintenance. We offered them a temporary home at Weston and they were able to continue training and also managed some quite ambitious flights. In appreciation, they have presented us with a beautiful trophy which will be awarded annually to the most promising newcomer.

The Cobra is in Poland for refinishing prior to sale and Clive Bailey, an instructor who has joined us from Cranwell, is bringing his Cadet Mk I to complement the vintage side of our fleet.

Pat Rowney completed his Gold C on the last weekend in July with a 300km triangle, Shobdon, Halton. Charlie Wiggins also tried the same task on the same day but landed just short at Weston.

Bruce Thompson has come to the end of his long stint as Chairman. We will miss his unselfish "behind the scenes" hard work and as a farewell gift the club presented him with a chronometer. His place is taken by John Delafield to whom we extend a warm welcome.

G.M.

CULDROSE (RNGSA)

Although the early part of the season produced some interesting flying, it was followed by ten weeks of glorious West Country sunshine; very nice for the beach but, being anti-cyclonic for most of that period, there were few thermals.

However there has been plenty of two-seater flying with a steady flow of new members. We have achieved a few first solos, C certificates and Bronze legs. Our latest A and B is Lyn Main who recently became our third female solo pilot. An attempt was made at five hours in a Capstan but failed after 4hrs 20mins.

We hit a bad patch in July when one of the Pirats finished up in a Cornish hedge after a field landing. The pilot was OK but the aircraft is still undergoing repairs.

At the time of writing, two members are at an instructors' course at Bicester. Our summer course starts soon and we hope to repeat last year's achievement with all the students going solo.

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P.W.

PHOENIX (RAF Brüggen)

The soaring season brought us several Bronze and Silver legs with Bob Greenwood completing his Bronze C and Mike Simmonds his Silver C. Mick achieved duration while competing in the Dutch under 25s competition.

Terry Slater, who competed at Hahnweide, gave an aerobatic display before a reputed half million spectators at RAF Wildenrath's open day.

Anglo-German relations were further strengthened with the expedition to Vennebeck. We welcome Ben Bennetts, bringing our full Cats up to seven. Our hangar is virtually complete with only the hangar doors to be hung. Our thanks to Ken Mackay for supervising the catering for a year—he is now looking for a replacement.

We said goodbye to the Charlett-Greens and wish them luck in their new club. The social side flourishes and after the success of the mediaeval night, Ron Cawthorne is planning more activities for the autumn.

A.M.

JANTAR



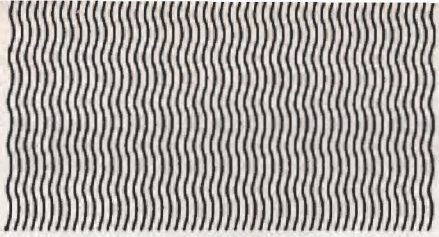
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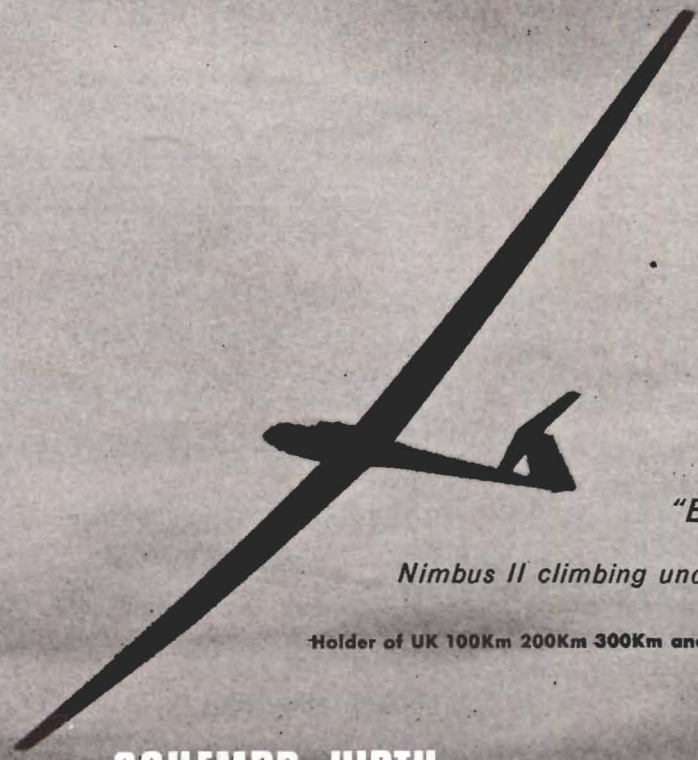
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