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The First Journal devoted to Soaring and Gliding



NOVEMBER 1949

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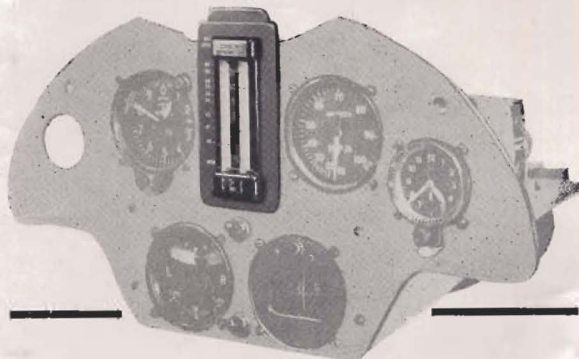
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TO SOARING AND GLIDING

NOVEMBER 1949 ★ Vol XVII No 11

EDITOR:

VERNON BLUNT

ASST. EDITOR:

VERONICA PLATT

ADVERTISING

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EDITORIAL OFFICES:

139 STRAND, W.C. 2

PHONE: TEMPLE BAR 6451/2

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COVER PHOTO:

Oerlinghausen.

Photo by D. L. Barton, Hants.

EDITORIAL

ELSEWHERE in this issue will be found the minuted decisions of the recent Gliding Section F.A.I. Meeting at Cleveland, Ohio, which the British representative was unable to attend. They make interesting reading and we publish them so as to give the widest publicity to their deliberations.

Probably the most sensational outcome of the Meeting is the establishment of the Diamond "C." It has long been felt by some people that the Gold "C" was not enough and the Czechs have for years had their own super Gold "C." Under the new rule holders of the Gold "C" may stud their badge with a tiny diamond for each of the following performances: Distance flight of 500 km. (310.7 miles), height gain of 5,000 m. (16,404 feet) and a goal flight of 300 km. (186.4 miles). Thus you can have three diamonds if you earn them, and Jock Forbes who with David Ince of the British Gold "C's" is entitled to a diamond because his Gold "C" distance was a goal flight, was quickly on the phone to the Editor asking who was to pay for them. There are critics of this step of course, but only because the Diamond is being given too easily. Suggestions of a goal flight of 500 kms. or a flight of 750 kms. without a goal, of a height reached of 10,000 m. (32,808 feet) including not less than a gain of 5,000 m. after release, or an out and return flight of 300 kms. have been made, but their consideration will have to wait until the next Meeting at Orebro during the International Comps. next year.

We also publish the latest records of the F.A.I. and would like to comment on two inconsistencies. During the war the F.A.I. announced that they would not homologate any records made whilst some nations were engaged in a cut throat struggle, and others not. In spite of this they have recorded two feats by a Russian and Frenchman made in 1940 and 1942. But no mention is made of Jachtmans duration flight of 52 hours 52 minutes nor Klochners 37,600 feet—presumably because they were German records. But if you do not believe that Russia was at war in 1940—ask the Poles, and it is a quibble to state that France, Vichy or Occupied was not at war in 1942. Anyway nothing can destroy the fact that both Jachtman and Klochner have far outstripped any records made since by a considerable margin, and we are fooling ourselves if we close our eyes to these facts.

The many friends of Robert Clowes will regret for the sake of old times that he is giving up the Secretaryship of the B.G.A. and we all wish him well in his new (and secret) venture in which we believe he is joining the ranks of the self employed. But that does not diminish the warmth of our welcome to Lady Alexa Kinfloch, an American lady lately married to a Scotsman. Lady Alexa is a pre-war Power "A" and a Gliding "B" and has for some time been in charge of the carnet department of the Royal Aero Club. She takes up her duties in mid November and is looking forward to visiting all the Gliding Clubs in turn. We are sure she will get all the support the Movement can give her and we wish her the best of luck.

The B.G.A. have decided to conserve their resources for the 1952 Olympiad in Finland, and consequently are not able to support financially any entries for the 1950 contest at Orebro. They have however made it known that they would sponsor but not financially, any volunteer(s) of the requisite calibre who are prepared to pay their own expenses. We have our own National Comps. also on the tapis next year—to be held in June at Midsummer—but the venue is not yet decided. A little bird tells us of a suggestion that the event might again be staged at Camphill.

The *Cape Times* announces a South African Silver "C" by Werner Kunze, who flew from Kroonstad to Warmbaths—203 miles on Oct. 8th in under 6 hours. We hope for more details later.

In Great Britain pilots of 14 years of age may now make cross country flights. Now then Grace—what about the twins?

Next month we intend to publish a full account of Arthur Hardinge's historic flight round New Zealand in his self built Chilton "Olympia"—54 hours free flight and aero towing.

The Meteorological Magazine for October contains pictures of the development of a cu-Nim. over Singapore, which are most interesting. A calculation of the thermal energy required for the development was 2×10^{12} calories. Incidentally that of the Bikini bomb was only 3.5×10^{12} —quite a reasonable comparison.

The Kemsley Winter Flying Competition is on again this year and began on November 1st.

If your newsagent says he can't get a copy of *Sailplane* write direct to the publishers with 19/- subscription or if this is inconvenient, send a postcard giving the name and address of your newsagent. The rest will be attended to.

3 Sensational Months for French Soaring June, July and August, 1949

By GUY BORGÉ

IN this article I sum up a few performances accomplished in France and North Africa during June, July and August, 1949. These flights prove the great vitality of French soaring, due to training of young pilots, quality of sailplanes and also to fine weather.

1949, the best French soaring year on record.

11th June.—M. Bornand, the C.F.I. of the Rhône Aéro-Club, flew from Corbas to Agde (Hérault), 180 miles in a "Weihe." On the Valence-Nîmes part of his trip (80 miles) he cruised at 120 miles an hour! From Lyons, Marseilles is too near, and he had to go south westward to find the necessary 186 miles. But on this day a head "tramontane" wind blew

at 50 m.p.h. and he failed by 6 miles on the Languedoc coast.

27th June.—Mrs. Choynet-Gohart breaks her own out-and-return record by 90 miles on the Fes-Bou Bekar-Fes run (French Morocco).

30th June.—A Montagne-Noire instructor, M. Delhoume crossed the Pyrenees chain for the first time and landed at Figueras in Spain (110 miles). I announced his projected flight in the October 1948 issue.

July saw the best performances ever recorded in France. The following list proves this, giving figures for the National Centres and the best club, my own Rhône Aéro-Club.

ACTIVITY IN JULY 1949

	Hours	Launches	B	C	Altitude	Duration	Distance	Altitude	Distance
Montagne Noire ..	1395	1495	1	7	11	7	4	—	—
Pont St. Vincent	1068	2268	10	8	12	9	3	1	2
Challes les Eaux..	1067	720	1	5	11	12	7	1	—
Saint Auban ..	599	1292	5	9	9	6	6	2	—
Rhône Club ..	469	1073	1	4	10	5	5	—	—
					Silver "C" legs			Golden "C" legs	

Some lucky pilots at Challes or Pont during these July courses exceeded 100 soaring hours.

Challes les Eaux recorded the best figure; each launch was of over an hour.

In Algeria the Constantine Aéro-Club also recorded a good soaring output; during its course at the Djebel Oum Settas Centre, from the 18th July to the 7th August, the following results were attained with a "C.800" two-seater, 1 "Nord 2000," "Olympia," 1 "Avia 40 P," 2 "Babies," 1 "Emouchet" and 1 "Avia 152": 20 soaring days, 582 hours of flight for 336 winch-launches, 1 "B," 3 "C," 5 durations, 3 distances, 3 altitudes, 3 Silver "C's". 22 flights of over 5 hours, 2 flights of over 9 hours, 34 altitude gains of over 3,280 feet, 21 altitude gains of over 6,560 feet, 5 altitude gains of over 9,850 feet.

Thermal conditions in North Africa are among the best in the world. On the 7th July, at Constantine (Algeria), René Dumortier made a return flight of 140 miles in 7 hours 28 minutes, in a "Nord 2000 Olympia." He gained 11,600 feet, climbing to 14,600 feet (the base of the cumulus!)

The S.A.L.S. (Service de l'Aviation Léger et Sportive) organized a trial of the Moyen Atlas, near Fes, at Timhaldit, an airfield situated at 5,900 feet, and where there was known to be a slope of 15 miles. On the 20th July, a friend of mine, Jacques Guinet (he got his "B," "C" and Silver "C" at my Rhône Club) flew 9 hours 15 minutes in thermals, a new Morocco duration record.

On the following days at Timhaldit notable altitude gains were made by means of clouds in "Nord 2000 Olympias":

Day	Pilot	Absolute Altitude	Altitude Gain	Distance
21st July	Moineau	19,500 ft.	11,800 ft.	—
24th July	Moineau	18,700 ft.	11,400 ft.	—
24th July	Guinet	19,000 ft.	12,600 ft.	56 miles
26th July	Guinet	—	—	—
30th July	Druesne	16,400 ft.	10,500 ft.	—
4th August	Druesne	17,100 ft.	—	—
4th August	Parizel	15,300 ft.	14,400 ft.	—
		21,250 ft.	(of which 6,600 ft. inside the cloud)	—

T H E S A I L P L A N E

14th July.—First flights at Aire Sur Adour (Landes) of the "Fouga Cyclone" jet sailplane, described in the June 1949 issue. Tests were made progressively: for its first flight the "Cyclone" was winch-launched as an ordinary sailplane, then aerotowed to 3,000 feet. All was O.K., and M. Bourrieau, the test pilot, took off by using the jet unit. He easily reached the 12,000 feet level in 20 minutes. Later flights showed that the "Cyclone" keeps a climbing speed of 8.2 feet per second, and a horizontal speed of 185 m.p.h. at 15,000 feet.

15th July.—At Beynes achieves his Golden "C" badge with a 11,600 feet gain in a cloud. France has 38 Golden "C" holders to-day, according to the latest list issued by the French Aéro-Club.

16th July.—At Fayence, Daniel Barbera is winched at 1 p.m. in an "Olympia," gets a lift at 500 feet and climbs to 17,000 feet above the airfield near a cloud; and thence to a 16,500 feet gain. Fayence proves to be an airfield as suitable for cloud flights as for wave ascents. Daniel Barbera is an excellent young pilot whom I knew at Challes. He has just accomplished an extraordinary crossing of the Southern Alps, going from Fayence to Challes in an "Olympia, certainly the year's finest flight.

20th July.—Miss Nicole de Montal is just 16 years old and she becomes the youngest Silver "C" holder. She took off at 4.30 p.m. from Cessieu in a "Baby," climbed to 7,500 feet and landed two hours later at Valence (50 miles).

Two weeks later her Tour du Pin Club organized

an eight-days' course at Saint Etienne de Saint Geoirs with 4 sailplanes: "C.800" two-seater, "Castel 301," "Baby" and "Olympia." The results of this course were: 115 soaring hours, 3 "C's", 3 distances, 3 altitudes.

23rd and 24th July.—Two good altitude days in the Paris and Loire areas.

André Moreau, winched in a "Baby," climbs to 10,300 feet at Saumur.

At Tours, in an "Olympia," Gagnière gains 9,650 feet. On the 13th August he went to Bordeaux and got his complete Golden "C."

At Etampes, Aupetit gained 12,000 feet in an "Olympia."

At Chavenay, near Paris, 3 Gaston Caudron Club members got their Golden "C" altitude. One of them, Boisramée, gained 11,800 feet, but discovered after the descent that his barograph had broken down. He took off again and gained 10,800 feet, his barograph working correctly this time.

25th July.—Eric Nessler breaks his own two-seater record in the "C.M.F." He soars 265 miles from Beynes to Chantillec (Charente). On the same day, Lambert breaks the out-and-return record by 205 miles on the Chavenay-Le Mans-Chavenay track.

4th August.—Edouard Durand, 17 years old, breaks the regional duration record by 14 hours in a "Castel 301." In two days this sailplane remained airborne for 24 hours in a north wind against the Mont Thou slopes, near Lyons. The previous regional records were as follows:

Pilot	Plane	Duration	Airfield	Lift	Launch
Miss de Montal ..	"Baby"	6 hrs. 40 mins.	Cessieu	Slope	Winch
Guinet	"Baby"	6 hrs. 40 mins.	Corbas	Slope	Winch
Mourier	"C.310"	6 hrs. 40 mins.	Corbas	Pure thermals	Aero-tow
Brézun	"Weihe"	7 hrs. 16 mins.	Corbas	Thermals	Winch
Borgé	"Weihe"	8 hrs. 7 mins.	Corbas	Thermals	Winch
Brézun	"Weihe"	9 hrs.	Corbas	Thermals	Aero-tow

The present 14 hours' record will be very difficult to break by using thermals! I should like to try it at Cessieu using the south wind, where I see the possibility of soaring for several days.

27th August.—At Chavenay, in the special "Air 100," owned by the meteorological services, Lambert makes a nice 16,200 feet gain.

GUY BORGÉ.

F.A.I.

MINUTES OF THE MEETING HELD AT CLEVELAND, OHIO, September 2-5, 1949

DELEGATES PRESENT:

Belgium, M. W. Grandjean; France, R. Cartier; Holland, P. F. Yperlaan; Switzerland, A. Gehrig; Poland, Janusz Przymanowski; Canada, D. L. Buchanan; U.S.A., E. J. Reeves; Hungary, Imre Koos.

ALSO PRESENT WERE:

Poland, Humen Wlodzimiers; Canada, Gordon F. Henderson, Barrie Jeffry; U.S.A., Ralph Barnaby, Richard Comey, Paul Schweizer, Jerome Wolcott, Marvin A. Krieger, Floyd J. Sweet, Wolfgang B. Klemperer.

ELECTION OF OFFICERS FOR THE MEETING:

Chairman, Mr. Gehrig; Secretaries, Mr. Cartier and Capt. Barnaby.

THE FOLLOWING ARE EXCUSED:

France, M. Pierre Massenet; Great Britain, P. A. Wills; Norway, E. Sandberg.

ITEMS 1 AND 4 OF THE AGENDA:

Possible Remarks on Rules Governing Gliding Records—Adjustment of Those Regulations to those of the Revised Sportif Code—and Speed Records on a Triangular Course—Measurement of Distance.

T H E S A I L P L A N E

It was proposed by the U.S. Delegate that the powered glider category of record be reinstated in view of the renewed interest. It was then approved that the Soaring Society of America would study the matter and make recommendations for new rules and submit them for consideration at the next meeting. These proposals should be sent to the Secretary-General, F.A.I., for distribution with a copy to the Chairman of the Committee. The study should consider having the only restriction being a limitation of fuel to 5 litres, and otherwise comply with existing glider regulations.

4.2.1. CLASS D :

It was approved that flying starts be permitted. To accomplish this, 4.2.1. Class D, 1st paragraph, be changed to read, "The moment of starting is fixed at the moment of free flight, that is to say, the moment of release from tow, or the flying start as defined in 4.2.1. sub, a)." Above may be used.

9.3.8. CLASS D :

It was approved that the words "At 1,500 metres maximum above the point where the glider leaves the ground," be deleted from this section. This proposal was originally approved at the F.A.I. Glider Committee Meeting on July 27, 1948 (DOC. BSM/48/8 Item 4), and inclusion of this phrase in the present draft of the Code Sportif is in error and should be deleted not only from this paragraph, but 5.4.1.6. should also be deleted.

9.4.4.C :

It was approved, in accordance with the decision of the meeting of the Sporting Committee of the F.A.I., 1948, Doc. ASI/48/11 Item 6.2, that a previous speed record must be beaten by a margin of at least 2 km./hr.

9.4.4.D :

It was approved that the second paragraph be changed to read : "At the finish the plane of sight must be crossed within 300 meters in a horizontal line from the starting point.

USE OF BAROGRAPHS IN TOWING AIRCRAFT :

It was approved by all delegates except France that barographs need not be required in towing aircraft except for altitude record attempts. It was further approved that to establish the release altitude, 9.6.1.C, Class D, have paragraphs *a*, *b* and *c* deleted, and in their place the following :

- (a) Statement of the tow pilot, who shall be an official timer as to the release altitude.
- (b) Statement of another official timer (commissar) that the maximum permissible release altitude was not exceeded.
- (c) If in the opinion of the F.A.I. the altitude of release stated leaves doubt as to whether the maximum permitted by the 1 per cent glide ratio was exceeded, the burden of further proof that this altitude has not been exceeded is upon the record applicant.

It was further approved that 9.6.2.E.d) have the following words deleted : "and of the towing aircraft"; in 9.6.3 E.d) should read : "Indication of the altitude of the point of release and the landing point." Parenthetical remarks deleted.

Other Necessary Changes for the Code Sportif

9.3.1. :

It was approved that a new paragraph, Class D, be added to this section, following DOC. VSM/49/1/ Item 2.8, which reads as follows : "It is not necessary that the National Aero Club be advised in advance of a glider record attempt, but it is necessary that the official observers and timers, as required, are present and the other necessary arrangements for the attempt must be accomplished.

4.3.1. :

It is approved that the following words be added to this paragraph : "In the case of speed flights of gliders, a jewel watch with a second hand may be deemed to be sufficient."

4.3.2. :

It is approved that a new item be added as follows :

(c) Time Pieces for Glider Speed Flights

Jewel time pieces used for timing glider speed flights must be checked against an accurate time source not more than three hours before the start, or not more than three hours after the finish."

9.4.4.B :

It was approved that the margin of error allowed for the determination of the speed be changed from plus or minus 0.2 per cent to plus or minus 0.5 per cent.

9.4.4.D :

It was approved that the following paragraph be added : "The speed shall be evaluated on the effective distance of the triangle used." In explanation, this rule is imperative because it is quite impossible to establish a triangular speed course of exactly 100 km., because prominent land marks must be used.

SPEED FLIGHTS TO A FIXED GOAL :

It was approved to leave the speed flights to fixed goals of over 100 km., 200 km., 300 km., 400 km. and 500 km., as homologated performances, but not change them to records.

It is necessary that these flights be done in a straight line so that information may be gathered on high speed flights under the most favourable conditions.

9.3.7 :

It is requested that the following question be resolved : Can a multi-seater be flown single-place and establish a single place record ?

9.5.1.D :

It is requested that the technical sub-committee of the Sporting Committee investigating Item CLASS D, "The preceding record must be beaten with a margin of at least 5 per cent." With reference to DOC. ASI/48/11, Item 6.1 give a report on this matter at an early date.

ITEM 2 OF THE AGENDA :

COMBINATION OF RULES GOVERNING INTERNATIONAL COMPETITIONS :

It was approved that the Aero Club of Switzerland translate and distribute the article "Principles of Evaluation of Sail Plane Performances in International Soaring Contests," as a basis of discussion for the next meeting.

It was agreed in principle that the committee should work towards standardized competition rules for the International Soaring Competitions.

GLIDING RECORDS TO 18th AUGUST, 1949

CATEGORY I—SINGLE SEATERS

International

(Best of National Records)

1. *Distance*
U.S.S.R. Miss O. Klepikova in "Red Front 7," Moscow to Otradnois (Stalingrad), 6th July, 1939. 749.203 km. (465.5 miles.)
2. *Gain of Height*
Sweden. Lt. Per Axel Persson in "Weihe," at Orebro, 12th July, 1947. 26,411 ft. (8,050 m.)
3. *Absolute Altitude*
U.S.A. John Robinson in "Zanonia," between Bishop and Muroc A.F.B., California, 1st January, 1949. 33,500 ft. (10,210.8 m.)
4. *Goal Flight*
U.S.S.R. P. Savtsov, in "Red Front 7," from Toula to Mikhailovka, 31st July, 1939. 374.3 miles (602.358 km.)
5. *Out-and-Return*
U.S.A. Paul B. MacCready, Jnr., in "Screamin Weiner," from Wichita Falls to Anson, Texas, and return, 16th July, 1947. 229.2 miles (368.8 km.)
6. *Speed over a triangular course of 100 km.*
Switzerland. Siegbert Maurer, in "Moswey III" from Muottas Muragl to Weissfluhjoch to Piz Curver to Muottas Muragl, 22nd July, 1948. 43.25 m.p.h. (69.6 km./h.)
7. *Duration*
France. Guy Marchand, in "Nord 2000," at Romanin les Alpilles, March 16th-18th, 1949. 40 hours 51 minutes.

Women's Single-Seater Records

1. *Distance*
U.S.S.R. Miss O. Klepikova, in "Red Front 7," from Moscow to Otradnois, 6th July, 1939. 465.5 miles (749.203 km.)
2. *Gain of Height*
France. Mrs. J. Mathe, in "Meise," at St. Auban, 4th June, 1948. 22,080 ft. (6,730 m.)
3. *Absolute Altitude*
No record homologated at date.
4. *Goal Flight*
U.S.S.R. E. Prokhorova, in "Red Front 7," Toula-Oboiane, 19th June, 1940. 213.5 miles (343.818 km.)
5. *Out-and-Return*
France. Miss M. Choynet, in "Weihe," from Baynes-Thiverval to Etampes, 25th July, 1946. 66.1 miles (106.430 km.)
6. *Speed over a Triangular Course of 100 km.*
No record homologated at date.
7. *Duration*
France. Miss Marcelle Choynet, in "Air-100," at Romanin les Alpilles, 17th-19th November, 1948. 35 hours 3 minutes.

British National

(May be set up by British Pilots in any part of the world)

1. *Distance*
P. A. Wills, C.B.E., in "Weihe," Hatfield Aerodrome, Herts, to Gerrans, Cornwall, on 1st May, 1949. 232.6 miles (374.4 km.)

2. *Gain of Height*

P. A. Wills, C.B.E., in "Weihe," at Long Mynd (Shropshire), on 23rd June, 1946. 15,247 ft. (4647 m.)

3. *Absolute Altitude*

P. A. Wills, C.B.E. 16,668 ft. (5,080.41 m.)

4. *Goal Flight*

Flight Lieutenant R. C. Forbes, in "Weihe," from Fassburg (Germany) to Butzweiler Airfield (Cologne, Germany), in company with Flying Officer J. F. P. Archbold, in another "Weihe," on the 19th May, 1948. 192.634 miles (310 km.)

5. *Out-and-Return*

C. J. Wingfield, in "EoN Olympia," Sheppard Field, Texas, to Quanah, Texas, and return, 16th July, 1947. 147.2 miles (236.9 km.)

6. *Speed over a Triangular Course of 100 km.*

P. A. Wills, C.B.E., in "Gull IV," from Muottas Muragl to Weissfluhjoch to Piz Curver to Muottas Muragl, Switzerland, 22nd July, 1948. 2 hours 6 minutes 48 seconds. 29.21 m.p.h. (47 km./h.)

7. *Duration*

Sub.-Lieut. A. N. Young, in "Falcon II," at Long Mynd (Shropshire), on 18th August, 1938. 15 hours 47 minutes.

8. *Women's Records*

No Women's British National Glider records homologated at date.

B.G.A. U.K. Local

(May be set up by pilots of any nationality for flights commencing in U.K.)

1. *Distance*

As National.

2. *Gain of Height*

As National.

3. *Absolute Altitude*

No record homologated at date.

4. *Goal Flight*

D. H. G. Ince, in "Olympia," from Long Mynd to Yarmouth on the 9th August, 1949. 192.88 miles (310.41 km.)

5. *Out-and-Return*

C. J. Wingfield, in "EoN Olympia," from Redhill Aerodrome (Surrey) to Welford (Berks.), and return, on 6th May, 1948. 114 miles (183.47 km.)

6. *Speed over a Triangular Course of 100 km.*

No record homologated at date.

7. *Duration*

L. Marmol, in "Zlin 24 Krajanek," at Dunstable (Bedfordshire), on 12/13th April, 1949. 33 hours 5 minutes.

CATEGORY II—MULTI-SEATERS

International

(Best of National Records)

1. *Distance*

U.S.S.R. I. Kartochev, pilot, O. Savtsov, passenger, in "Stakhanovetz," from Moscow (Ismailovo), to Ouchnia, 17th July, 1938. 358.1 miles (619.748 km.)

2. *Gain of Height*

France. Guy Rousselet and Leon Faivre, in "Kranich," at St. Auban on Durance, 21st September, 1948. 22,244 ft. (6,780 m.)

3. *Absolute Altitude*

No record homologated at date.

T H E S A I L P L A N E

4. *Goal Flight*

U.S.S.R. I. Kartachev and V. Petrotchenkova, in "Stakhanovetz," Toula to Kharkov, 19th June, 1940. 307.6 miles (495.020 km.).

5. *Out-and-Return*

U.S.S.R. I. Kartachev and V. Petrotchenkova, in "Stakhanovetz," Toula to Ouklovo to Toula, 12th June, 1940. 258.5 miles (416.070 km.).

6. *Speed over a Triangular Course of 100 km.*

No record homologated at date.

7. *Duration*

Germany. A. Bodecker and K. H. Zander, in "Kranich," Rossiten, 9th-11th December, 1938. 50 hours 26 minutes.

WOMEN'S MULTI-SEATER RECORDS

International

(Best of National Records)

1. *Distance*

U.S.S.R. Miss O. Klepikova and V. Bordina, in "Stakhanovetz," from Toula to Konotop, 19th June, 1940. 275.5 miles (443.714 km.).

2. *Gain of Height*

France. Mrs. Mathe and Mrs. Gaudry, in "Kranich," at St. Auban, 21st January, 1948. 9,459 ft. (2,883 m.).

3. *Absolute Altitude*

No record homologated at date.

4. *Goal Flight*

U.S.S.R. L. Velikosseltzeva and N. Zavialova, in "Stakhanovetz," from Toula to Pipetzk, 31st July, 1939. 139 miles (223.633 km.).

5. *Out-and-Return*

No record homologated at date.

6. *Speed over a Triangular Course of 100 km.*

No record homologated at date.

7. *Duration*

France. S. Melk and Miss Therese Buquet, in "Castel 242," Black Mountain, March 25th, 1947. 16 hours 3 minutes.

British National

(May be set up by British pilots in any part of the world)

1. *Distance*

F/O K. L. Hirst and A/C K. Simpson, in "Kranich," from Gutersloh Airfield to 1 mile East of Fuhlsbuttelt Airport, Hamburg, Germany, on 28th May, 1949. 138.9 miles (223.55 km.).

2. *Gain of Height*

J. A. Grantham and B. E. Bell, in "Kranich," from Cambridge Airport, on 24th July, 1949. 10,080 ft.

3. *Absolute Altitude*

No British Record homologated at date.

4. *Goal Flight*

Cdr. C. Nicholson and Lt.-Cdr. (E) G. P. Blake, O.B.E., R.N., in "Kranich II," from Yeovil (Somerset) to Bramcote (Warwickshire), on 17th June, 1947. 118.2 miles (190.2 km.).

5. *Out-and-Return*

J. W. S. Pringle, M.B.E., and J. Grantham, in "Kranich," from Cambridge Airport to Dunstable and return, 12th August, 1949. 77.2 miles (124.26 km.).

6. *Speed over a Triangular Course of 100 km.*

No British Record homologated at date.

7. *Duration*

F/Lt. W. B. Murray and Lt./Cdr. (A) J. S. Sproule, R.N., in "Falcon III" at Dunstable (Bedfordshire), on 9th/10th July, 1938. 22 hours 14 minutes.

8. *Women's Records*

No Women's British National Glider Records homologated at date.

B.G.A. U.K. Local

(May be set up by pilots of any nationality for flights commencing in U.K.)

1. *Distance*

K. Haberstitch and K. Fahrlander, in "Spahlinger S.25," from Bramcote (Warwickshire to Hampstead (Norfolk), on 25th June, 1947. 126 miles (203 km.). Swiss.

2. *Gain of Height*

As National

3. *Absolute Altitude*

No record homologated at date.

4. *Goal Flight*

As National.

5. *Out-and-Return*

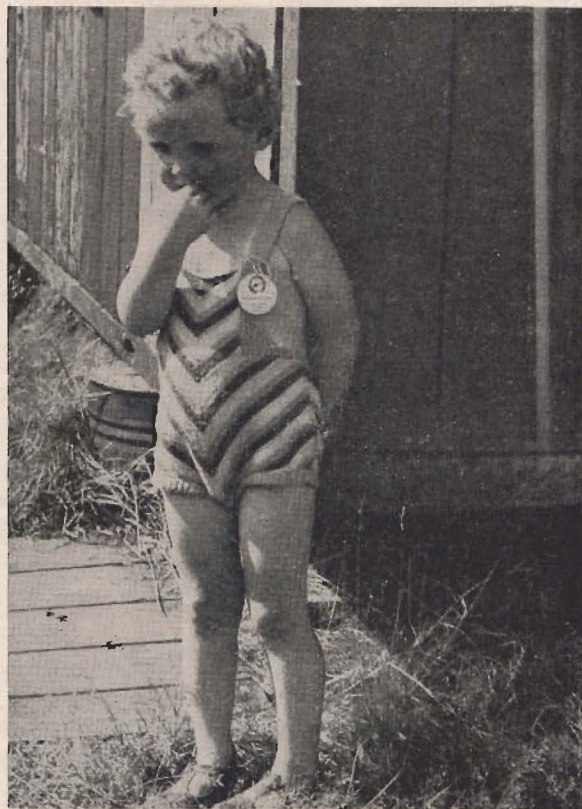
As National.

6. *Speed over a Triangular Course of 100 km.*

No record homologated at date.

7. *Duration*

As National



DON'T KNOW HIS NAME

—but he had a competitors' badge like the big fellows.
(His name is Michael Armstrong.)

PHOTO: F. SLINGSBY

AUSTRALIAN DISTANCE RECORD, 221 MILES

It is not widely known, we believe, that the flight by Fred Hoinville (of the Sydney Soaring Club, the N.S.W.G.A., and now of the G.F. of A. also) in January this year, which put up a new, Australian Distance record, was preceded by two determined but unsuccessful efforts. We have been sitting on Fred's own accounts of these two flights for some months; now at last we have the chance to circulate to some extent the story of how Fred, never having flown cross-country before, managed to set a new record on his third attempt.

"AN INNOCENT ALOFT"

(First sufferings of a cross-country novice)

December 30th, 1948: Jerilderie to Hillston—
128 miles—in 5½ hours.

First take-off at 10.30. Felt terrific lift at 1,000 feet, released, but it was only turbulence. Landed in 6 minutes.

Sky fully overcast, beginning to break in South, wind 10-15 from south-east.

Second take-off at 11.25. Air very calm so went to 4,000 feet. Released in calm air and glided right back without finding any lift.

Decided to have lunch, then third tow-off at 1.05. Clouds now well separated and looked promising. Lift felt good, released at 2,000 at 1.15. I had no difficulty climbing to near cloud base at 3,500 but couldn't get in, and stooged around for half an hour, wondering if it was safe to push off.

I had never before flown cross country in a sail-plane, and found myself faced with many problems quite new to me. And what a place to start! I had to go north; and north, for 70 miles, was just a vacant block on the map. I edged away from Jerilderie and believe me, I've never seen such featureless country. After an hour I was still only ten miles away, precariously holding from 2,000 to 4,000 feet, and the only landmark in the whole wide world was the town I left behind me. At 20-minute intervals a very correct radio voice in my ears would say, "Gull from car, what is your position, over." I would reply, "Dunno, but I think about 20 miles, somewhere about north of Jerilderie, I hope."

Then in the middle of that nothingness, I dived under a lonely cloud, and discovered why it was lonely. Its best friends wouldn't tell it, but I did. It had no lift, and I decided no personality. I left the damn' thing and slid unhappily down to 1,500 feet, wondering if I could reach the next cloud.

Landing was no problem. The country was one vast aerodrome, but oh!—so lonely! It was cross-wind with myriads of little tracks which were not on the map but which effectively masked the few roads that were. They all looked alike, and they all went the wrong way. There were many dry lakes, also not on the map, and every ten miles or so, a homestead.

I picked out a prosperous-looking house and circled round it at 1,500 feet, when suddenly the port wing kicked up. I just as promptly kicked it down again, only further, and swung violently left, and sure enough, the green ball came coyly forth and said hullo.

With vast relief and a somewhat changed viewpoint, I levelled off at 4,000 feet and edged to the east. I still had only a vague idea of where I was, and decided now that the best thing to do was not to bother about it any more, but just get to hell out of it and not waste any more time. I had wasted a lot of time just trying to pick up a landmark. Now I slipped gaily from cloud to cloud, gradually gaining height to 5,000 feet as the cloud base rose higher. Suddenly the Murrumbidgee came in sight, then with a swift glance Westwards I spotted Hay many miles away, and to the east, soon Griffith showed up about 12 miles distant.

I gained height steadily, and used a couple of short cloud streets.

Carolling gaily and full of joy, I sailed smoothly past Griffith. So far the trip was due North, now at 6 p.m. I saw that the only clouds remaining in the sky were stretched out in single file N.N.W. from Griffith, for many miles, so I plunged in and travelled the street to the last fading cloud, which I reached at 6.50 p.m., about 12 miles west of Hillston, at 5,500 feet.

Then came a decision that I regretted later. I could either glide north and land in a field far from a town, or east and land in the town of Hillston. I was already abreast with Hillston, so I was choosing between a 150-mile flight and maybe sleep in a paddock, or 128 miles and have a nice comfortable hotel bed. There was obviously no more lift to be found, and I could not reach Gold "C" distance (187 miles) anyway, so I chose convenience for myself, and the club, and turned east.

I arrived over Hillston with 3,000 feet to spare, so practised a few loops and stall turns, picked out a nice large central paddock, and did a little sight-seeing, then slipped in over the fence and landed. I wondered how it was that half the town knew which field I would choose and were there to meet me, but it was no mystery at all. I had unwittingly landed on Hillston aerodrome!

The time was then 7.02 p.m.

The Second Attempt

Narromine to Gulargambone: January 5th, 1949.
67 miles in 1 hour 40 minutes.

The Gull was towed off in a perfectly clear sky, about 11 a.m. on January 5th.

Strong lift was found at once, but alas, the vario-meter didn't work, so I headed back to land at once and fix it. During the approach I found that the spoilers had gone u/s also.

These little things were adjusted and the second tow-off commenced at noon. Releasing at 600 feet in a violent thermal I climbed at 10 to 15 feet per second. The thermal was very narrow and to get the best lift I had to do very steep turns, about 75 degrees bank, at fairly high speed, 55 to 60. Later I tested the "Gull" (another day) and found that it lost 1,000 feet in 90 seconds at 60 m.p.h. at 75 degrees bank, giving a sink of 11 f.p.s. in still air, so that thermal must have been doing around 25 f.p.s. However, it was so narrow that it was not possible to stay in it with less bank. The "Gull"

went straight to 5,000 feet, and remembering the lessons of my first cross-country trip, I determined to make this a fast one, so set off at once, north again. Wind was again from S.E. about 10-15, and as I sailed happily northward, I allowed a lot of drift.

No thermals!—The smile faded, to be replaced by a very worried frown as the altimeter monotonously unduly itself, until, ten miles north at 1,500 feet, I made a last-hope dive at a junction of three ploughed paddocks, and pulled the rabbit out of the hat, in the shape of another fast narrow thermal just like the first.

Very quickly reaching 5,000 again, and ceiling, I set off for Gilgandra, about 45 miles North of Narromine, finding sufficient thermals, and not worrying unduly because many of them faded as low as 3,500 feet.

Gilgandra was passed in one hour, and everything was just lovely. Then I decided to try the dry bed of the Castlereagh River for thermals, on the assumption that water in the sandy bed would probably give good lift. The theory seemed to work very well, and I raced past Gulargambone, spurning weak thermals in my desire for speed. I left one at a point about a mile past the town, without bothering to use it right to the top, and set out again from 3,500, which taught me another lesson, 3,500 feet is not high enough for safe cross-country travel. From that point I glided smoothly down, until at 1,500 I became really alarmed, and turned away towards a large scald—or bare patch of red soil—where there just couldn't help being thermals. I was probably dead right, but unfortunately I arrived over the patch at 500 feet, between thermals, and sank gracefully to rest in a dead calm, broken only by my astonished and incensed remarks.

And then—Success!—The Third Attempt yields a New Australian Record.

The story of the record-breaking flight is better known, but to complete the story the following gives a condensed version of the official account of this flight.

On 11th Jan., 1949, Dr. G. A. M. Heydon towed the "Gull" (S.S.C.) from Narromine to Peak Hill, 30 miles to the South. After a bumpy flight Peak Hill was reached, and Fred Hoinville in the "Gull" cast off at 6,300 feet, time 11.30 a.m. During the first hour, 36 miles were covered to reach a point not far from Narromine.

It then became necessary to move further east to reach better cloud formations, and, crossing a considerable stretch of blue sky, height was lost to 3,000 feet at 1.20 p.m. about 18 miles N.E. of Narromine.

Here a strong thermal was found, and the "Gull" gained 10 feet per second with about 60 degrees bank, to 6,700 feet, at 1.40 p.m. For the next four hours height was never below 5,200 feet. Position was now 12 miles west of Gilgandra, and the second hour had given only 22 miles.

The third hour added 38 miles, Coonamble had been passed, the pilot had lunched on sandwiches and water, and by circling tightly had reached 7,400 feet.

Now the broad wheatlands gave way to grazing country, sparsely settled with few roads, homesteads 10 miles apart, occasional claypans and

scalds, and far too many stunted trees. To the east stretched the uninhabited Pilliga scrub, definitely hostile, offering no visible landing fields. Northwards, keeping east of the Castlereagh river, occasional fields and homesteads suggested safety and hospitality every 10 miles or so, so the pilot resolved to make 5,000 feet the minimum cruising altitude and to stay right over any selected landing ground and regain altitude before going on. The fourth hour ended 20 miles north of Coonamble, having added 32 miles. Lift remained good, and the Gull was at 7,300 feet.

Ten miles further, near the town called Come-by-Chance, a cloud street carried the "Gull" rapidly N.W. to the Namoi River, at 6,500 feet altitude. In ten miles of straight and undulating flight, only 100 feet was lost. The Gull was slowed to near stalling speed while passing through the best lift under the upwind (trailing) edge of each cloud, and cruised at 50 between lift areas in the street. At 4.30 the fifth hour gave 30 miles.

At 4.40 p.m. this cloud street had to be abandoned because it continued northwest into unsafe country. The "Gull" turned east and crossed a four-mile gap to an adjoining street, coming in under the best cloud yet encountered. This cloud billowed up in true cumulus fashion, considerably higher at the top than the rest, and it whisked the "Gull" rapidly to 8,000 feet, and for the first time cloud base was reached, but only just.

This second street carried its silent traveller 25 miles non-stop from the Namoi River, over the Walgott railway, across the Barwon River and up the main road to within sight of Collarenebri, still 25 miles away. 45 miles in the sixth hour and still 7,000 feet up. The radio had functioned well up to 80 miles, then static became so strong that the pilot could hear voices but not words. At 120 miles the pilot heard static but no voices. However, the radio car was still receiving, and the pilot, expecting this, continued to give his position and height, repeated over and over, every 20 minutes. At 5.40 p.m. the last message to get through was received at Narromine, about 170 miles away. "Position 30 miles N.E. of Walgott, height 2,200 feet, struggling for height." The "Gull" was now within 5 miles of the Australian distance record, and only 2,200 feet up over a solitary cleared paddock in heavily-timbered country. The listeners then remained in suspense until breakfast next morning.

With 25 miles, crosswind, to reach Collarenebri and a new record, the cloud street had to be left for safety. Down to a few hundred feet over the only paddock in otherwise heavily-timbered country, an eagle kindly saved the day by indicating a small thermal, which took the "Gull" to 7,000 feet after a hard climb lasting 30 minutes.

Other clearings could be seen north-eastward towards Collarenebri, and they formed stepping-stones of safety as the Gull set out on the long gentle 37-minute descent that finished at 6.45 p.m. on a 600-yard natural aerodrome right alongside a main road, at the 4-mile peg north of Collarenebri.

The flight had lasted 7 hours 15 minutes, and raised the record from Martin Warner's 209 miles to 221, at an average groundspeed of 30 m.p.h.

NEW CANADIAN SAILPLANE

"THE LOUDON"

Advanced Training Glider Produced by the University of Toronto

By W. CZERWINSKI

(Soaring Association of Canada)

A SOUND gliding movement in any country needs a fairly complete set of several glider types, serving different purposes. In a country like Canada where the gliding movement is still struggling for its due right and position as a widely spread national sport, the problem of possessing the proper number of glider types is of extreme importance.

Thanks to Professor T. R. Loudon, Head of Civil and Aeronautical Engineering at Toronto University, and Mr. B. S. Shenstone, past president of S.A.C., a scheme was worked out and adopted by Toronto University to design and build a glider by the Fourth Year students of aeronautical engineering under the supervision of responsible aircraft designers.

Thus, the University of Toronto is offering to its students an excellent training in practical aircraft design, giving simultaneously to the Canadian gliding movement, a new type of glider.

It was decided to embark, for the first project, on the design of an advanced trainer, a type badly needed in Canadian gliding.

As an acknowledgment of Professor Loudon's organization of this venture at the University, the students have named the prototype "Loudon."

As an advanced trainer, the glider possesses several new features worthwhile mentioning. The sinking speed of 2.5 fps is rather low for this type of glider. The best gliding ratio of 23.1 indicates a rather clean design carefully studied from the aerodynamic standpoint. The span of 45 feet assures easy handling on the ground and hangaring. The special fuselage-

wing fitting arrangement (Fig. 1) permits the assembly of the glider by a crew of three. Because the lower main spar bolt (a) and rear attachment bolt (b) are arranged in one line, it is possible to put the wing tips on the ground after these bolts are fitted in. This arrangement is a very useful feature in both assembly and dismantling for transport or storage.

As is seen in Fig. 1, the fittings joining the fuselage with the wings are easily accessible from the top, and are simply attached to the two fuselage main frames by means of a few bolts.

Special attention was paid to the design of the aileron control system. It is arranged on the front face of the main wing spar, thus making it easily accessible during assembly. The ailerons have a differential control of 2.1 differentiality which together with a washout of 4 deg. will assure good flying properties in turns and small lateral control-stick forces.

The primary wing structure consists of a cantilever I-beam spar and torsionally stiff "D" nose covered with diagonally laid birch ply-wood. The torsion of the wing is taken out at the fuselage by a steel-tube tripod structure bolted to the spar at the root fittings and at the station 45 inches from the root.

The fuselage is of a birch plywood stressed shell design, having an oval shape in the front portion and an angular edge along the whole bottom as well as along the top rear of the fuselage between the wing and fin. The pilot seat permits flying with a seat or back parachute and can be adjusted forward and aft on the ground. The canopy top consists of two portions; a fixed front one and a removable rear one. In the case of less advanced trainees, the glider can be flown with the front portion only which serves in that case as a regular wind screen.

The stabilizer is fitted into the fuselage in a manner shown clearly in Fig. 2. The arrangement of the fin being placed a little forward with respect to the stabilizer, has a great advantage in a spin, as the fin will never be shadowed by the wake of the latter. Also the sharpened upper edge of the fuselage between the wing and fin permits prediction of an easy recovery from a controlled or non-voluntary spin.

At the present time a complete type-record is being prepared for the use of Civil Aircraft Authorities, as well as a complete set of production drawings, which were already verified by the shop, during construction of the first prototype. These drawings will be extremely valuable material for all who will in the future build more gliders of this type.

The prototype will be flown in the early spring of 1949 and will be subjected to a very complete flight test programme which is now in preparation. The

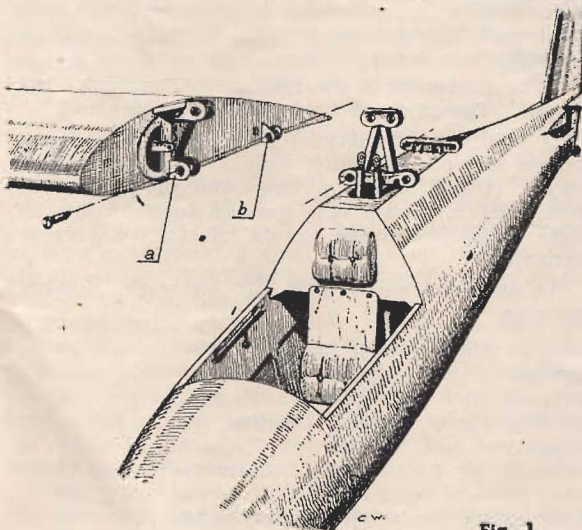


Fig. 1

aim of this testing will be to check the flight as well as the utilization properties of the glider with respect to general efficiency, safety and performance.

It is to be hoped that further "Loudons" will be built and flown and that the University of Toronto will receive the commendation that is its due for pioneering in practical design training for its student aeronautical engineers.

The staff of the University who are associated with this project are already formulating plans for a new development as soon as the present (UTG-1) is completed. They are convinced that a programme of this type is of great value to the gliding and soaring movement in Canada.

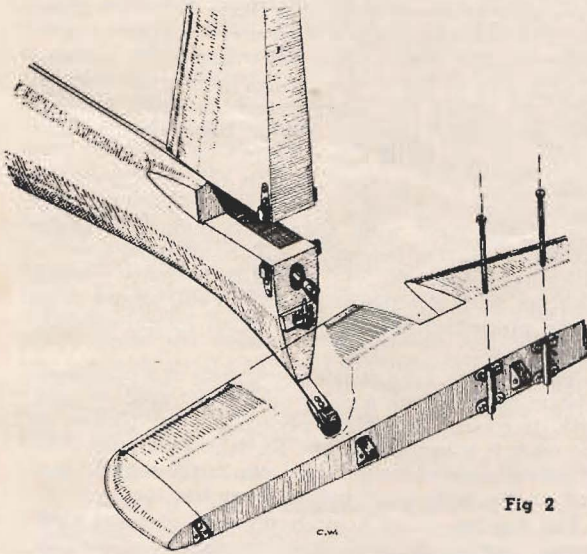


Fig 2

JACKPOT FLIGHT

By Barrie Jeffery

ON August 13th, 1949, the "Olympia" was reaching for cumulus which covered one-third of the sky over Carp. I had come second in the draw for the "G.B." and at 12.48 hastily borrowed a shirt and a watch and set off without a sweater, food, drink or maps, to try for the best the day had to offer.

Johnnie Dure manned the "Moth" and took me to a good thermal in a clear patch at 1,700 feet. A few minutes later, as I reached 5,000 feet a small cumulus blossomed above me. With the lift falling to zero I headed west to a likely-looking cumulus nearby. I turned tail as soon as I was under it—it was puffing downwards. When I looked back a few moments later it had almost completely dissolved.

At 5,900 feet, a mile or so west of Carp, I made my only contact with cloud during the flight. I trust the "G.B." as I trust a cat, however, and left the cloud in something of a panic.

At this point I was considering a cross-country to Arnprior, just to prove to the boys there that one

could go places in a sailplane, but the headwind and the fact that I had dropped to 2,500 feet three or four miles west of Carp were discouraging, and when I was on top of the next thermal I cut east.

Carp receded; I skirted Uplands Airport; Ottawa receded. Carlsbad Springs, a marshy area marked "Danger" on the airmap, receded and with it my last landmark for some time.

The trip was punctuated by two drops to about 2,000 feet, at Embrun and Apple Hill, I think. It was on these occasions that I realized how slow mental processes had become. It took effort even to hope for another thermal and to swing into it when it was contacted. It took appreciable mental effort even to hope for another thermal and to swing into it when it was contacted. It took appreciable mental effort and concentration to count as high as three, as I did once or twice on entering a thermal.

Both the little towns gave boisterous and encouraging thermals, though, good for 6,000 or 7,000 feet. I did not, as one Ottawa paper put it, "... just pull back on the stick and pray for a cross-wind..." My mental processes had not deteriorated that far.

At half-time I sang when I saw the St. Lawrence, and after five hours I sang again—Mount Royal was showing dimly through the haze of the big city.

At 6 p.m. I was sitting on top of a thermal at 5,000 feet, considering Lake St. Francis and, as I thought, the U.S. on the other side. I had five hours, though I had come more than 100 miles and ambition was all gone. Thus, in a half-hearted attempt to reach a cloud 10 or 15 miles away, I cruised peacefully along the shore of the lake. A lake freighter, a light plane and a few skiffs were floating along below me, also enjoying, it seemed, the colours and warmth of the late afternoon.

The comfort of the lower levels was reviving, but the thermals were dying and the gentle breaths from the lakeshore only slowed the descent through the last few hundred feet.

The field I touched down in was one of several long, smooth ones near the highway and was soon filled with strange but friendly people all talking excitedly in a strange tongue.

"Pas propelleur! Pas Moteur! Pas roue!" I caught. They helped dismantle the glider.

At 1.30 a.m. Sunday, Johnnie Dure and Hank Janzen arrived, brimming with congratulations and curses. (I had broken a record and the Buick had been a bitch.) I am very grateful to them for the night of sleep and the untold effort they gave in retrieving.

We arrived home a little late for work, Monday morning.

Date of Flight : 13th August, 1949
 Duration : 5 hours 20 minutes
 Take-off : Carp, Ont.
 Landing Place : Coteau Landing, Que.
 Distance : 88 miles
 Aircraft : "G.B.11," Gatineau Gliding Club.
 CF-ZBH
 Max. Height : 6,950 feet (altimeter)
 Pilot : C. B. Jeffery

(From the Yearbook of the S.A.C.)

A WARNING

THE other day I visited my old gliding club.

Fifteen years ago it was that I joined it. I was a power pilot of some seventy hours' experience, and as such I was rightly regarded with a certain amount of suspicion, for it was well known that power pilots were very apt to stall immediately after take-off. Well—I didn't, because I had been reading and thinking gliding for some years already, and even occasionally doing it. I was given a few check slides, hops and circuits, and then I went for my first real soaring flight, in a two-seater, my instructor showing me how to keep in the best lift. After that, and lunch, I was despatched in a "Hols-der-Teufel" over the edge to get my "A," a memorable flight of forty minutes with a landing back on top. There followed in due course some circuits and my "B." The "C" was also a flight I shall never forget, for it was done in thermal lift off the slope, with the windsock blowing down the hill!

When I was there again the other day, it was a beautiful day with a light southerly wind, the sky blue but patterned with fair weather cumulus, and obviously full of thermals. As it was Saturday I was not surprised to find nobody had yet turned up. I peered into the locked hangar, packed with gliders. Then I peeped through the windows of the newly-erected clubhouse, built around the brick fireplace which was the sole remnant of the pre-war clubhouse. I noted that the decoration of the bar was almost complete. At 2 o'clock there was still nobody but myself. I thought of the many happy Saturdays I had spent there in the old days. At 2.15 "X" arrived on a motor-bike, with his girl-friend on the pillion. This was more like it. We opened the hangar doors and fitted a newly-repaired wing to one of the machines. Then we went to the edge and admired the view. The wind was not in a very good direction, or very strong, but I could remember having had plenty of fun in similar conditions, scratching along the south slope, or flying downwind to the northern end of the bowl where the lift would be better, or just catching thermals off winch launches.

"Come on, X, what about some flying?"

"No, no good. The wind's too far south and too light."

"Well, what about catching thermals off the winch?"

"No, we don't think much to that, too much like hard work. We only usually bother to come up here if there's a spanking good west wind blowing slap up the slope. If it's not a good day we prefer to do something else, like fishing."

I was vastly disappointed. In the old days we would have been training "nits" with winch-launched circuits. Soaring pilots would have been at least trying the lift on the south slope and the north end of the bowl, or taking turns at trying to catch thermals off the winch. The two-seater would have been out, too, and earning money from joyriding the general public who would have been there in sufficient numbers to be an embarrassment to pilots wishing to land. By the end of such a day,

and the end came only when the daylight was insufficient for a safe landing, there would be some flying in the log-book, some cash in the kitty, and a hearty appetite to satisfy with a meal in the clubhouse, and plenty to talk about in the bar.

I remembered my first deliberately caught thermal off the winch. A launch to 300 feet, a hard struggle, rewarded by a fifteen-minute flight in no wind. My next flight was 2 hours 15 minutes in thermals with maximum height 1,400 feet, wind conditions slightly less favourable than to-day, and with no variometer, for only the experts had them in those days, and we were just a happy bunch of amateurs. But now the verdict is that it is too much like hard work catching thermals off a winch launch; we only fly when it's too easy to miss.

The next day, Sunday, the wind was south-easterly, a very bad direction, but the day was warm and sunny. "X" and "Y" were the only flying members present, but a group from another club was there with a "Petrel," and wanting to fly. The winch was got out, and flying started at about 2.45 by this group of enthusiasts. They were only able to stay up from three to six minutes, but during that time they did a few beats over the south slope. The best flight was ten minutes, with climb to six hundred feet over flat moorland. I joined in with a borrowed machine but could only manage two flights of about two minutes each. But all who flew got some fun out of trying to beat very difficult conditions, and even this small amount of aeronautical activity attracted a dozen or so spectators to the site.

Luckily, I do not believe there are many gliding clubs in Great Britain which have gone in for the policy of cutting out training *ab initio* because of the prangery and the modern expense thereof. The only foolproof way of abolishing the prang is to stop flying altogether, but there is an excellent way of cutting prangery to a manageable minimum, and that is by having a really good instructor. These, I know, are scarce, but they will never even develop unless there is material for them to work on in the shape of a continuous flow of new blood, full of the enthusiasm which is so necessary to make a club really live. New blood must also be allowed its say in the management of the clubs, for as we get older we tend to get rather too "security-minded." If training methods of the pre-war era produced crashery to an extent which is now financially unacceptable, the training methods must be changed, and it is good to see that in general the clubs are very much alive to this problem and are tackling it in ways which vary according to their means and the limitations of their site. In 1933 the *Sailplane* ran a series of "Letters of a glider pilot to his son," in one of which I remember seeing the advice, "Fly whenever you can, my son." I believe that to be very sound advice still, and failure to follow it can only result in a loss of enthusiasm which cannot be spared if a club is to continue in existence. Enthusiasm is what makes gliding clubs so different from aeroplane

THE CHANNEL WAS FLOWN BY AN ULTRA LIGHT FIRST

By Geoffrey Dorman, A.R.Ae.S., Chairman of the General Purposes Sub-Committee, U.L.A.A.

On July 25th, 1909, Louis Bleriot, a 37-year-old Frenchman gained an undying place in history by flying from France to England across the Strait of Dover in a monoplane with an all-up weight of 715 lb. Its top speed was about 45 m.p.h. and its landing speed about 7 miles less. Its motor, rated somewhat optimistically at 35 h.p. seldom developed more than 25 h.p., so it came well within the ultra light category. Fortunately for Bleriot there was no A.R.B. in those days so he required no Permit to Fly, neither did he need any of the other present-day frustrations such as C. of A., Pilot's Licence, Custom's Carnet, Health Certificate, nor even a Passport. Those were the days!

All he needed was the pluck and determination to overcome obstacles. He was a self-made man who was keen to fly and needed money for building experimental aeroplanes. But he was also a man of enterprise. He lived his early manhood in the early days of "horseless carriages." Those motor cars were only a little less dicey and experimental than were aeroplanes. Most drivers were content to drive by day, so cars of that period were sold without lamps or other accessories.

Young Bleriot designed, built and marketed the first motor-car lamp. The source of light was at first oil, and later acetylene gas. Cars were multiplying and there was a ready sale for his lamp from which he made enough money to pay for his flying experiments. He did not sit down and wait until somebody like Lord Kemsley provided him with the money to buy a kit of parts from which to assemble an aeroplane. Those were the days before too much bureaucracy had stifled the spirit of enterprise—

the days when fingers were kept well and truly out. I appreciate that you think you have more frustrating difficulties than had the early pioneers, but have you really? Difficulties are made to be overcome, and the reason why Bleriot is such a great name in world history is that he had the determination to overcome difficulties. Really practical flying was not thought possible before he flew the Channel. He proved that it was possible and showed the way. Go and do thou likewise.

Someone with Bleriot's character might show the way to ultra light flying. If he can show the way to overcoming the obstacles of the A.R.B., M.C.A., I.C.A.O., I.A.T.A. and Uncle Tom Cobley and all, he will get as sure a place in aviation history as Bleriot has.

Bleriot flew from Calais to Dover in 37 minutes on Sunday morning, 25th July, 1909. He had a slight following wind which gave him an average speed of about 45 m.p.h. He reached the Kent coast at St. Margaret's Bay, but had to turn west as the tops of the Cliffs were higher than the ceiling of the monoplane. When he reached Dover Castle he turned into a gap in the cliffs and landed on a rough down-slope which caused his frail castoring wheels to collapse, which broke his propellor. Half of that propellor now hangs in the bar of the Royal Aero Club and is possibly a source of strength to A.R.B. members who drink there and who hope it will serve as an "awful warning" not to experiment.

Thereafter there was a big demand for Bleriot monoplanes, and so enterprise brought its own reward. Bleriot died in 1935 at the age of 64. His son is now Secretary General of the F.A.I.

(Continued from previous page)

clubs in general. Enthusiasm is a club's greatest asset, and is far more valuable than, for instance, a magnificent hill-soaring site. Enthusiasm is what urges men to overcome their difficulties.

But enthusiasm is not engendered by only going to the club site when conditions are perfect for soaring. Duff weather for soaring must always be used whenever possible for training up the *ab initio*s so that when at last some good weather does arrive, they are ready to make use of it and get their "C" certificates. Phillip Wills does not consistently win all our competitions and put up our national records because he only flies when the weather is perfect, he does all these things because he flies when others think it is not good enough to do more than slide to

the bottom of the hill, and no doubt he sometimes slides to the bottom like them, but other times he has a terrific struggle, and manages to squeeze all the lift out of the weather and use it for his purposes. The man who wins is he who goes on when the others have given up hope and this is the spirit which my old club seems to have mislaid during the war years and never recovered.

So come on, you fellows, keep out of that bar till flying is over, and see to it that flying is not over till either daylight has come to an end or cloud is right down on the deck. You have a soaring site which is the envy of nine-tenths of the gliding clubs in the world. The enthusiasm required to put you out in front of the rest is UP TO YOU.

On the Selection of Construction Materials

Contributed by A. R. Weyl—Chairman Research Sub-Committee, U.L.L.A.

We publish this article as much for the sake of those who are constructing their own gliders, as of those who are building their own power planes—Ed.

The amateur builder of ultra light aeroplanes will often find it rather difficult to get hold of the small quantities of material and ready-made parts he requires, and he will be tempted to use materials of doubtful qualities and condition. This would not matter for non-vital parts (as, for instance, ash-tray in the dash-board), but so far as vital members are concerned, the amateur is under obligation to satisfy himself and any inspector, that all material and parts can be safely used for the purpose for which they are intended. If he does not do so he may see the fruit of his labours being turned down either by our own inspection people or by the A.R.B.

Unfortunately, however, it is not only the culprit who suffers from his lack of care in the selection of materials. The whole movement is also brought into discredit at a period when it is trying hard to establish itself. A bad reputation is acquired when such careless habits are exposed. This is bound to express itself in a tightening of the safety precautions to which our movement is subject. Besides, inspectors, etc., get distrustful and will most certainly make life harder for amateur builders, in order fully to discharge their responsibilities.

In ultra-light aircraft, there are few parts which cannot be considered vital. Thus it is far cheaper and simpler in the end to stick to material and parts of strictly aeronautical quality. Where such material cannot be had, the U.L.A.A. will try its best to help; there is a special organisation for this, and this should be utilised more than it has been hitherto. Advice can also be given in cases where substitute material has to be introduced. Tubes, for instance, are very difficult to obtain in certain dimensions; in some cases, it is quite admissible—to the permission of the inspectors—to replace T45 (weldable) Steel Tubes by Tubular parts made up from S3 sheet (mild steel) longitudinally welded. This is far safer than to use, say, a gas pipe and try to persuade the A.R.B. Inspector to accept that.

Under no circumstances should materials or ready made parts be incorporated in any vital components which are of doubtful or non-aeronautical origin, however "good" they may appear from the outside and however "cheap" they may be.

When, for instance, plywood of "commercial" quality is closely inspected, the difference becomes obvious in the quality or condition of the core veneers, and/or in the gluing which keeps the veneers together. Such ply will do for a fairing or a servicing floorboard, but never for a component which carries appreciable stress whilst in flight or in other operating conditions.

On the other hand, it is quite admissible to use aeronautical materials which have been taken from other aircraft or aircraft components, provided that (a) such second-hand material is still in proper condition, and (b) that it is fit to be used for the

purpose for which you intend it. It all depends. You cannot, for instance, use the sheet of a sheet-metal fitting for a vital fitting when this means the re-bending of pre-formed bends (as along the bending edges, the material is weakened); also, it is not wise to utilise Simmonds stop-nuts again in parts subject to vibrations (e.g. engine mountings), as the fibre ring may have deteriorated.

When using such second-hand materials, they should, therefore, be selected with great discretion, and when you are in the least doubt if it is wise to do so in a specific case, try to ascertain the position. Every inspector will gladly oblige.

It will most certainly not do when during an inspection some unexpected bolt holes are discovered just along a bending edge. On such startling discoveries any decent inspector cannot but be suspicious that similar incidental features might exist in other vital components on strategic points where they cannot be seen: it is only logical and, with regard to our movement, to be appreciated if amateur construction disclosing such lack of care is turned down as un-airworthy.

Also, the indiscriminate use of well-made fittings appropriated from other aeroplanes may be a dangerous procedure. When the original aeroplane was bigger, heavier and faster, the fitting as used in the ultra-light aircraft for a similar purpose, may well be of more than sufficient strength. This, however, must be ascertained and not merely guessed. Moreover, vital fittings in aeroplanes are not immortal. They may have suffered badly in the very same crash which gave you the welcome opportunity to cannibalize. Or, they may be at a place in your aircraft in which higher stresses are to be taken up than those to which they would have been normally subjected. All this must be well taken into account. It is not sufficient to argue that *because* this fitting has done service on a Gipsy-engined Klemm, it will *of course* do on your 30 h.p. ultra-light single-seater; neither the A.R.B. nor our Inspection nor our Design team will take your fitting for granted (when it is a vital one).

Incidentally, in all dealings with the A.R.B., in particular with A.R.B. Inspectors, our Groups and Members will do well to bear in mind that they are well disposed towards our movement. Usually, they go to great lengths to see that your aircraft will be permitted to fly. It is their primary obligation to be inquisitive and to take nothing for granted. They have a responsible duty to discharge, and nothing would facilitate their work more than to turn amateur constructions down on the first indication that they are not to the standard they are used to.

As yet we have not a single instance to record in which the A.R.B. has not been most helpful to our amateur constructors, and we hope, that with all the co-operation you can give, this happy relation

will persist. Hence, our urgent request: *When in doubt, go and consult your Inspector (or us) before taking decisions in respect of materials and ready-made materials that you intend using.* It will be greatly appreciated, and you will derive the greatest benefit from it.

RESEARCH SUPPLEMENT

Contributed by A. R. Weyl, Chairman, Research Sub-Committee

WOODEN AEROPLANE PARTS AND GLUING IN DRY CLIMATES

A member living in Denver, Transvaal, South Africa, Mr. Archibald C. T. Isaac, who is rather interested in building his own aeroplane (it will be his seventh), has written to say that he is rather concerned about wooden aircraft parts and gluings in respect of the very dry climate. Spruce is unobtainable, and he had not yet discovered any substitute timbers which are practical for aircraft components. Oregon pine, however, is available. He further states that the dry climate is very rough on glued joints. Though gliding people seem to get away with it, a heavier twin-engined aeroplane has come to grief in the air, because of structural failure, though the hangar floor had been kept flooded, in order to retain moisture (the particular aircraft had been built in Britain and casein glue had been used).

We have advised Mr. Isaac to make enquiries of the S.A. Authorities who might have information on substitute timber and on the reliability of gluings for ultra-light aeroplanes. Moreover, we have submitted the enquiry to the Forest Products Research Laboratory, at Princes Risborough, Bucks, the world-famous authority on all matters concerning wood and gluings, with a request for expert advice. They have very kindly responded to our request and have sent

us the following reply which will be of general interest to all our Groups and individual Members (a copy of this reply is being forwarded to the Air Registration Board with a request for additional guidance, and should further information on the matter be forthcoming, it will be included in a subsequent issue of our "Bulletin") :—

FOREST PRODUCTS RESEARCH LABORATORY

Although during the war, and to some extent since, we have been concerned in the testing of timbers and glues for aeroplane work on behalf of the Ministry of Aircraft Production, we have no experience in the details of aeroplane design and on the application of the information given below we feel that the Air Registration Board would be best to advise you, as that body should be in touch with current practice.

On the question of substitute timber, the use of Douglas fir (Oregon Pine) for spruce is covered by Ministry of Aircraft Production specification D.T.D. 469.

On the question of gluing, our information is that the deterioration of planes made in this country and used in Africa has been due primarily to shrinkage of the wood rather than to failure of the glue. Wood conditioned to the damper climate of this country has lost moisture in the drier conditions of South Africa and elsewhere and this has caused serious shrinkage. If the wood is dried to a moisture content appropriate to the local conditions we feel that no difficulty will arise, and in a dry climate a casein glue should be satisfactory, but resin glue gives an extra margin in case of accidental wetting. Of the resin glues the phenolics and resorcinol are the most durable, but the urea resins also give a good performance and are approved by the Air Ministry.

BOOK REVIEW

I Flew with the Birds, by Harald Penrose. Country Life, 18s.

"One calm and lovely evening I had soared 2,000 ft. above the Yorkshire Moors in my little sailplane. Wherever fancy beckoned I could float like thistle-down across the smoothly-rising air. Presently the sky slowly crimsoned, and the sun sank in a fiery ball. The moors became misty purple in the evening light, and then dim and brooding, waiting for the stars.

"Reluctantly I prepared to glide down to where the crew waited with the trailer—but, even as I turned the sailplane a lone swift swept across my path. On still wings, stretched to crescent points, it soared above the same great air bubble as my machine. For a few moments I held parallel course with the bird, not fifty yards away. Southwards and southwards it flew, rising slowly—a hundred feet and yet another hundred, until it vanished above, still leading southward in the gloaming. . . .

"That night I lay in my tent, watching the stars twinkle through the open flap. Where was the swift, I wondered: was he still soaring southward and

onwards, screaming his wild *svi, svi* through the moonlit space of night?"

The above is a typical excerpt from Harald Penrose's book, a lovely thing full of bird clues on thermal hunting hidden among descriptions of aerial ornithological research. Did you know that a marked lap-wing had been found in U.S.A. a few months later? Penrose is searching for a clue to the mystery of how small birds migrate so far across the sea and the above passage concerns such a speculation. Lawrence Wright recounts that one day in the "Minimoa" he joined a group of soaring kestrels and suddenly lost them. On descending he was informed that they had tailed off in line astern behind him and remained in the same thermal. The same thing seems to have occurred to the author who related many instances of losing his birdly soaring companions.

This book will find its way into all soaring libraries, but it is a book worth possessing for its own sake and not merely for the thermal and bird lore with which it is filled.

V.E.

ULTRA LIGHT AIRCRAFT ASSOCIATION

Bulletin, September, 1949

ONE of the more noticeable features in industry of recent years is the facile ease with which many big industrialists lay the blame for their companies' frustrations, delays, disappointments and last, but not least, financial losses, fairly and squarely on the shoulders of the Government and the various Ministries concerned. No doubt in many cases industrialists do have a measure of justification for their complaints, and blaming the Government was always a popular pastime whatever party happens to be in power. In passing, we often wonder how many of our weaker brethren see in official ineptitude a heaven-sent excuse for their own lack of enterprise and efficiency.

It is not, however, our purpose to explore the rights and wrongs of such a pastime, but rather to point out that, in spite of what many people and some sections of the press would have us believe to the contrary, the Government and its various Ministries have by no means a monopoly in red tape and frustration, and that autocracy can be every bit as bad as unenlightened bureaucracy.

We refer in particular to the case of the Community Flying Club, late of Woodley and now at Aldermaston. Most people in the flying world know that the Community Flying Club is one of the pioneer clubs of the communal type, in which every member is a part owner of the aircraft and does his or her share of the running of the Club and the maintenance of its aircraft on a purely voluntary basis, in order to cut flying costs to a minimum. It is fair to say that over a period of eighteen months to two years, the Club has become fairly established, had acquired a second aircraft, and was well on the way to proving that, despite what our elders and betters have said to the contrary, the communal type of club could be made to work successfully.

It was, therefore, a distinct shock to the Club to be told that they would have to quit Woodley at a time when they were contemplating expansion. Various reasons were given for this action by the landlords, and the objections—some technical and some trivial—were met, and, sometimes with the aid of M.C.A. but mostly by their own spirit and enterprise, were overcome. (As a point of interest one of the objections was that it was undesirable for a flying Club to operate from the same airfield as a Reserve Flying School! No doubt this will cause some quiet amusement among other Clubs and Reserve Flying Schools similarly situated.)

As, in due course, all the objections of the landlords were satisfied, the Club were told that they would be allowed to remain providing that they could obtain sanction from the head of the main organisation established at Woodley. Now knowing the head of this concern to be a famous pioneer of the aircraft industry whose ready and witty tongue had unleashed many powerful broadsides on behalf of enterprise against ministerial red tape and muddle, both the Club and the Association had high hopes of such sanction being given.

It therefore came as a great shock that after many weeks of negotiation, and with Ministerial help at very high level, the answer was a firm uncompromising "No."

In face of this attitude, the Ministry of Civil Aviation rose, once again, to the occasion and provided accommodation for the Club at Aldermaston, from where they are now operating. Truly the boot has been on the other foot in this instance—Ministerial enterprise, private red tape. The pioneers of the new type of Flying Club deserve better treatment from a pioneer of yesterday.

In the Bull's Eye, by Maurice Imray

As one of the judges for the bombing competition at Skegness, I was installed on the airfield tender—one of those powerful four-wheel drive ex-Army trucks, and sent out to circle the centre of the airfield and await the descent of distemper-filled missiles from the competing aircraft.

The first bombs were from Mr. Macdonald in "Piper Cub" G-AKAA, bomb-aimer, Mr. T. R. Swift, and proved to be the nearest, falling right in the path of the truck about 2 feet ahead of us. After this virtual hit, our driver evolved a technique which consisted of circling fast until the aircraft started its bombing run. Then he would head directly for the oncoming aircraft—quite shaking for the judges, who stood on the seats with their heads through the sliding roof, hanging on like grim death, and watching the truck and aircraft approaching each other at a combined speed of possibly 120 m.p.h. or more. As the aircraft pulled out and released his bombs, our driver took avoiding action by swerving hard to port or starboard. Very nice for the spectators but a little rough on the judges. However, we survived the bumps of the airfield and the hazards of avoiding action to record a five-yard miss by G/Capt. Mole in the "Bolfair" and a seven- to ten-yard miss by Cole in the "Comper Swift." This latter aircraft came in very fast in comparison with the others and on one run, came in almost low enough to make us duck, although a minimum height of 50 feet was stipulated. The Zaunkoenig last but not least seemed so high on his runs that we accused the pilot of misreading his metric calibrated instruments and flying at 50 metres! (That was not so, I was reading the oil pressure gauge, and flying at 20 kilograms per square centimetre! Chairman, P.R. Sub-Committee.)

However, we retired unscathed from the battle, but very shaken, and firmly convinced that there is quite a lot more future in being a bomb-aimer than a target!

A Regrettable Resignation

We very much regret to have to record the resignation of F/O I. G. Imray, the former Chairman of the Operations Sub-Committee, who is leaving the Executive Committee through pressure of work and lack of co-operation from our members. He will, however, carry on in an active flying capacity with the Experimental Group at Elstree. On behalf of the Executive Committee and all U.L.A.A. members,

the *Bulletin* would like to thank Mr. Imray for the hard and capable work he has put into Ops. work during the past few years. His Skegness Rally was a triumphant *ave, atque vale*.

We would like volunteers from members, preferably pilots, for his successor, and names and qualifications should be sent to the Act. Hon. Secretary as soon as possible.

Committee Member Required

A deputy is required for the Chairman of the Construction Sub-Committee to advise intending amateur constructors and to keep in touch with the various projects in hand. We need monthly reports for the *Bulletin* giving information on new projects and details of progress, the difficulties encountered and the ways and means of overcoming them. We want the *Bulletin* to become a central pool of information on this important aspect of our movement. Applications should be sent to the Act. Hon. Secretary as soon as possible.

GROUP NEWS

Notable Newcomers

We are proud to welcome Wing-Commander J. A. Kent, D.F.C., A.F.C., Chief Test Pilot at the Royal Aircraft Establishment, Farnborough, as an Individual Member of the Association, together with his colleague, Flt-Lt. G. Banner, D.F.C. There is a possibility of the formation of a Group at this illustrious Establishment, and Wing-Commander Kent and Flt-Lt. Banner have already taken over the disassembled "Comper Swift," belonging to the Association, which has been housed at Elstree. After re-construction, they hope to enter the "Comper" for the next King's Cup race. This will be the third "Swift" flying in this country, now that Ron Clear's aircraft is airworthy.

South Hants Ultra Light Air Club

The Committee of S.H.U.L.A.C. had hoped to put on a full-scale air display this year in conjunction with the A.T.C. Welfare Committee and a few meetings were held with Air Commodore Croke and members of his committee, but in view of the heavy cost of compulsory insurance, advertising, etc., the Club could not raise the sum of £200 necessary to launch this display so the scheme was finally abandoned.

It was therefore decided to organize an ultra-light Rally on similar lines to the one held in September of last year, and as everyone present fully agreed that it was a most successful event. The Rally was held at Somerford Airfield, Christchurch, on Saturday, September 3rd.

In addition to the Club's own "Auster" and the gliders of 89 Gliding School, there were 8 other visiting aircraft present and an almost full muster of S.H.U.L.A.C. Members and their friends. The first arrival was Mr. Rex Downes and Mr. McKinlay with the Airways Aero Club's "Piper Cub," to be closely followed by the "Zaunkoenig" flown down from Elstree by Mr. Peter Gooch in just under 2 hours. Members were most impressed at the approach of this machine and many expressions of "I don't believe it" were heard. One Member referred to it as a "motor-actuated parachute." Next to arrive

was the Elstree "Auster," piloted by Miss Jean Bird and bringing Mr. Armstrong and another member of the Experimental Group, Mr. Ron Clear, Test Pilot at Airspeed Ltd., who, during the morning had been busily engaged in flying the "Ambassador" airliner, made a spectacular arrival from behind the trees with his newly re-built "Comper Swift." This machine was the centre of admiration and Mr. Clear is to be congratulated on the fine job he has made of rebuilding the aircraft. G/Capt. E. L. Mole and passenger arrived in the "Topsy Belfair" and later arrivals were an "Auster" with Mr. Thompson and passenger from Portsmouth Aero Club, a "Tiger Moth" from Elstree and a "Miles Hawk" from Airways Aero Club.

Naturally, the greatest interest centred around the "Zaunkoenig" and after a short flight by Eddie Livermore (S.H.U.L.A.C.'s C.F.I.), about a dozen or so other members of the Club were given the opportunity of flying this most interesting machine. The general impression was one of complete amazement at the machine's performance and many asked the question, "Please may we keep it here?"

Ron Clear gave a most polished display of aerobatics with his "Comper," which, by the way, was originally owned by Mr. George Errington, Airspeed's Chief Test Pilot. The "Belfair" was much admired by everyone and G/Capt. Mole demonstrated the machine's ability to take off and land in the shortest-of-short spaces and also performed a series of loops. A further demonstration of aerobatics was given by Rex Downes in the Airways Aero Club's "Hawk" and throughout the whole of the day training flights continued on the S.H.U.L.A.C. "Auster" and the gliders of 89 Gliding School. Gliding demonstrations were given on "Kirby Cadets" and a "Kit II" sailplane by the C/O Flt./Lt. R. Hayter and the Gliding School Instructors.

Sunday morning gave more members a chance to fly the "Zaunkoenig" until 13.00 hours, when we reluctantly had to say "Cheerio" to Peter Gooch and the little German machine. Shortly afterwards we said "Au Revoir" to G/Capt. Mole and his passenger with the "Belfair," and so ended a most enjoyable weekend, which all Members sincerely hope will be followed by many more.

The Committee would like to take this opportunity on behalf of all Members, of expressing their appreciation for the help given by G/Capt. Mole, Mr. Gooch and all the other visitors; their visit certainly assured us of success once again.

Community Flying Club

As stated in our leader, the club is now established at Aldermaston. The good work of one department of M.C.A. in establishing them there was almost undone as we understand that the Ministry assessors originally fixed a rent of over £600 per annum for hangarage of their two aircraft. However, the Ministry once again helped the Club out, and the rent has now been reduced to £70 per annum, for sufficient cubic feet to house three small aircraft. The Club would welcome applications from private owners who wish to house one or two aircraft in their hangar, and thus reduce individual expenses.

On Sunday, September 18th, John Fricker, Public

Relations Officer of the U.L.A.A. brought the "Zaunkoenig" over to Aldermaston for several qualified members to fly. Activities were slightly held up, but about half-a-dozen members went off successfully, and all enjoyed the unusual experience. There had been a last minute scramble for one or two people to get in their five hours solo before Sunday afternoon, but they managed it.

DESIGN SUPPLEMENT

Contributed by G/Capt. E. L. Mole, Chairman, Design Sub-Committee
Slingsby "Motor-Tutor"

The official flight trials of the "Motor-Tutor" have now been successfully completed, and the issue of its C. of A. is only awaiting the necessary paper work. Meanwhile, Mr. J. W. Leach, Slingsby's chief engineer and test pilot, has brought the first production aircraft south for a demonstration tour from the works at Kirbymoorside in Yorkshire. As reported elsewhere in this *Bulletin*, he attended our rally at Skegness on the weekend of the 10th/11th September and gave a convincing demonstration of the aircraft there. Since then he has continued on a tour of aircraft firms, flying clubs and U.L.A.A. Groups who have expressed interest to see the "Motor-Tutor" and to try it out.

Recently he appeared at Farnborough where the writer, and a number of R.A.E. pilots were able to try out the machine. The writer was impressed with its ease of handling, its short take-off run and its remarkable angle of climb. Its stall seemed viceless, just a gentle sink at about 20 knots indicated air speed. The open cockpit was large (though rather draughty) and the view was excellent despite the fact that the pilot sits under the wing. The 36 h.p. flat twin Aeronca J.A.P. engine was quiet and surprisingly smooth; Slingsby has certainly solved the mounting problem, and we would recommend amateur constructors wishing to fit these engines to study his neat rubber-mounted installation.

The writer experienced at first an instinctive reluctance to glide in to land at the recommended slow speed of 30-35 knots, with the result that he came in too fast and floated a long way before touching down. This could be overcome by the fitting of spoilers, but the reluctance quickly disappeared with practice, and in any case it would not be felt by pilots used to glider flying. The aircraft naturally has glider handling characteristics and will undoubtedly serve a most useful purpose as the link between glider flying and powered aircraft. Indeed, it combines the practical utility of a powered aircraft with the joys of soaring—which can be indulged in to a reasonable degree with the throttle closed.

Tipsy "Belfair"

Thanks to the generosity of Mr. E. O. Tips, head of Avions Topsy in Belgium and designer and constructor of Topsy aircraft, the writer has been lent the Topsy "Belfair" for a short period. This attractive little aircraft is the post-war version of the well-known Topsy "B" two-seater, and is in most respects similar to it—the only major difference being the provision of a closed cockpit, the canopy of which fairs directly on to the fuselage behind.

The "Belfair" is really an education in what can be done with an ultra-light two-seater. It cruises easily at 100 m.p.h. using 3 gallons (or rather less) fuel per hour, and it has remarkable take-off and landing properties making it essentially practicable for small field operation. At reduced load (880 lb. all-up weight) its C. of A. permits full aerobatics. Its controls have the distinctive Topsy feel about them, being delightfully light and crisp, and well harmonised. The 62 h.p. Walter Mikron engine is smooth and an easy starter. It remains completely free of oil leaks and seems to require little or no maintenance.

For the benefit of those who do not know the aircraft, it is an extremely smart-looking low-wing monoplane, with a closed cockpit and side-by-side seating (the right-hand seat being staggered slightly to the rear of the left-hand seat to provide adequate elbow room without unnecessary width of fuselage). A single, centrally-placed, control column is used, but dual rudder pedals are provided. There is ample luggage accommodation in a locker behind the seats. The airframe structure is of wood with ply and fabric covering. The semi-elliptical wing is constructed in one piece and bolted on below the fuselage. Plain flaps with two-position selection are fitted. A conventional undercarriage with tail wheel is used, the main legs being short and spatted, with shock absorption by rubber in compression. Extremely simple and effective brakes are provided as used successfully on the Fairey "Junior." Brief specification and performance details are given below.

The "Belfair" is certainly an ideal aircraft for the private owner who wants a good performance with very economical operation, but its design (though simple in detail) is rather more refined than we would consider necessary for our proposed basic two-seater trainer, and its cost is consequently rather high (about £1,000). The writer would be pleased to visit any club or group wishing to have a demonstration of this interesting ultra-light two-seater.

SPECIFICATION

Span	32 ft.
Length	22 ft.
Wing area	129 sq. ft.
Empty weight	611 lb.
Fuel (12 galls.)	87 ..
Oil (1½ galls.)	15 ..
Crew (two)	340 ..
Luggage	50 ..
All-up weight	1103 ..
Wing loading	8½ lb./sq.ft.
Power loading	18 lb./b.h.p.

PERFORMANCE

(62 h.p. Walter Mikron II engine)

Max. speed	115 m.p.h.
Cruising speed	100 m.p.h.
Stalling speed	37 m.p.h.
Take-off run (approx)	100 yards
Initial rate of climb	600 ft./min.
Cruising range (still air)	400 miles
Endurance	4 hours

NEWS FROM THE CLUBS

MID-AIR COLLISION AT DUNSTABLE

Saturday, September 17th, 1949

The findings of the flying committee's investigations into the causes of this accident are as follows:—

1. The collision was due to the lack of "collision consciousness" of both pilots, in that the "T21" pilot turned steeply knowing that another a/c was somewhere behind him, while the other pilot was unnecessarily close to the "T21" in view of the latter's lack of upward and rearward vision.

2. The attention of all pilots is drawn to the fact that the field of vision from the "T21" is inferior to that from other club aircraft, and special regard should be given to this.

3. A Friend's life would be rather a high price to pay for your success as a thermal catcher.

IN THE INTERESTS OF SAFETY—PLEASE CONFORM TO THESE RULES—Published to refresh the memory of the few, for the benefit of all.

**NOTICE TO SOARING PILOTS
The Ridge Rules and Flying Discipline**

1. High Performance sailplanes will give way to Primary, Secondary, Intermediate and Two-seater gliders.

2. Of two gliders approaching to land, the higher will give way to the lower, and will delay its descent approach within reasonable limits of safety.

3. When meeting other aircraft at or about the same level, pilots will keep to the right and at a distance of not less than three spans.

4. A glider overtaking whilst ridge soaring at or near the same level must pass on the down wind side at a safe distance.

5. Notwithstanding the foregoing rules, a Pilot must not unduly force another out of the hill lift.

6. Before circling or turning especially when ridge soaring, Pilots must look out for other aircraft.

7. Steep turns near the ground, aerobatics below 2,000 ft. and

"shooting up" in any form, whether club aircraft or privately owned aircraft operating under club arrangements, are forbidden.

8. Gliders must not be flown free, winch launched, or aerotowed above the respective speeds permitted for each type, nor may aerobatics be performed in any glider not approved therefor.

9. In the early stages of the approach to land the Pilot must watch movements on the landing ground noting especially whether a take-off is imminent.

10. Although glider pilots are encouraged to land near the take-off point, such a landing must never be made at the risk of undershooting or collision.

11. A landing run must never end close to and towards other aircraft on the ground, buildings or other obstructions.

12. For breaches of flying discipline. The Chief Instructor is empowered to relegate any pilot to a less advanced type of glider or launch, or to ground him for a stated period or until after dual instruction.

13. The acting instructor or Day organiser is responsible for reporting any serious breaches of flying discipline to the chief instructor, either directly or via the flying record sheet.

14. When ridge soaring pilots must always turn away from the hill.

15. Aircraft must not be flown above or below other aircraft with less than 200 ft. clearance.

The foregoing rules will be strictly adhered to at all times. All pilots will sign the C.F.I.'s book to say that they have read and understood, as and when they qualify to soar. Any breach will involve grounding or other disciplinary action as the case may be.

**BRISTOL GLIDING CLUB
October 1949**

What must surely be the best thermal soaring season since the game was invented showed no signs of slackening, though only eleven weeks remain till Christmas. October has shown a "C" flight in the "Tutor" by N. W. Peel,

a flight of over an hour in the "Olympia," and one of half-an-hour in the two-seater. However, with the approach of winter our thoughts turn more towards the hills, and on the 15th October the presence of a strong S.S.W. wind the "Olympia," a tug complete with pilot and a Silver "C" duration aspirant in the form of C. C. Dorman, led to the execution of "Operation Mendip." The somewhat reluctant pilot was strapped into the "Olympia," towed eight miles due south from Lulsgate and heartlessly cast adrift over the 800-feet slope of the Mendips between Cheddar and Wells. Five hours ten minutes later, having landed at the A.T.C. soaring site on the top of the ridge, he was being mercilessly bumped before once again being hitched on to the "Auster" and towed back to Lulsgate.

At our own hill soaring site at Roundway, near Devizes, the wind has been less co-operative and the longest flight so far has been a 3-minute winch circuit. However, working parties have now made the barn secure for the storage of aircraft and the cottages habitable for week-end parties. The Club "Grunau," the mobile winch, a "Beaverette" and the syndicate-owned "Olympia" "Bluebird" have been taken over in the hope of doing some soaring before the winter mud puts an end to operations.

**THE YORKSHIRE GLIDING CLUB
Notes of Activities 1949 (March to September)**

These notes have not appeared since March, although their absence must not be taken as a token of complete cessation of activity. It has not been a good summer up here due to weather, distance of members from site, and various other difficulties not so far overcome, but many of them are coming a little nearer to solution. The truth is that the member who writes these notes has just fallen down on the job, and our other member who can write, has fractured his Biro. Well, behold the

"fallen" one—up! . . . (as far as his knees!)

Flying. On March 10th and 20th some soaring on the hill and serious practising on the site by the R.E. Club; 3½ hours' soaring was done. In April, the club operated on four days, the 10th, 19th, 20th and one other—mainly S.W. to N.W. winds on those occasions, but little in the way of thermal activity. On the 20th, an extremely rough day, Sharpe rocked around on his own in the "Kite Mk II" for 2 hours plus, popping in and out of cloud base at 1,500 feet, and seemed to be set for 5 hours—until he landed to keep a forgotten appointment. (Needs some planning at high level here).

Twelve and a half hours for the month; Barker, Pick, Hartness, Alderson, Maufe, Hinchliffe, Rickman and Lion having flown, with a visit from Maj. Sprankling (R.E. Club)—a former "regular" now posted to the South. May 8th was a "patchy" day with N.W. wind varying in strength—3 hours 20 minutes flying. May 29th, in rather similar conditions Maufe, Sharpe and Purser (R.E. Club) turned up and did 1 hour 20 minutes between them. On 5th and 6th of June we had two quite decent days—9 hours 40 minutes on the former and 4 hours 25 minutes on the latter. The usual team operated with the addition of Slingsby, Lyddard, Coulson and Burningham (the last mentioned is now overseas again, and we believe he has visited the Ottawa Gliding Club recently). On June 12th Ritchie Pick had a solitary 25 minutes in the "Kite II." July 12th, the new winch arrived, and was the object of general admiration; it is one of the Jack Rice two-wheel trailer efforts, has a nice pay-on gear, and is very handy to manhandle by a couple of chaps. It is easy to tow behind a "Beaver," after one has been used to heaving several tons of "Wild" winch chassis about in the past! The weather on this day and next was not soarable, but some circuits for winch testing were done. On July 30th some advanced training done, and two R.E. members turned up; 50 minutes' flying in all. The 31st brought quite a useful S.W. wind and 8 hours 15 minutes' flying was done, Peel, Sharpe, Barker, Hardie (R.E. Club),

Pick and Dr. De Redder all flew, and Record took his "C" test; (care will have to be taken with his name, one can see!). On August 1st, De Redder flew the "Petrel"—the first time many had seen it—and it brought back pleasant memories with its clear dope and varnish finish, reminiscent of pre-war days. 2 hours 30 minutes for the day included another flight by Record to polish his new "C." On Aug. 6th, the weather conditions are not shown in the book, but as there were 10 hours' flying that day, with heights of 3,100 feet (Lion in "Tutor") and 2,800 feet (Bill Record (same bloke!) in "Tutor"), the weather calls for little comment. Barker, Sharpe, Hardie, Alderson, Pick and De Redder also flew. On Aug. 13th again, the weather was not logged, but out of 6 hours 15 minutes' soaring was a flight by De Redder to Sherburn (E. Yorks.), not quite his 50 kilometres, bad luck again for him. Record was able to get 4,000 feet in Tutor, Sharpe 2,300 feet in "T.21," Lion, Alderson and Barker also flew. On the 14th there were 11 hours of flying, which included Lion's five-hour duration towards his Silver "C," and other flights by De Redder, Hardie, Rickman, Peel, W. Sharpe and Record. On Sept. 4th, John Neilan visited, and the "Kite II" was tested after a small repair to one wing. O'Grady flew the "Petrel," but conditions provided only some extended circuits in local thermal, and a little hill lift on the White Horse slope (S.S.E.). Sept. 10th was a similar day to the last mentioned—2 hours 5 minutes for the two days. The above report covers 79 hours of soaring, which is not in itself an impressive total, but does show that the old firm still functions, if only in a modest way.

General. Due to excellent work on the part of Donald Sharpe, the bar opened on 18th Sept. and went off to a good start due to various members and friends bringing bottles of this and that to float the stock, as it were! The Clubhouse is becoming quite a fair spot again, but there is still plenty of work to be done. Our latest venture is a "primary," which is to be delivered in the near future, and in which we hope to make a few cautious experiments in

primary training. We notice that this was mentioned in October *Sailplane*, but the report was inaccurate, as it mentioned "Cadets" and "Tutors" were to be used for the job. This year has been a notable one, the outstanding occurrence being the apparent success of the campaign to steer unwelcome legislation away from the sport. There is no doubt that this success—and we hope it is one—could not have been achieved without the effort of most of us, and it is to be hoped that all will be vigilant to ensure that the splendid record of the gliding fraternity in managing its own house, is maintained so that it never becomes necessary to set up machinery at public expense to see that we do manage it! The only remaining item of news we intend to record is that the A.T.C. detached line at Sutton Bank has closed down.

G.A.H.

SOARING ASSOCIATION OF CANADA

Club News

Calgary Activities

Norman Bruce reports that the Red Deer glider group folded in June when he moved from Red Deer to Calgary.

However, shortly after arrival in Calgary, Norman joined forces with a group at 10 Repair Depot, R.C.A.F., now called the "Tenardee" Gliding Club. This Club has taken over the "Schweizer," formerly at Red Deer, and repairs are almost completed on it. The "Robin" which, it is believed, was originally at Winnipeg, is now also being repaired by this group, whose C.O., F/Lt. Syme, has afforded many facilities in a most co-operative spirit. By now, the "Robin" should be flying.

Norm reports that there is evidence of strong consistent thermal activity less than a mile off the runway and they are looking forward to some sustained flights.

The S.A.C. would be grateful, indeed if this group, which numbers some 40 strong, would be good enough to keep in touch with us, so that we may report their progress. The West has always been looked upon as ideal soaring country and we want to hear more of it.

Briefs

November

Due to lack of space, the following are fired at you briefly:

Gordon Henderson, legal friend of the S.A.C. was elected a Vice-President of F.A.I. at recent meeting in Cleveland. Canadair Soaring Club (Montreal) shop has been cleared for repair of "MU-13," last of the N.R.C. German Gliders. Stefan Brochocki in charge.

New Members: William P. Stack, 108 West 7th Ave.; Frank Dashwood, 3865 Glydesdale St. (New Westminster), J. W. Eshom and N. E. Evoy, both of 7009 Main St.; Alex. P. McMullen, 1510 Charles St.; John Owen, 2248, 4th Ave. W., all enlisted by Gulf Gliding Club, Vancouver. Welcome indeed, and good work Gulf Club!

GUTERSLOH GLIDING CLUB

On the 1st October, we of Gutersloh reluctantly admitted to ourselves that the season was at an end. For the next six months our only means of support will be the elusive S.W. at Oerlinghausen, which rarely obliges on our available flying days.

Looking back over the period 1st January to 1st October, we think the months have been put to good use. In 125 flying days 7,000 launches were carried out, giving a total of 630 hours flying time. 35 "A's," 30 "B's," 19 "C's" and 3 Silver "C's" were gained. 14 flights during which 1,000 metres and more were gained, 7 flights of more than 5 hours and 28 cross country's. All this was done entirely in thermal conditions as we have no hill available for soaring during the summer months. On the debit side we recorded five prangs, or one prang per 1,400 launches. This is quite an acceptable accident rate as it includes the "prime" prangs, some of which are almost inevitable.

Our flying, which is quite often interrupted by Service flying is carried out on Wednesday afternoons and weekends, using two winches for sailplanes and dual aircraft, and one winch on a separate strip for the beginners and their beloved "prime."

The members of the club consist of 90% non-flying personnel, and on top of their normal duties, which often extend beyond recognised union hours, most of them always

have time to carry out maintenance work on vehicles and aircraft.

We are particularly grateful to Cp. "Paddy" Cronan, who, unfortunately, has now left us. His skill as a glider carpenter was invaluable and was only equalled by his energy and keenness. The club which has Paddy for a member will be lucky indeed.

The work carried out by members enabled us to completely overhaul our "Minimoa," and very nice she looks too, the more advanced members can think and talk of nothing else.

During the better months it was not an unusual sight to see ten sailplanes airborne, and the advanced site winch-driver "zizzing" for 30-minute stretches. One of the best flights of the season was made by AC. Jesty, who gained the distance leg of the Silver badge by soaring in front of a thunderstorm for 60 miles. The flight was only terminated by the proximity of the Russian zone. We are also happy to announce that the club has its first operational woman pilot, Mrs. Carson. Unfortunately she graduated to "Grunau" gravity launches too late to gain her "C," although she only just missed it by a flight of 12 minutes. Our "C" requirement is a flight of 15 minutes minimum.

With this successful summer behind us we are now looking forward to the winter season. Our programme will be to major inspect our sailplanes and vehicles and also carry out ridge soaring at Oerlinghausen, provided the necessary S.W. wind is there.

The social side of the club will also be stepped up, commencing with a club evening every Monday when lectures and discussions will take place. It is also hoped to include a percentage of Link Trainer flying to prepare a 1950 contest team. Sometime in December we aim to hold a dance which will, we hope, help to swell our funds.

Our fleet of sailplanes will be increased this winter by the addition of a "Kranich 1," converted to single seater for the purpose of Cu. Nimb. flying. It will be equipped with electrical instruments, oxygen, de-icers and radio. This machine added to our present fleet of "Grunau's," "Berliner," "Bussard," "Minimoa,"

"Olympia," "Wiehe" and two-seater "Kranich" will offer our members a very comprehensive selection of high performance sailplanes for thermal flying in 1950.

Our thanks to the club President, Group/Captain Murray who, although the Station Commander, still devotes his spare time to the betterment of the club and gliding in Germany. Thanks also to F/Lt. Carson, Sgt. Campion and last but not least, Mrs. Carson, the club Treasurer, time-keeper, lemonade vendor, log book seller and tea maker.

For those ex-members of Gutersloh G.C. in the U.K. who long for the feel of a 1 or 2 up—a little advance "gen"—plans are under discussion for the provision of a summer holiday camp in Germany. As soon as more details and dates, etc., are decided upon the full "gen" will appear in the column. And now Gutersloh—GO TO IT.

SCOTTISH GLIDING UNION

Autumn has settled over Balado, with an almost uninterrupted series of calm, placid week-ends where the changing hues of the Ochils almost compensated for the absence of anything remotely resembling "lift." But with an intensive training programme still on hand, the airfield presented a scene which oddly contrasted with the tranquility of the season. The launching rate was in many cases more than in the longer days of summer. For example on the week-end of Oct. 8th, 9th, 69 launches were achieved with all the precision of a well-tuned machine; a fortnight previous to this we fitted in a party of Air Rangers who returned to complete their interrupted summer course. Seven girls arrived, and by Sunday afternoon were collecting "A's" with great regularity. Actually, it was no easy matter to qualify for their certificates with the air so calm that to call the "S.G." a glider under such circumstances was somewhat unreal. But four of them did it, and can rightly claim to be the first Air Rangers in Scotland to qualify as certificated pilots. Plaudits then to Rangers Marjorie Brodie, Flo' Lowe, Mary Sangster and Elizabeth Berry. Praise too, must be given to three Scottish pilots and gentlemen, Hendry, Fyfe, and Aitken, who elected to do their circuits at

7 o'clock in the morning so that the girls' gliding would not be interrupted. They never actually got airborne; officially, at any rate, the rain came down in "buckets." Whilst on the subject of the "S.G." it should be noted that it is a glutton for punishment; one young lady managed to land the machine on the top of a stone wall. The wall was damaged, but not even the skid of the "S.G." was scratched . . . the young lady, in the terminology of "1984," is now an Unperson.

On Monday afternoon, Oct. 3rd, Alex Fyfe, one of our indispensable engineers managed to get the height and endurance legs of his Silver "C." Considering that this was his first attempt in the matter and that his machine was a mere "Cadet," his was no mean performance. Since there were only two people to help the launch, he was pushed with a great deal of brute strength over the hillside, where he eventually gained enough momentum to bump himself into the air. The 45 m.p.h. wind swept him upwards at an astonishing rate of climb, and having probed the length of the ridge, he found that the westerly wind hitting the northern edge of Bishophill was producing a standing wave of dreamlike quality. Its effect was mitigated however, by occasional sweeps of cloud which caused him to lose height and position on several occasions. On two occasions he made the stipulated height of 5,000 feet (or 3,600 feet above the site) and considers that if he had known more about these matters he would probably have gained considerably more height. As the wave seemed to fade, he cast around and found a younger brother off the shores of Loch Leven, and later again, he found more lift off the hill. And having completed his five hours, he said, as so many others have said, how intensely interesting the whole thing was.

The most interesting development phase at the moment is the continuing auto-towing tests. Quite encouraging heights were obtained by towing a "Cadet" in still air with our venerable 1926 Austin and the tests were continued with a variety of private cars. The most successful day was when we were lucky enough to have a fairly

strong wind in addition to a borrowed ex-W.D. V-8 truck as the tug machine. With this combination 1,000-foot launches were obtained on the "Cadet" and "Eon Baby," and on one launch David Hendry kited the last 200 feet with the truck at a standstill. It was fairly obvious that with a reasonable wind speed very little is needed from the towing vehicle. The wire used at the moment, so far with no breaks, is about 12-gauge virgin wire, and costs only £2 6s. for 4,500 feet. Any enquiries about this wire should be made to secretary Hendry, its discoverer.

The other project at Balado is to make flying pay, and for this month we have just got our noses in front, and the result is, as with Micawber, Happiness.

THE VICTORIAN MOTORLESS FLIGHT GROUP

Winter Work Diary

Weather, gremlins and the like permitting, next month's heading will read: FLYING DIARY. In the meantime, highlights of our recent efforts have been. . . . The roof-painters finishing up with silver shoes and silver hands, needing only silver stars in their hair to be sold as Something for the Christmas Tree. The crew lining cracks in the inside walls with battens, can always be relied on for light comedy:

WORKER INSIDE: "Right, have you got the dolly in place?"

WORKER OUTSIDE: "Where?"

"Here!" (bang, bang).

"Here?" (bang)

"No, here!" (BANG)

"WHERE?"

"HERE!!!" (CRASH, BANG)

"Oh, here?" (Tap, tap)

"No" — — ? ? ! ! HERE ! !

(B A N G)

One day some Beaufort Club members arrived unheralded but for thirty seconds warning. A furious scurry resulted; one member was seen leaping out of the flying-suit he had "borrowed" and hurling it back on its nail, while another member vaulted into the air and reached down the swinging pressure lamp, also "borrowed," to replace it frantically in its box; others spun guiltily in circles trying to remember what else had been "borrowed."

A propos the flying suit:—

DON (Beaufort): "Anybody seen

a spare flying-suit around?"

CHORUS (V.M.F.G.): "Spare flying suit . . . no, Don."

Don wanders around, vaguely suspicious, then finds his flying-suit hanging on the wall.

DON (apologetically): "Oh, here it is."

DON (snarling slightly): "Eh, what's this WET WHITE PAINT on it?"

CHORUS (V.M.F.G.) (weakly): "Wet white paint. . . ."

DON: "Yeah, wet white paint. . . ."

GORDON (V.M.F.G.) (defensively): "Well you're lucky your tobacco pouch is still there and still full of tobacco."

CHORUS, V.M.F.G. SMOKERS: "WHAT!!!! Why didn't you tell us he had tobacco there?"

A propos the pressure lamp:—

RON (V.M.F.G.): "Where do you buy spare mantles for pressure lamps like yours, Doug?"

DOUG (Beaufort): "Huh? What, did you buy a pressure lamp after all?"

RON (gently): "No."

DOUG: "What do you want it for then?"

RON (gently): "I thought I'd buy one for you."

DOUG: "Huh? But I've got a spare mantle."

RON (gently): "No you haven't, Doug."

Coogee fuselage has been repainted and a spare skid made—always a good insurance against breaking the skid; the split ply in the keel has been replaced, much of it in German by Steve and Oskar. The first time Oskar saw Coogee, he spoke, vigorously, in his own language, for about three minutes solid. A little anxiously, we asked Steve to interpret for us. Steve looked embarrassed. "Go on, Steve, we can take it." "Well," said Steve, "he just said that he doesn't think Coogee is quite as good as his Moswey." As Oskar paints, hammers, carries timber, paints, hammers, carries timber again, he sometimes sings a doleful little song which, we suspect, has as its theme—"Why did I ever leave Samedan. . . ."

Concerning Arthur Hardinge and the "Yellow Witch"

SNAPSHOT OF A GLIDER By Hunter McNicoll (from "N.Z. Flying," April 1949)

When we decided to photograph

the glider in action it seemed a simple enough task. All we had to do was get the sailplane aloft and swoop around a bit in a "Tiger Moth" and get some close-up action shots. The glider pilot was quite helpful, too. On the way out to the airfield he told us exactly what he planned to do.

"I'll cast off at about 2,000 feet," he said, "and then I'll do a couple of loops and a stall turn. All you have to do is follow me around and take the pictures."

"What speed will your sailplane be doing?" asked the pilot of the "Moth."

"Oh, around about 55 m.p.h.," said the gliding enthusiast vaguely.

"In that case, don't worry about us," said the pilot. "Just go through your stunts. We'll be around."

Apparently there was much more to gliding than that. When we reached the airfield we found the glider had still to be assembled. From various crates the enthusiast produced wings, fuselage and lots of nuts and bolts. Being a tidy man, they all had to be laid out on the grass in review order before a single nut was allowed to meet its bolt. Finally the task of assembly began. Under the eagle eyes of the pilot, we sprang with a will

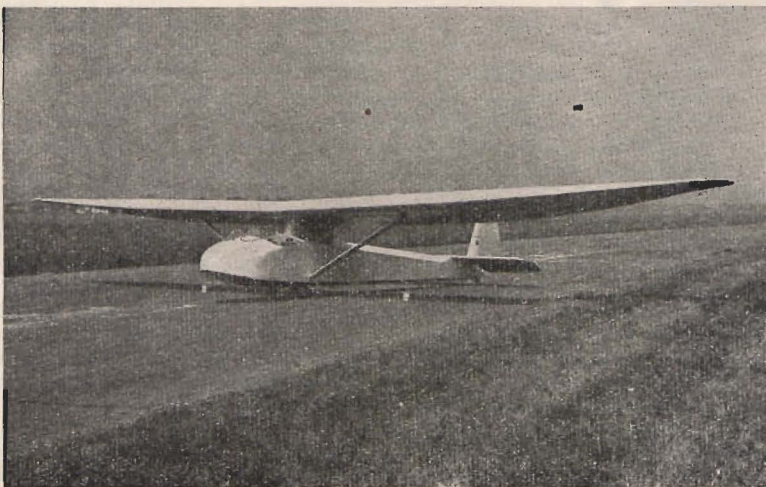
to the task of putting the pieces together. Because the pilot was not only tidy, but also careful, he watched everything we did. Not only watched, but tested it two or three times after we had done it. Finally, the glider lay complete, but listless, on the grass. The pilot made a couple more routine checks before he jumped on its tail. Nothing broke under the strain, so he apparently judged it safe to take him aloft, for, with a grunt of satisfaction, he turned his attention to his parachute, inspecting it two or three times as a matter of routine.

At last, all was ready for the venture. It was a beautiful day, reasonably calm, and with a promise of plenty of thermals off the hot mud of the Manukau Harbour to delight the enthusiast's heart. "Don't forget," came his last words, "when I cast off, I'll do two loops and a stall turn. You be around." With a cheery wave to the spectators left grounded at the airfield, he suddenly became airborne in the wake of the "Tiger Moth." Aircraft and glider made two wide circuits of the field, with the photographic "Moth" in close attendance. When the glider pilot deemed he had sufficient height, somewhere above the

brewery at Otahuhu, he severed his connection with the towing craft. The big moment had come. In swooped the "Tiger Moth" at a good 80 m.p.h., but suddenly it faltered, like a bloodhound which has lost the scent. Where was the glider? Those who watched from the airfield knew more than the frustrated pilots. They had seen the glider seized by a giant but invisible hand and whisked aloft. Since aloft, meant into the sun, the glider was completely hidden from the two pursuing aircraft, which cast about helplessly seeking a fresh scent.

Then, true to his promise, the glider pilot, some thousands of feet above the "Moths," headed back for the airfield, where he promptly put the sailplane into the two loops, the stall turn and several other tricks. At last the two "Tigers" picked up the scent. They ceased circling aimlessly around the brewery and headed back for the airfield, and, to the spectators below, there was something about their cawing which suggested a grimly-set jaw. The photographic aircraft closed with its quarry, hounded it down to 400 feet. Then, suddenly, it came. "ZOOM!" The glider was caught in another thermal. It disappeared

On Service—for The Service



The T21B, 2 seater is now in quantity production for the Reserve Command Royal Air Force as well as for export to foreign governments.

Slingsby Sailplanes Ltd., Kirbymoorside, Yorks.

T H E S A I L P L A N E

rapidly in a vertical direction at a speed bordering on 115 m.p.h., while the "Tiger" lumbered in pursuit at a mere 80 or 90 m.p.h. To the onlookers below, it seemed at that moment as though the air around the "Moth" had turned distinctly blue. Even although it was 2,000 feet above them, they swear they distinctly heard the voice of the "Moth's" pilot—"He's not co-operating," it seemed to say. The Moth pursued the glider to 4,000 feet before it gave up the struggle. It came back and landed on the airfield. For a while, the spectators waited anxiously. They had taken the fellow out to Mangere and it seemed the decent thing to wait for him and bring him back to Auckland. All eyes scanned the blue, but there was no trace of the glider. Had he, like Elijah, been snatched up to heaven? From the remarks floating around the field, we doubt it.

The frustrated pilot of the "Moth," pacing restlessly back and forth on the tarmac, was heard to groan—"We've got to keep that guy away from here. He'll ruin my business." About an hour later, the ground party departed by car to return to their wives and loved ones. As they passed over the long bridge at Mangere they found the glider again. It was darting around and about a fine cumulo nimbus and doing all sorts of fancy flying on the side. The film was developed that night—we'd caught the glider all right, against a bank of towering cu. At least, we think it was the glider—the photographer said it might be a small speck on the negative. We met the enthusiast next morning. "What happened to me?" he answered our question, "Well, I hung round waiting for you guys to come up close and get some good photos then I struck a good thermal so I said, to hell with this, I'm going for a sail." That was definitely the last time we'll attempt to photograph a glider in anything slower than a "Gloster Meteor."

New Members

Welcome to four new flying members—Leo O'Donnell, Geoff Newlands, W. Young and M. Montgomery and we wish them good flying.

ROYAL AERO CLUB GLIDING CERTIFICATES

SEPTEMBER, 1949

(Issued under delegation, by the B.G.A.)

GLIDING CERTIFICATES)	"A" .. 182 (Nos. 10650—10831 inc.)
	"B" .. 52
	"C" .. 26
SILVER "C"	.. 6

"B" CERTIFICATES

No.	Name	A.T.C. School or Gliding Club	Date taken
1223	Charles Geoffrey Dorman	Army F.C.	21. 8.49
1949	Ralph Ashley Shute	London G.C.	13. 8.49
4315	Gordon Jenkinson	188 G.S.	28. 8.49
4378	Frank Frederick Richards	A.H.Q. B.A.F.O. G.C.	26. 6.48
4637	Edward Geoffrey Shephard	A.H.Q. B.A.F.O. G.C.	15. 7.49
5463	David Victor Eves	142 G.S.	28. 3.48
6761	Arnold Cheetham	Gutersloh G.C.	26. 8.49
7011	Timothy Jefferis	Portsmouth G.C.	28. 8.49
7992	Ronald Ernest Holmes	102 G.S.	21. 8.49
8853	John Harold Vaus Bishop	London G.C.	13. 8.49
9130	Anthony George Clifford Jones	Army F.C.	28. 8.49
9432	Alan Rowarth Lewis	162 G.S.	18. 9.49
9756	Neville Thompson	27 G.S.	28. 8.49
9903	William Keith Winslade	London G.C.	24. 6.49
10004	Arthur Clarence Luff	95 G.S.	24. 7.49
10307	Dennis Simpson Driver	27 G.S.	28. 8.49
10438	Ronald William Frost	106 G.S.	4. 9.49
10555	Richard Arthur Guntrip	Bristol G.C.	19. 8.49
10650	Robert Park Blundell	12 Group G.C.	17. 7.49
10651	Maurice Frederick McCormack	Oerlinghausen G.C.	14. 7.46
10671	Douglas George Banks	Lubeck G.C.	7. 7.48
10672	Patrick Christopher Cronan	Gutersloh G.C.	30. 4.49
10673	Alan John Playford Reynolds	Bristol G.C.	20. 8.49
10677	Robert Stanley Strath	London G.C.	19. 8.49
10680	Roger Stanley Allison Bunker	Uetersen G.C.	24. 7.49
10688	James Grout	Bristol G.C.	24. 8.49
10699	Norman Marshall Witty	107 G.S.	12. 8.49
10705	Gerald Hayman Marston	12 Group G.C.	16. 7.49
10706	Frederick Peter Curry	Portsmouth G.C.	21. 8.49
10707	Edwin Ernest Tooke	R.A.F. College, Cranwell	1. 8.49
10708	Derek D'Arcy Mumby	London G.C.	16. 8.49
10709	Roderick Anthony Smith	105 G.S.	6. 8.49
10713	Jacob Alexander Bruce Cartmel	Bristol G.C.	21. 8.49
10720	Keith Emslie	R.A.F. Tech. G.C.	21. 7.49
10721	Audrey Patricia Johnson	Portsmouth G.C.	4. 9.49
10722	Charles William Francis Busk	Surrey G.C.	29. 6.49
10742	Michael Dalton Thunder	22 G.S.	3. 7.49
10744	Douglas William Eggleton	Bristol G.C.	23. 7.49
10758	Ian John Dellow	H.Q. B.A.F.O. G.C.	20. 2.49
10761	Robert Jennings	London G.C.	17. 8.49
10769	Brian Grimmond	H.Q. B.A.F.O. G.C.	15. 4.49
10770	Georg Sigfrid Neumann	Cambridge U.G.C.	8. 8.48
10771	Raymond James Frighi	Portsmouth N.G.C.	19. 6.49
10772	Edward Alexander Cleminson	12 Group G.C.	17. 7.49
10789	Derek Alan Dunbar	London G.C.	26. 7.49
10808	John Aubrey Brignell	Lueneberg G.C.	6. 6.49
10809	David Leslie Way	H.Q. B.A.F.O. G.C.	17. 7.49
10810	George Neil Leonard Bryant	92 G.S.	11. 9.49
10812	John Bernard Dawson	Midland G.C.	13. 8.49
10817	Austin Barry Wallace	Surrey G.C.	16. 9.49
10820	Patrick Arthur Swoffer	Halton Apprentices	11. 9.49
10821	Donald Wilkie	Surrey G.C.	9. 9.49

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3127	William Henry Barber	Army F.C.	24. 7.49
4378	Frank Frederick Richards	A.H.Q. B.A.F.O. G.C.	13. 8.49
4637	Edward Geoffrey Shephard	H.Q. B.A.F.O. G.C.	7. 8.49
6761	Arnold Cheetham	Gutersloh G.C.	11. 9.49
7607	Gordon McLaurin Brown	Midland G.C.	31. 8.49
8351	William G. Parr	London G.C.	8. 9.49
8420	Courad Leather Williams	188 G.S.	15. 8.49
8718	Herbert Charles Moreton	Midland G.C.	30. 8.49
8748	Arthur Stuart Forbes	Midland G.C.	31. 8.49
9006	Norman Ian Sprout	Scottish G.U.	13. 8.49
9173	Dennis Alfred Wigg	Fulmar G.C.	4. 9.49
9658	Francois Gaston Andre Marie Antoine	Scharföldendorf G.C.	21. 7.49
10010	Stuart James Bell	London G.C.	8. 9.49
10181	Wilfred Cooksey	Midland G.C.	30. 8.49
10190	Michael John Smedley	Surrey G.C.	28. 8.49
10651	Maurice Frederick McCormack	Oerlinghausen G.C.	30.11.46
10671	Douglas George Banks	Lubeck G.C.	18. 4.49
10672	Patrick Christopher Cronan	Gutersloh G.C.	24. 7.49
10706	Frederick Peter Curry	Portsmouth N.G.C.	21. 8.49
10758	Ian John Dellow	H.Q. B.A.F.O. G.C.	30. 7.49
10769	Brian Grimmond	H.Q. B.A.F.O. G.C.	30. 7.49
10770	Georg Sigfrid Neumann	Cambridge U.G.C.	4. 8.49
10789	Derek Alan Dunbar	London G.C.	9. 8.49
10808	John Aubrey Brignell	Lueneberg G.C.	3. 7.49
10809	David Leslie Way	H.Q. B.A.F.O. G.C.	29. 7.49
10812	John Bernard Dawson	Midland G.C.	14. 8.49

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Letters to the Editor

DEAR SIR,

Some of your readers may be aware of a recent letter that was written by the Ministry of Civil Aviation to the B.G.A. concerning accidents to gliders; however, as others may not have seen this letter, I feel it is necessary to quote part of it—only a small part as space is short, and this extract seems to me to contain the dominating spirit of the letter: "As you are aware, this Ministry has avoided regulating gliding except where essential to ensure the safety of other aircraft and other third parties. However, this policy can only continue if the Movement itself is able to maintain an adequate standard of safety."

If ever there was unwarranted interference this is it, and it only goes to show that the Ministry must find itself overstuffed in having to justify its existence by looking around for something else on which to pin a few more unnecessary regulations. Gliding is a sport, and those who partake of it are only too well aware of its dangers and do not need to be gratuitously reminded of the fact by any ministry. I can appreciate that regulations to avoid injury to third parties is desirable, but if anybody wants to kill *himself* gliding let him do it with the least amount of red tape. Furthermore, it is all part of the current vogue for safety first; it would not surprise me if in a few years' time the Government decided to take similar action in respect of mountaineering or ocean racing, by pronouncing that licences would be required before ascending the North Buttress of Ben Nevis, or taking part in the Fastnet Race. Already they have tried to introduce needless licences for glider pilots—and will no doubt try again before long.

What is particularly disturbing about this is that the Gliding Movement appear to take all these restrictions on their freedom lying down, instead of fighting them—as witness the nonsense over glider registration and C's of A.; this was accepted as a necessary evil until a few strong-minded men spoke up and demonstrated the futility of it. Are we going to let this latest threat also paralyse us

into meek submissiveness? I for one shall give up gliding altogether rather than do it on the gracious sufferance of a number of gentlemen in Whitehall who know nothing about the sport; and I sincerely hope that a great many other glider pilots will share my feelings.

Yours faithfully, J.I.P.

87 SINGLETON AVENUE,
PRENTON, BIRKENHEAD, CHESHIRE.
SIR, October 25th, 1949.

I am happy to inform you that plans are now under way to establish an active gliding club on Merseyside, to be called the "Cheshire G.C."

We are proud to boast as our President, ex-Sqdn./Ldr. Mark Twomey, late of 85 Wing G.C., Hamburg, and also of 2 Group G.C., who fortunately for us, now resides in Wallasey.

By means of articles in local papers, and if necessary, chalking on walls, we aim to let all would-be enthusiasts know what is afoot. Believe me, we intend teaching a few prospective parliamentary candidates the meaning of the word "Campaign"!

In view of this, would you therefore help us, and I hope eventually, the sport in general, by publishing the contents of this letter.

Throughout the coming winter months we shall be holding a series of meetings and lectures, the latter by authorities on all aspects of the sport.

Negotiations are in progress regarding the all-important "Site" when we are ready for it, but for the time being we aim to meet worries and obstacles in strict rotation!

Our motto shall be "Shoreditch did it—so can we!" I might add, the President of that splendid group, Louis Leith, is to be our closest adviser.

Anyone desiring information regarding meetings, etc., apply in writing only, to the above address.

GLYN THOMAS.

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