



The Club Trophy of the Soaring Ass'n of Canada.

CANADIAN SCENE

By DOUGLAS A. SHENSTONE

THIS year the S.A.C. had two trophies to present, and the ceremonies took place at the Annual General Meeting in Montreal, on February 7.

The Club Trophy, a gleaming silver rose bowl standing some ten inches high on an ebony base, is the gift of Mr. Berkeley Roden of A. V. Roe (Canada) Ltd., and was presented to the Toronto Gliding Club, which, reports showed, had got the most flying out of their gliders during 1947.

The B.A.I.C., an abstract sculpture of aluminum, stainless steel and lucite is a gift of the British Aviation Insurance Co., designed by Emanuel Hahn. It was presented to J. W. Ames for the best flight of the year—an altitude gain of 3,740 feet.

Since both these prizes are challenge trophies (the B.A.I.C. winner, however, being given a replica in miniature, in addition), it is expected that next year will see greater efforts put forth in Canada in competition for such worthwhile awards.

Under the eye of Professor T. R. Loudon, Professor of Civil and Aeronautical Engineering at the University of Toronto, a new glider is taking shape in the basement of one of the buildings.

Commencing with the class of 1946 as a project for the direct application of practical design, it is now

taking physical shape and will be completed by the class of 1948. The actual work is being done by Les Racey, whose experience at de Havilland Works qualifies him as a meticulous and competent builder. He has been working at it since October and expects to complete the job by summer, with the assistance of various interested students. Racey has the shop drawings put on masonite painted white, and then mounted on plywood and varnished. This preserves the drawings and simplifies layout.

The design was developed by the students under instruction from B. S. Shenstone and W. Czerwinski, and is a round nosed, fuselaged model with cantilever wing. Forty-five foot spars are complete as well as trailing ribs and nose ribs.

It is hoped that with the completion of this sailplane the University will form a club for experimenting, capture the interest of future graduating classes and do much to forward gliding in Canada.

The report of the annual meeting, presented by B. S. Shenstone, retiring president, revealed a situation in Canada which, while bright in many respects, projects a picture of difficulties to be met in the future. The greatest of these is the acquisition of gliders, a problem which grows more difficult every day, due mostly to cost of importation from United States or England. On the other hand Canada, with a population of twelve million has 40-odd gliders, which is proportionately a healthy condition.

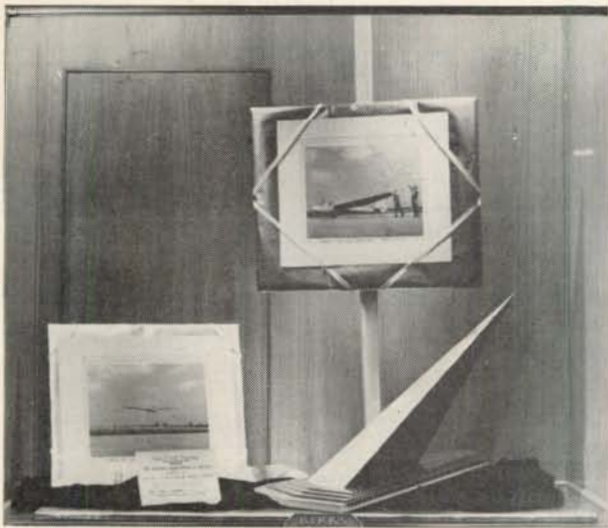
During 1947, the S.A.C. issued 60 "A" certificates, 38 "B" certificates and 17 "C," making a total to date of 118 "A," 88 "B," and 34 "C," or 238 certified glider pilots.

A new group of enthusiasts in Edmonton, all students of the University of Alberta, have formed a club under the leadership of D. K. MacDonald and are planning a membership drive, with motion pictures and lectures. They are building a BG-6 and are progressing rapidly with it, with the prospect of having it ready to fly this summer.

After protracted negotiations, it now can be stated fairly definitely that bona fide Canadian gliding clubs may be incorporated under Part II of the Dominion Companies Act as non-profit organizations, without the payment of the normal \$100.00 fee.

In conjunction with the Royal Canadian Flying Club Association and, with the help of their and SAC legal advisers, a sample application form for incorporation, and a set of by-laws have been drawn up. Copies of application and by-laws may be obtained upon request to Box 851, Ottawa, Canada. SAC has been fortunate in making arrangements with members in the legal profession to "pilot" the application through the Secretary of State's office for a fixed fee of \$25.

Winter gliding has received impetus in Toronto through the efforts of the Toronto Gliding Club, members of which made experimental flights in sub-zero weather at the Oshawa Airport. Frank Brame qualified for his "C" Certificate by remaining aloft for 35 minutes after release, with most of the flight being made during a brisk snow storm. He reports that although there was a fairly solid overcast, ground thermals were



The British Aviation Insurance Co. Trophy on display in Ottawa. This trophy is offered annually by the Soaring Association of Canada for the best flight of the year, distance or altitude.

numerous and provided lift for one free climb of 950 feet and another of 450 feet.

Several flights were made in a Laister-Kauffmann and a Schweizer 2-22 utility glider towed by a Tiger Moth. About four inches of snow covered the field.

A note of enthusiasm comes from J. B. Taylor in Victoria, B. C., who in 1942 was instrumental in forming the Victoria and Island Gliding Club. After numerous vicissitudes, during which the membership climbed to 122 then dropped to 40 after two gliders had been damaged, the group is re-forming and planning to purchase a two-place high performance sailplane in the United States.

Twelve members reached the "B" stage before the last glider cracked up and since then Mr. Taylor has undertaken to instruct Air Cadets at Royal Roads, the Naval College. He has handed over to them the remnants of a Kirby Cadet glider with the plans. He understands they will build one since they have excellent woodworking and metal working facilities.

A survey of Canadian-owned gliders reveals a very promising picture. Types and locations are as follows:

CADETS: Victoria, B. C.; Vancouver, B. C. (2); Fort William, Ont.; Ottawa, Ont. (3); Halifax, N. S.—total (8). PRIMARY: Victoria, B. C.; Vancouver, B. C.; Lethbridge, Alta.; Ottawa, Ont.; Montreal, P. Q.; Toronto, Ont.—total (6). SCHWEIZER TG-3A: Vancouver, B. C.; Medicine Hat, Alta; Halifax, N. S. (2)—total (4). GRUNAU BABY: Vancouver, B. C.; Kingston, Ont.; Ottawa, Ont.; Saskatoon, Sask.—total (4). H-17: Saskatoon, Sask.; Montreal, P. Q.—total (2). TG-4: London, Ont.; Oshawa, Ont.; Kingston, Ont (2)—total (4). SGU 1-19: Brandon, Man. (2); Winnipeg, Man.; Toronto, Ont.; Dunnville, Ont.—total (5). SGU 2-22: Oshawa, Ont. SPARROW: Toronto, Ont. PRATT-READ: Ottawa, Ont. (2); Montreal, P. Q. (2)—total (4). FALCON: Montreal, P. Q. BRIEGLER BG-6: Montreal, P. Q. MU-13: Montreal, P. Q. OLYMPIA EON: Ottawa, Ont. *Grand Total* (43).

DOUBLE TOW

By STEPHEN J. BENNIS

ARE you planning to double tow your gliders? By utilizing both the high and low tow positions we find a safe and efficient method for double towing. Safe because there is a barrier between the gliders—the turbulent slipstream of the tow plane. The man on the high tow position is on the short rope in full view of the low tow man on the long rope. Efficient because with the high and low tow position being employed the climb is approximately that of a single L-K being towed in high tow position. Two L-K's towed in the conventional fan substantially reduced the climb on our tow plane (Waco F2), so much so that the climb was marginal.

In high and low tow the pilot in the low tow has in his field of vision the second glider and the tow plane. The pilot in the high tow position on the same tow need only to hold his position behind the tow plane. He never could see the man on the long rope regardless of what method of towing was employed.

The man on the short tow takes off in the normal climb assuming a position, as soon as he is airborne, directly behind the tow plane and slightly above, while the man on the long rope stays on the ground until his position in relation to the tow plane is achieved by the tow plane getting airborne; then he slides directly behind the tow plane below the slipstream. The ships will be maintained in a position relative to the tow plane as follows—high tow is approximately 3° to 5° above the tow plane, low tow is approximately 10° to 12° below the tow plane, thus affording a safety arc of approximately the difference or 17°. It may be argued that the man in the low tow position may not be able to overcome or hurdle barriers on his initial take-off, but he has positive airspeed as the tow plane begins to accelerate. With this method of double towing the tow plane has a minimum amount of drag at take-off instead of the maximum drag that is created by the conventional fan type of double tow where the pilots in both gliders are jockeying about the disturbing slipstream. It is basically a one-two-three take-off: first the glider in high tow, second the towplane, third the glider in low tow. Take-off in steps is more easily accomplished than trying to get both gliders airborne at the same time.

The release is normal. The man on the short rope drops the tow rope first and turns away. There are two ways in which the man in the low tow can then release from the tow. He can pull up through the slipstream and release, or he can just release from the low tow position. The pull up is more desirable particularly because of the extra altitude gained.

The most important feature of this tow technique is the safety involved, due to the fact that there is no change in tow technique for the glider pilot from the normal single tow he is accustomed to. This method has also proven itself on long cross-country double tows in gusty weather, where it would have been difficult and dangerous to double tow in the conventional "fan."