

NOTES FROM THE S.A.C. SUBMISSION TO THE NATIONAL  
COUNCIL FOR FITNESS AND AMATEUR SPORTS IN 1961

Readers can see how some of the proposals have come to pass, to a degree, how long they have been materializing and the growth of the movement in the past decade.

1. INTRODUCTION TO THE PROPOSALS OF THE S.A.C.
2. THE S.A.C. PROPOSALS TO THE N.A.C.F.A.S.
  - (a) The 1963 International Soaring Competition
  - (b) The Training of Soaring Instructors
  - (c) Modernizing Club Equipment
  - (d) Assistance to the S.A.C.
3. APPENDICES - SOME BACKGROUND NOTES ON SOARING
  - (A) The Organization of Soaring in Canada
  - (B) A Typical Canadian Soaring Club
  - (C) Soaring's Place in Canadian Society
  - (D) The Growth of Soaring in Canada

## I N T R O D U C T I O N

World soaring began with the scientific experiments which led to the achievement of powered flight at the beginning of this century. It has always been associated with experimental aeronautics, but it began to develop in Europe, between the two world wars as a participation sport, where it received substantial support from public funds.

In Canada a few individuals had built and flown gliders before the Second World War, but the movement as it is now known began in 1941, when a group of National Research Council scientists in Ottawa formed the Gatineau Gliding Club. By 1945, the need for organized support for the sport led to the formation of the Soaring Association of Canada, which received its federal charter as the governing body of the movement within Canada.

The movement has grown slowly but steadily, and there are now some twenty (1971 - 40) soaring clubs in Canada with an active total membership of more than four hundred (1971 - 1,000). Despite financial difficulties, the movement is healthy. As the interest of Canadians turns to participation sport, we believe that the sport of soaring in this country is ready for considerable expansion; and that the infusion of a realistic amount of financial assistance would step up the rate of development.

Based on the experience of such countries as Great Britain, Poland, and Germany, where soaring has been longer established and has received a good deal of financial assistance, we may confidently expect the Canadian soaring movement to double within the foreseeable future.

(a) The 1963 World Gliding Championships

The Canadian soaring movement has developed pilots of international competitive standard, but it has not always been able to finance Canadian entrants in the biennial Olympic-type competitions. There have been eight of these competitions since the war, and Canada has been represented ably at four of these. However, for the last international contest, held in Germany in 1960, the Soaring Association of Canada was able to raise from its membership and friends less than \$1,000. The minimum cost of sending one team would have amounted to about \$2,000. and consequently the Canadian team could not participate.

The next championships will be held in February 1963, in Argentina. The Argentine government has offered substantial financial support to competitors once they have reached Argentina. Canada can produce a team which could do honour to this country' but the provision of travelling expenses for a team is beyond the resources of the S.A.C. at present.

A team of minimum size would include a team captain, two pilots, and four crewmen. The cost of transportation for such a team would be about \$4,200. Taking into account what we believe can be contributed by the S.A.C. and the members of the team, we still need \$3,000. to guarantee the travelling expenses of our team. We, therefore, ask the National Advisory Council for Fitness and Amateur Sport to contribute this sum to support the Canadian entry in the 1963 World Gliding Championships.

(b) Training of Soaring Instructors

Soaring in Canada is a non-commercial sport. Instruction in the art is given by qualified instructors who receive no fee for their services. The student pays only for the use of the aircraft. This is a healthy condition which we would not like to see changed, since it is an important factor in keeping the cost of soaring down. However, as the sport grows in popularity, heavier demands are being made on our instructors, and if the soaring movement is to grow, so must the corps of qualified volunteer instructors.

At present, the Department of Transport holds periodic instructors' schools for power pilots and contributes towards the living expenses and flying of the students. Commencing in 1961, soaring pilots were admitted to these schools, but they are granted no help on the ground that soaring is a sport and is therefore not eligible. The number of soaring pilots who have attended such schools has therefore been very limited.

To keep pace with the growth of the soaring movement, and to keep present instructors abreast of the latest instructional techniques, we should like to see an average of one instructor per club trained each year at the Department of Transport Instructors' Schools. We believe that this can be done if the N.A.C.F.A.S. would contribute to the travel and living expenses of each student an average of \$100. The S.A.C. member clubs and the students themselves would be responsible for the cost of flying training. The next of these schools will be held during the summer of 1963 at Brantford, Ontario, and we suggest that the Council make available the sum of \$1,000. to make possible the attendance of ten soaring instructors at this school.

Cost of Attendance at School

Flying

8 Soaring Flights at \$3.00 per hour	\$18.00
8 Aero Tows at \$3.00 each	\$24.00

Transportation-----Average Train Fare \$83.00

Living Costs -----\$9.50 per day

Motel \$5.00	
Meals \$4.50	\$ 9.50

SCHOOL EXPENSES \$134.50

Loss of Salary or Leave  
(Average take-home) \$130.00

\$264.00

For 10 Instructors (\$264.00 X 10)	\$2,640.00
50% From S.A.C.	\$1,320.00
Requested From N.A.C.F.A.S.	\$1,320.00

(c) Modernizing Club Equipment

One of the biggest obstacles to the rapid development of soaring in Canada is the difficulty of financing the purchase of modern aircraft. Most clubs are operating with World War Two vintage towplanes and gliders. Serviceability problems with towplanes, and weather conditions which are marginal for older types of gliders, prevent many clubs from operating at full efficiency and slow the growth of their re-equipment funds. This, at a time when the clubs need to accommodate growing numbers of people who are becoming interested in the sport.

A glider should fly about 150 hours per year to enable its cost to be amortized at an economical rate. Soaring in Canada is restricted, for all practical purposes, to about seven months per year; and most clubs operate only on weekends. Poor weather and unserviceable towplanes can easily reduce the number of flying days to an uneconomical level. On good flying days the club equipment is used to the maximum; but it is common to see a dozen impatient glider pilots waiting on the ground for a turn at the club's few available aircraft. If there were more aircraft available, these pilots would be flying and contributing to the club's finances.

There have been tremendous advances in the design of gliders in the past decade. If Canadian clubs were equipped with modern sailplanes they could be flown in weather which is unsuitable or marginal for our present equipment. If the clubs had modern equipment, there is no doubt that it could be operated more efficiently and pay for itself sooner through the increased revenue it would bring.

Few Canadian clubs could finance the purchase of a good used aircraft for use as a towplane; or of modern high performance training gliders. A suitable aircraft costs from \$6,000 to \$7,000; and a modern glider may cost from \$4,000 to \$6,000. Clubs usually finance their equipment purchases by subscription loans from among their membership; but for the average club with a membership of about thirty, purchases of this magnitude are extremely difficult for them to handle. They are forced to make do with old equipment whose maintenance costs are heavy.

To help break the financial impasse which is clearly holding back the development of many gliding clubs, the S.A.C. proposes that the N.A.C.F.A.S. establish a re-equipment fund from which loans could be made to Canadian gliding clubs. Such loans should be at a rate of interest sufficient only to cover administrative costs; and should be for amounts large enough to cover half the purchase price of new equipment; the balance to be found by the club themselves. We suggest that such a fund be administered through or by the S.A.C., and that it remain available for a given period of years so that, as it is replenished by repayment of loans it may be used to make new loans, thus providing a continuing source of low-cost financing for the Canadian soaring movement.

(c) Modernizing Club Equipment - Continued

We suggest an initial figure of \$25,000 for establishing this fund. This sum would enable loans of \$2,500 to be made to ten clubs in one year thus financing the purchase of one new aircraft for each of them. To ensure the orderly repayment of these loans and the replenishment of the loan fund, loans should be repaid over a period of five years. The fund would ten be replenished ← H at a rate of \$5,000 per year, sufficient to provide help for two more clubs each year at an average of \$2,500 each. (At this rate of repayment, most clubs would not be able to repay their own members until after the re-equipment fund had been repaid. This would encourage full utilization of the aircraft, encourage the clubs to operate efficiently, and encourage them to attract new members and broaden participation in the sport; all of which is necessary to put the sport on a sound footing.)

(d) Assistance for the Soaring Association of Canada

With a current membership of about 500, and annual income from dues of \$2.00 per member, it will be evident that the S.A.C. operates on a very slender budget. (Membership actually costs \$5.00, but of this sum \$3.00 pays for the members' subscription to Soaring, the monthly journal of the Soaring Society of America.

The S.A.C.'s officials serve on a voluntary basis. It has no paid staff, and secretarial help is on an honorarium basis only. At present it does not have the resources to do the job that needs to be done to encourage and help the soaring movement grow in Canada.

The S.A.C.'s main functions are:

To regulate soaring in Canada through the issue of gliding certificates; through sanctioning the annual Canadian National Soaring and other Meets; by the appointment of official observers for record purposes; and by validating and maintaining a list of Canadian soaring records.

To act as a clearing house through which information can be distributed among Canadian clubs about club activity, new flying regulations, etc.

To encourage the highest standards of flying possible; and to assist in the growth of the sport through offering advice to new clubs.

To represent the Canadian soaring movement in relations with official bodies both within Canada and abroad.

Currently the S.A.C. has in hand two important projects, for both of which some financial assistance is needed. These are two publications; one a "Handbook of Canadian Soaring", and the other an Instructor's Handbook.

It is probable the Association will manage to publish both these items eventually; they are already two years behind the target date and one of the main obstacles to progress has been reliance on part-time unpaid help.

The volume of correspondence is growing and to do the task efficiently entails the services of an experienced secretary for about ½ each normal working day. Office space is also required. Shared space or space in the incumbent's home would be the most economical solution for the present. The Association could share space with the R.C.F.C.A. with whom it has worked closely in the past. A sum to be properly accounted for, and amended as found necessary on presentation of facts, of about \$1,000 per year for 5 years would be of tremendous help. The present potential membership is estimated to be about twice the current standing but it is anticipated improved service and more effective clubs should considerably reduce this gap. A potential of 2,000 members within the next 5 years is not unrealistic.

THE ORGANIZATION OF SOARING

Soaring as an international sport comes under the aegis of the Federation Aeronautique Internationale (F.A.I.). The F.A.I. maintains a register of the recognized world records in soaring, supervises the holding of international competitions and encourages the technical advance of soaring through an international scientific congress (The Organization Scientifique Technique Internationale du Vol à Voile) held at the same time as the international competition.

The FAI delegates its authority to issue gliding certificates and badges to the national aero clubs. Thus, in Canada, the Royal Flying Clubs Association issues gliding certificates through the Soaring Association of Canada (S.A.C.) the regulatory body for the sport of soaring in our country.

The S.A.C. is an elective body with all of its officials elected yearly. These people serve without remuneration to promote the sport of soaring within Canada. While the Federal Department of Transport licences glider pilots as it does power plane pilots, the S.A.C. issues the internationally recognized soaring badges: the C, Silver C, Gold C and Diamond Badges which indicate levels of proficiency within the sport. A register of badge holders and of the current national records is maintained.

One purpose of the S.A.C. is to disseminate information among member clubs, S.A.C. News Bulletins and Recommended Practices to encourage safety are issued. The S.A.C. is vitally concerned with safety and with raising the standards of flying instruction. To this end soaring instructors' schools have been held periodically. The yearly Canadian National Soaring Competition is held under the auspices of the S.A.C. which establishes the rules and referees the contests. The S.A.C. represents the soaring movement in its dealings with official bodies and has, for instance, served in an advisory capacity in the establishment of the Department of Transport's licencing rules and Air Regulations respecting soaring.

The pattern of development is slowly taking shape with centres tending to follow their natural attributes of either personnel or location guiding them to some particular aspect of the sport. Thus Pincher Creek in Alberta is becoming famous for its wave soaring potential; Regina, the site of Canadian National meets held in the West; Brantford Ontario, National meets in the East; and Pendleton Ontario, instructor school facilities and a possible technical and test centre.

THE "TYPICAL" CANADIAN SOARING CLUB

The typical Canadian soaring club is located near a major population center and has perhaps 30 to 60 members. Generally there is a hard core group of enthusiasts who necessarily possess considerable skill in aircraft maintenance and construction, have a sound background in aeronautics, are competent instructors and who are willing to organize and train the newcomers to the sport. There are no paid employees and the work of the club is done on an entirely voluntary basis. The club will generally own or be striving to obtain a towplane and a two-seater training aircraft. Depending on the size of the club it will own one or more single place gliders. In the larger clubs syndicates of 2, 3 or 4 pilots will band together to share the cost of owning a high performance single place sailplane intended for competition and performance flying. The club's activity is highly co-operative with all members expected to share in the labour of tending the aircraft and the organization of the flying.

Membership dues and flying fees are generally only as much as is required to cover the cost of flying and maintaining equipment at a reasonable level. In one club the average yearly expenditure of a flying member was \$100 in the year 1961.

SOARING'S PLACE  
IN THE CANADIAN SOCIETY

Because of its beginnings and its nature, soaring has always had a scientific background and emphasis. The contributions of soaring enthusiasts to aeronautics and meteorology have been important in the past and will continue. The value of the sport to a modern community is attested to by the following excerpts from recommendations made by men prominent in Canada's universities, industry and government research.

"I am quite convinced that from the points of view of education, design and development, gliding has a place in Canada's aeronautical future."

Gordon N. Patterson,  
Director, Institute of Aerophysics,  
University of Toronto.

"The Beaver aeroplane has brought considerable export business to Canada and pioneered in the STOL field. The short field performance and low speed flying qualities of this aeroplane were obtained to a considerable extent by incorporating in the design aerodynamic data derived from sailplanes."

R.D. Hiscocks,  
Assistant Chief Engineer,  
The de Havilland Aircraft of  
Canada Limited.

"Gliding is an activity which contributes significantly to aeronautical interest in Canada."

T.E. Stephenson,  
President,  
Canadian Pratt and Whitney  
Aircraft Co.

In a civilization with an increasing emphasis on passive mass entertainment and spectator sport, soaring stands out as an activity which attracts and encourages the individual willing to participate both mentally and physically in a challenging endeavour. Soaring in Canada is a truly amateur sport and acceptance into a gliding club has always depended upon one's contribution of time, skill and effort rather than money.

If the Canadian soaring movement is given the opportunity of improving its equipment, of raising its standard of instruction and of increasing its opportunity for competitive flying, then there exists the possibility that in the near future Canada could achieve an honourable standing in world competition. Canada is an air-minded nation. Soaring ought to have as sound a place on the Canadian scene as the small boat and its volunteer crew had in British sea supremacy.