

# ALBERTA SOARING COUNCIL

**2005**

## **SPORT PROFILE**

a summary of the sport  
of soaring in Alberta today



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## – a profile of the sport –



### 1 OVERVIEW

1.1 The overall objectives of the ASC have been defined and deposited under the province of Alberta Societies Act. The role of the Executive is stated in the by-laws. The Council was originally organized in 1966 as an umbrella agency of the then three gliding clubs in Alberta to assist the Alberta Provincial Committee, Air Cadet League of Canada, to put the “air” back into Air Cadets.

1.2 Since its inception, the Council has assisted local clubs during their formative years and is continuing in this direction. In addition, the ASC has developed a comprehensive profile offering leadership and program opportunities with strong regional and provincial components and extensive national support. Regional activity is supported at the regional soaring centres and hosted by the local soaring club. Provincial events are collaborative efforts which are coordinated and planned by the ASC. Through these programs the ASC has grown into a functional, working council providing the provincial leadership in soaring.

1.3 The Soaring Association of Canada (SAC) is the national body, and since 1945 has provided the necessary services in support of soaring at the national level. This relationship is one of direct liaison with the individual clubs. The constitution of SAC also recognizes and permits affiliation with provincial associations. To expedite this, in 1980 the Alberta clubs decided that the Alberta Zone Director of the SAC Board of Directors would also hold the position of ASC Vice-President in order to facilitate communication between the two bodies. In 2004, this became an ex-officio ASC executive position.

1.4 At the national level, ASC supports SAC by covering when it can some or all of the expenses of persons undertaking national programs such as the director of the Western Instructors course, and several ASC members hold key national committee functions. At the provincial level, ASC has been actively working to highlight its provincial role in competitive and recreational soaring by organizing flying events. In this manner, the Alberta soaring community meets together on a provincial basis on many occasions during the season.

### 2 ORGANIZATION CONTACTS

ASC maintains direct and indirect liaison with the following organizations:

a) **The Soaring Association of Canada**

ASC members are on its Board of Directors and chair various committees, and sends delegates to the SAC AGM. This provides input to national policy and leadership training for the delegates.

b) **Alberta Sport, Recreation, Parks & Wildlife Foundation**

The Foundation supports provincial sport associations and provides funding from Alberta lottery revenues. With this funding support the ASC develops, plans, and delivers a viable recreation and sporting activity, with major support to ASC clubs, coaches, officials, instructors, and pilots.

c) **Transport Canada**

This department directly supervises the flying activities of ASC pilots through:

- medical standards for pilots, who must be certified by approved examiners for solo flight,
- proficiency standards for pilots, which are examined with written test administered by Transport Canada, and a practical flying test administered by each club's Chief Flying Instructor on behalf of Transport Canada,
- instructor endorsement proficiency standards,
- Air Regulations, which stipulate airworthiness requirements, standards for aircraft, equipment, personnel, and airspace use.

Transport Canada issues the regulations governing flying activity, but in doing so, it relies on input from SAC in determining policies and practises. ASC maintains an indirect liaison with Transport Canada through SAC, and each club has a Chief Flying Instructor who is directly responsible to Transport Canada, and acts with its authority in supervising flying.

Transport Canada, through Alberta Transportation, is the the landowner of the the regional soaring centre at Cowley, Alberta. ASC maintains a Memorandum of Understanding with Alberta Transportation for the up-keep and operation of this airfield.

d) **Navigation Canada**

NavCan was incorporated in 1996 to take over operational management of the air traffic control system from Transport Canada. ASC negotiates with NavCan the extent and use of Class C airspace in the vicinity of Calgary. ASC maintains a direct liaison with the Edmonton Area Control Centre in Nisku in the use of high altitude airspace over Cowley in southern Alberta and near Grande Prairie in northern Alberta. The ASC has significant responsibility in flight-following gliders flying above 28,000 feet when either of these airspace blocks are opened for our use for the purpose of making record or trophy flights. This airspace use was negotiated by ASC after very considerable discussions with air traffic control authorities.

e) **Department of Communications**

This department controls licensing of all radio operators. Some ASC members have been made "Approved Persons" and have the authority to issue "Radio Telephone Operator's Certificates (Aeronautical)" on behalf of the DoC.

f) **Municipal Recreation Boards**

Relationships with these are maintained through various clubs, and several programs have been established.

g) **Educational institutions**

As needs and opportunities arise, appropriate links are established. Some of those currently active are:

- Glider Pilot Ground Schools, through the Public School Board and NAIT in Edmonton, and Mount Royal College in Calgary;
- Student Pilot Scholarships at Mount Royal College and SAIT in Calgary.
- Alberta Science Network - input to school science classes and teaching.

h) **Municipal Districts and Town Councils**

The towns of Claresholm and Innisfail have worked in cooperation with the ASC during past national and provincial contests, and Claresholm is working with the ASC to hold the 2004 Provincials and the 2005 Nationals. The Village of Cowley supports the Summer Camp at the Cowley airfield. The MD of Pincher Creek works with ASC in supporting the Cowley airfield and in business and tourism promotion of soaring in the area.

i) **Air Cadet League of Alberta**

In addition to our historical connection with the Air Cadets, some ASC members have associations with the League and are organizing events to expose many cadets to their first experience of flight. (Giving cadets glider familiarization flights was a major reason for the formation of the ASC in 1966 and was the origin of the present national cadet glider program which, in 1995,

achieved a total of one million cadet glider flights since its inception!).

Air Cadet squadrons make use of the Cowley airfield for cadet familiarization flying under a memorandum of agreement between ASC and the Department of National Defence.

j) **Alberta Sports Hall of Fame**

The ASC Historian has liaised with this organization in order to build and archive the ASC provincial flight achievements — trophies, national records, FAI badges, outstanding recognitions from provincial to international certificates.

k) **Canadian Aviation Hall of Fame**

The ASC Historian has been active with this prestigious national aviation organization which, for the first time in 1989, inducted a glider pilot into the Hall of Fame. In addition, the Aviation Museum in Wetaskiwin now displays the restored *Viking* sailplane, the first composite glider built in Canada. The restoration was done by members of the Edmonton Soaring Club in 1990.

### 3 REVENUES and EXPENSES

3.1 Soaring in Alberta is a non-profit, noncommercial sporting and recreational activity. All excess revenues after expenses are returned to the participants through the programs of the Association and its clubs, and in increasing its equity. Funding for a paid part-time Executive Director was established through the Alberta Sport Council in 1986 in order to better deliver our programs and reduce the administrative workload of the volunteer executive. This position is contracted out part-time based on funding received.

3.2 Each event is self-supporting throughout the season, with costs such as travel, accommodation and soaring borne by the individual participant or candidate, by registration fees, towing charges, etc. and by support from the Sport, Recreation, Parks and Wildlife Foundation.

### 4 ASC SUMMARY

In summary, the Alberta Soaring Council:

- is affiliated with the national body, the Soaring Association of Canada, and plays an important role in its decision-making process,
- has become a mature sports council coordinating the activities of regional soaring centres at the provincial level, and has a well-rounded program encompassing leadership, administrative and program components,

- maintains regulated flying training programs to federal government standards,
- maintains training programs for certified coaches (licensed instructors),
- encourages and provides for the development of sporting officials to international standards (FAI “Official Observers”),
- is subject to stringent regulation by the federal government in respect of its pilots, instructors and equipment,
- maintains direct and indirect liaison with municipal, provincial and federal government departments and other aerosport associations,
- is an active and stable organization through its total volunteer aspects and its revenue base, and enjoys (requires) tremendous volunteer support by its members in the execution of its programs,
- promotes multi-recreational facets of the sport to families, the public, and specific organizations expressing interest.

## 5 SOARING’S ENVIRONMENT

Certain aspects of the sport of soaring are unique, and must be recognized in assessing the effectiveness of its delivery to the people of Alberta:

- It is a capital intensive sport, requiring:
  - real estate, ie. an airfield as a minimum, though in some instances arrangements have been made to use facilities at municipal airports,
  - gliders (two-seat trainers cost \$50–70,000 each, and single-seat high performance gliders cost \$35,000 to \$80,000 each or more),
  - tow aircraft (\$70,000 to \$100,000 each),
  - hangar facilities (typically over \$100,000), and insurance.
- It is a time intensive sport, demanding significant volunteer support from its participants, typically five hours of non-flying activity per hour of flying. Note also the comments on program constraints due to volunteer time given in 7.2.
- It is subject to stringent medical requirements, which restricts universal participation in the flying activities of ASC.
- It operates in an environment regulated by bodies such as Transport Canada, Navigation Canada and Communications Canada.

For the above reasons, soaring cannot be directly compared with “mass participation” sports such as baseball, hockey, basketball, etc. It should also be emphasized that the sport is not restricted to an elite class

— persons from all walks of life and age groups, and both sexes, are active participants. Because of the capital intensive nature of the sport, the tendency in recent years has been towards developing multirecreational opportunities through the regional soaring centres. It must be stressed, however, that through the active club volunteer structure, the cost of soaring to an individual is kept low — a typical club member’s cost per year is less than the cost of a cigarette smoking habit and considerably less hazardous to one’s health.

## 6 MEMBERSHIP

Participation in Council activities falls into two broad categories: flying and nonflying participants. No membership distinction is made on the basis of age or sex.

### 6.1 Flying Membership

Flying membership comprises both aircraft owners and non-owners who use club-owned aircraft. Most members will start flying in club aircraft, since initially one has neither the expertise nor the commitment required for ownership. The importance of club aircraft ownership cannot be overstated; without it, it would not be possible to accommodate the number of people who want to learn to fly, or support the new members who may not stay with the sport for more than a season or two (the drop-out rate among new students can be as high as 60–75%). A ‘drop-out’ is a student who doesn’t return for a second year. It’s about this time that the student decides if the demands on time, effort, and finances are acceptable. This rate is no worse than that in other endeavours requiring comparable mental and physical skills, and self-motivation.

After a student becomes a licensed pilot, the choice is whether their enjoyment would be increased by aircraft ownership. Shared ownership is the most common form and has two advantages: lower cost, and continued club contact. With new aircraft costing up to \$80,000 it obviously becomes more affordable for two or three members to share an aircraft. For many others, use of club-owned aircraft is increasingly the only option remaining. There is an increasing need to share resources and this is a trend at both the regional and provincial levels.

### 6.2 Non-Flying Membership

For every flying member, there are about 3–4 non-flying members who contribute to and benefit from the programs offered by ASC and its clubs. These include families and associates of glider pilots, accredited officials, and former members who are no longer active pilots (for reasons of health, age, etc.), but retain their interest and provide valuable assistance and advice, and many other individuals and groups who make use

of club facilities in order to get their initial exposure to the sport. (In 1983, formal amendments were made to the Association bylaws to recognize these important non-flying participants in the sport of soaring.)

These non-flying members enjoy the camaraderie of the flying community, and benefit from the recreational facilities of the clubs. At established centres (such as Chipman, Black Diamond, and Cowley) the effort has been dedicated to the provision of amenities such as club houses, picnic and camping areas, and playgrounds. This has been done with the goal of increasing the enjoyment of non-flying participants.

### 6.3 Regional Distribution

The two largest soaring centres are located outside the major centres of Edmonton and Calgary, with others in Grande Prairie, Cold Lake, and Red Deer. However, all the clubs draw their membership from a wide area (there are usually over 50 communities identified on our member mailing list), and hence deliver the sport to areas and towns that could not support it alone.

### 6.4 Future Membership

Flying will never be cheap, and the economic climate and changing general level of disposable income of potential members makes forecasting difficult. The following factors point to some trends:

- Women are an active part of the membership. Physical differences are of little importance in the sport so women can and do participate and compete on equal terms with men.
- Students continue to join at a steady rate. Juniors are encouraged and supported by ASC subsidies to their flying training expenses and membership. There is much more awareness of the sport, through the links with educational establishments, the seductive appearance of sailplanes in TV commercials, and other exposure. A significant source of students are "baby boomers" who are established in their careers, have their children gone, and have the disposable income and now the time to follow their dreams of flying.
- Power pilots are an source of members given that the costs associated with recreational power flying have risen dramatically and these pilots look for more economical ways of staying airborne.
- Overall membership in Alberta receives a boost from our topography and climate which makes the province a favoured area for the sport.
- Age spread, which is wide, is a notable feature of soaring membership. Several begin before the min-

imum age for solo flight (15) to be ready for the big day. Others continue well past their 60s; there are even octogenarians flying. With a few seasons of cross-country flying behind them, pilots in their late teens compete with the veteran, the sharper reflexes and coordination of youth competing with the veteran's wisdom and experience.

- Competition and cross-country soaring has increased in recent years, and is fostered by the ASC interclub events held at Cowley and elsewhere annually. This is an important factor in maintaining pilots' interest once the licence has been earned. In response to desires expressed by club members, and with ASC's assistance and encouragement, training programs introducing cross-country and con-test flying have been held. In the past, such training had often been sought out on an individual basis. The more formal programs are intended to increase the efficiency and effectiveness of the training, and to introduce this exciting aspect of the sport to a broader range of the membership. This should further reduce the drop-out rate, as pilots see more challenge in the sport.

### 6.5 Membership Growth

Flying membership in Alberta grew from approximately 80 in 1966 to peak at 317 in 1982. The slump in the economy then caused a drop-off which stabilized at about 250. Membership in other areas of the country also showed a similar decline. Growth potential is seen to be in two main areas:

- "Empty-nesters" with the urge to fly and new disposable income. Appropriate advertising to highlight the sport's existence may work here.
- young ex Air Cadets who have already got their gliding licence (but no disposable income) who wish to extend their love of gliding. The lack of funds problem is being addressed by reductions to club membership dues and to subsidies on their training costs and national membership has been eliminated. The plan seems to be working as youth membership nationally has risen significantly.

As stated earlier, each flying member represents about four other associated members, and the total participation in flying and allied multi-recreational activities was near 700 in 2004. The decrease in the past 2-3 years has been in the non-flying member category.

## 7 HUMAN RESOURCES

7.1 The time and effort volunteered by members are undoubtedly the most valuable resources ASC has. Instructors, towpilots, field managers, timekeepers,

groundcrews, official observers, contest staff; all these provide essential services directly concerned with flying activities. In addition, ASC and club executives are always active, if not always visible, doing countless hours of administrative tasks both in and out of season. It has been ASC policy as well as a need, to invest heavily in this human resource. Our assistance to new and small clubs is directed to the development of enthusiastic and competent volunteers.

7.2 It should be stressed that, at the current membership level of ASC, and given the amount of discretionary time volunteers have and the amount of individual time required to assist in events (both at the club and provincial level), the Alberta Soaring Council has reached a saturation point in what it can reasonably expect to be accomplished throughout the year. Many holidays and long weekends in the flying season usually have some event "on tap", and if a new event is seen to be valuable, it means that there is less volunteer effort available for existing ones. This problem is recognized, and is a factor in annual planning.

## 8 FACILITIES

Each club is established as a regional soaring centre consisting of an airfield, aircraft, supporting ground equipment and other recreational facilities. They provide for participation in soaring throughout the province. As well as clubs' home airfields, we are fortunate to have established other sites which are attracting national and international interest:

8.1 **Cowley** airfield is the scene for two major events and some Air Cadet, aeromodeller, and less formal use. It has been declared Canada's first national soaring site by the Soaring Association of Canada. Mountain wave soaring, considered the ultimate in soaring experiences by many pilots, requires particular conditions of topography and meteorology. The site has potential for international record achievement. Cowley is becoming known throughout North America as a premier site for these conditions, and several Canadian records have been set there:

- In 1981, the Absolute Altitude record of 34,400 feet was attained.
- In 1985, a 100 km speed to goal record.
- In 1991, the Female Absolute Altitude and Gain of Height records were set.
- In 1995, a new Gain of Height record of 27,750 ft.
- In 2002, a 100 km speed to goal record.
- In 2004, 100 km speed to goal and 100 km triangle distance speed records.

In 1994 ASC took over the responsibility for the main-

tenance of the Cowley airfield and campground from the Alberta Department of Transportation. ASC has contracted out runway maintenance to a local farmer and uses member help to upgrade the campground.

8.2 **Claresholm** has three times been the site of the Canadian National Championships, hosted by ASC, the most recent being the Canadian 15m/Open class Championship in 1983, and hosted the 1989 Western Interprovincial Gliding Contest. The Canadian Nationals will be held here in 2005. Most club airfields are snowbound in winter, but being hard surfaced and favoured by chinooks, the Claresholm airport often allows flying when it is not possible elsewhere. This can provide flying experience out of season, which is a great aid to retaining proficiency.

8.3 Apart from their special features, these sites provide opportunities for pilots to fly from unfamiliar fields. This is a valuable experience, particularly for student pilots as it enables them to develop the necessary judgement and skills for safe landings away from their home base, an essential ingredient of cross-country and competition flying. In the 2003 season there were five provincial soaring centres.

## 9 SHARED EQUIPMENT

9.1 Planning for capital equipment acquisition began in 1981 when the ASC recognized that with the continuing growth of soaring clubs in Alberta, and particularly the growth of ASC-sponsored events, it was becoming more difficult to divert towplanes and club gliders from normal club operation to support these events. For these reasons the ASC purchased a towplane in 1986 and a two-seat sailplane in 1987.

9.2 The towplane has proved itself, being well utilized throughout the season at soaring events and as a supplement to club operations, particularly at Innisfail. The "roving" sailplane was found to be logistically difficult to manage and was sold in 1993.

## 10 EVENTS

ASC planned or sponsored the following major events in 2004 as part of its soaring program:

- **National Annual General meeting** The Soaring Association of Canada AGM was held in Calgary.
- **Cowley Summer Camp** This is the largest soaring event in Canada which regularly attracts up to 80 pilots and 25-30 aircraft from western Canada, the western USA, and points further afield.

- **Cowley Wave Camp** A national event, with strong participation from Alberta, across Canada, and the western USA at times.
- **Spring Safety Seminar** This “season-opener” is often held in Red Deer and is a popular day of lectures on soaring safety matters. In 2004, it took place at the national AGM.
- **Provincial Championships** The annual provincial soaring championship was held in Claresholm (as a precursor to the 2005 Nationals) and at Innisfail.
- **Cross-Country Clinics** One week courses are held in Black Diamond and Chipman for cross-country pilots.
- **Ground Schools** In several locations ASC clubs run ground schools, which are open to the public. These teach theory, safety, air regulations and other necessities, and generally introduce people to the sport of soaring and to the regional soaring centres.

## 11 LEADERSHIP AND TRAINING

### 11.1 Western Instructors School

The school, sponsored by the national Flight Training & Safety committee, is conducted by the Alberta provincial instructor coach when held in the province. Its prime purpose is to teach new instructors to train student pilots to Transport Canada standards. It is an intensive week of theory and practise, covering flight and instructional skills.

### 11.2 Cross-country Instruction

Coaches have been identified, and will be developing and encouraging cross-country soaring skills for newly licensed and other interested pilots. Some clubs are developing a formal structure and program for initial and intermediate cross-country training.

### 11.3 Instructor’s Coach

A coach has been appointed to standardize techniques and methods, and teach the national Western instructors course.

### 11.4 Official Observer Coach

ASC has established a provincial coaching program to maintain and upgrade FAI Official Observer skills in Alberta. In 1998, an ASC member co-authored the rewrite of the international code and remains on the committee which updates it, and in 2000 edited the new interpretive annex to this code.

### 11.5 Audio/Visual Library

A program exists subsidizing the purchase of relevant

training books, films, video tapes, etc. by club libraries. Establishing a library is a goal.

### 11.6 Awards and Trophies

An Awards and Trophies chairman monitors and prepares the formal recognition for Alberta achievements. The chairman has established several provincial trophies for soaring pilots at various skill levels.

### 11.7 Historical

In 1988, a historical book, *Stalking the Mountain Wave*, by Ursula Wiese, was published by ASC. An enlarged and improved second edition of this book was published in 1997. It documents the history and meteorology of mountain wave soaring in Alberta. It describes the cooperation required between ASC pilots and various provincial and federal government departments, to establish the airfield and the airspace required for the specialized soaring performed in that area, and contains much other related scientific, historical, and photographic information.

Research has also been completed on the history of badge, record, and provincial trophy flights in Alberta. This was published in 1992 and is updated annually. Further historical work is being actively pursued in collaboration with other external agencies such as the Soaring Association of Canada and, on occasion, with the Alberta Sports Hall of Fame and the Canadian Aviation Hall of Fame.

## 12 COMMUNICATIONS

There have been notable advances in communications and publicity:

- ASC publishes *ASCent*, a magazine distributed free to members of all Alberta gliding clubs and outside organizations and pilots with ASC contacts.
- *Free Flight*, the SAC national gliding magazine, has been edited by an ASC member since 1981.
- The Internet, e-mail, and club e-mail lists are now a major means of communication between ASC members.
- ASC has an active website which is an excellent means of communication and for making available documents. It is at <[www.soaring.ab.ca](http://www.soaring.ab.ca)>.