

SOARING ASSOCIATION OF CANADA

ANNUAL REPORTS FOR 2004 & 2005 AGM Minutes

The following information is SAC's report on the activities of the Association in 2004. A copy is posted on the SAC website. The full financial report is available from SAC upon request.

SAC ANNUAL GENERAL MEETING

Minutes, 19 March 2005

Introduction

The 60th annual general meeting of SAC opened at 9:22 am with a quorum present (about 40). Ray Bastien, president of the Gatineau Gliding Club, which was hosting the meeting, welcomed participants. Noting the anniversary of our Association, he made some comments about the role that GGC had played in its formation. He then turned the chair over to Phil Stade, the president of SAC.

2004 AGM minutes

Phil asked if there were any changes to last year's AGM minutes. There were none.

Financial report

Jim McCollum reviewed the financial statements for 2004 and discussed various aspects of SAC membership, funds, and expenses. He gave a brief history of the financial state of SAC, from its perilous condition in the early 80s when it had essentially no assets and was running deficits to its solid position now. There are no significant changes from the 2004 budget. The membership fee schedule contained an overall small increase to offset the rise in the cost of living.

Motion #1

Moved by Charles Peterson, seconded Ian Oldaker, that "the minutes of the 2004 AGM be accepted as written."

Carried

Motion #2

Moved by Board, seconded Keith Andrews, that "the 2005 budget with its associated membership fee schedule be accepted." Carried

Motion #3

Moved by Board, seconded Tom Coulson, that "Kent Whittaker, CA, be appointed auditor for SAC for the 2005 financial year." Carried

NEW BUSINESS

Exploring SAC alliances with external aviation organizations

At last year's AGM, a motion charged the SAC marketing committee to: "... formally investigate means of raising

awareness of, and interest in, the art and techniques of soaring with other aviation organizations. Such investigations shall explore the creation of strategic alliances with other national aviation bodies with the objective of creating higher awareness of soaring and distribution of soaring information to a broader population."

As a result of this motion, John Brennan and Charles Peterson contacted SSA to explore possible insurance plan and flight training and safety linkages, and with COPA for such things as marketing, shared admin, government relations, and Transport Canada regulatory changes.

Charles fully briefed the Board prior to the AGM, and summarized to the AGM what were found to be areas of possible common interest. The Board is to consider the report and get working groups together as needed to explore interest areas.

TC aircraft maintenance requirements

Last year, a club was grounded for a time by Transport Canada for irregularities in glider maintenance and recording procedures. As a result, TC Civil Aviation Safety Inspector, Wayne Juniper, was invited to speak to the AGM on owner responsibilities with regards to aircraft maintenance and associated regulations.

Flight Training & Safety committee report

Ian Oldaker gave a short summary of his annual report, with emphasis on a new safety awareness program ("Safety First/Sécurité d'Abord) which is going out to clubs this spring.

Accident report

Dan Cook, the SAC Safety Officer, gave a brief presentation of his annual accident report, with emphasis on the new "lessons learned" addition. This draws general conclusions from similar accident scenarios over time.

Motion #4

Moved by Ian Oldaker at 1442 pm, "That the meeting be adjourned."

Carried

Recording secretary, **Tony Burton**

BOARD OF DIRECTORS REPORTS

SAC PRESIDENT — Phil Stade

The early part of 2004 got off to an interesting and busy start with preparations for the SAC AGM that was held March 20 in Calgary. The lead up to that meeting was primarily characterized by the angst that clubs and their members expressed over the cost of insurance. A number of initiatives were suggested to deal with that and they fell into one of two broad categories: improving our safety record or joining with other insured groups. Both fronts were being explored as the year ended.

The On Line Contest, championed a few years ago by Ernst Schneider, continued its growth. Participation grew by 26% to 188 and the kilometres flown grew 24% to 191,452. What I find most encouraging for our sport is the range of results: from Hans Binder's fifty flights with an average of 615 kilometres a flight to Peter Mabrucco's single flight of 9.85 km. The fact that these two individuals, along with 186 other Canadian pilots, find the OLC motivating is one of soaring's greatest successes. I'm sure increasing participation and new ways of using the OLC are in our future. Our sincere thanks to the developers and proponents of the OLC and, here in Canada, especially to Ernst for his vision, enthusiasm and persistence for introducing this program.

During 2004 the weather seemed to conspire against soaring pilots participating in contests across Canada. All of us have great hopes for the 2005 season and particularly for the Nationals that are once again being held in Alberta. We look forward to many pilots helping us celebrate our province's centennial as we introduce them to our great thermals and the beautiful scenery around Claresholm, Alberta.

ALBERTA ZONE — Phil Stade

Once again the Alberta Zone experienced weather in 2004 that was not as conducive to soaring as hoped. In spite of the weather, the Alberta clubs joined together for several flying events.

The first joint flying activity was the annual Cowley Summer Camp held for the first time in the latter part of June. Moving the event from the traditional late July to a June date was our attempt to avoid the overly stable weather of the last few years. Also, as the National Soaring Contest is to be held at Claresholm in 2005, the Alberta provincial contest for 2004 was held there as a test run following the Summer camp. It would be the understatement of 2004 to say that stable weather was avoided. Unfortunately the alternative moist, unstable conditions experienced produced more thunderstorm activity than usable thermals. Both the Cowley Summer Camp and the Claresholm event were plagued by threatening cb's and some hail damage was experienced. Glider pilots are a resourceful lot and so there were many memorable soaring flights and attempts all the same. As a result of these conditions our landout experience increased significantly.

The Central Alberta Gliding Club planned a winch launch course for the August long weekend. Since the Alberta Soaring Council contest had only completed one official day in Claresholm, the contest entrants were invited by CAGC to share the long weekend at the Innisfail Airport. Another four days of flying yielded one more day for the contest and numerous outlandings. As always, the experience was enjoyable and we all look forward to more sharing in the future.

The Edmonton Soaring Club again hosted a number of Grande Prairie Soaring Society members as well as some from the Cold Lake Soaring Club. All reports indicate the ESC hospitality was greatly appreciated. This type of resource sharing has benefited the smaller clubs and helped to preserve our sport in this province.

The Cowley Fall Camp continued the success of the past number of years. Great weather conditions on the majority of days gave pilots an opportunity to fly cross-country in wave and to achieve higher altitudes than normally available at their home club locations. The cooperation of Alberta towpilots is necessary for the success of this camp. It was therefore greatly appreciated when our towpilot shortage was addressed by Henry Wyatt volunteering. His expressions of unbridled enthusiasm at finally getting to high altitudes was great to see.

The Alberta zone has only five clubs so each one is very important to the health of soaring in this province. A variety of circumstances led to activities being reduced at the Cold Lake Soaring Club and Grande Prairie Soaring Society fields. One of the focusses for the coming year will be to find ways to support these clubs and we look forward to the opportunity.

Tony Burton has had a large influence in the Alberta soaring community as the Executive Director for the Alberta Soaring Council. His 19 years of service in that position has been greatly appreciated by the glider pilots of Alberta. His next major soaring challenge will be organizing the Nationals which will be flown from his hometown airfield. Here's to many great flights Tony, and even more enjoyment from the sport you have given so much to.

PRAIRIE ZONE — John Toles

The Prairie zone covers a large geographic area representing four clubs. Total membership in the zone is less than in some of the larger clubs. However, what we lack in numbers is made up with enthusiasm and excellent soaring conditions. All clubs had a safe, enjoyable soaring season in spite of the weather generally referred to as "the summer that never came". There were few weekends when it wasn't too cool, rainy, or windy. Still, many hours of good prairie soaring were recorded. The online contest indicated 24 pilots entered flights, with close to 10,000 km being claimed. Saskatchewan is fortunate to have the support from a provincial soaring association with funding from SaskLotteries. In 2004 each of the three Saskatchewan clubs was provided with a Colibri datalogger, increasing the interest and opportunities to fly cross-country flights with club aircraft.

The **Winnipeg Gliding Club** is the largest in the zone. The seventy five members flew 875 flights during 2004. The aircraft fleet consists of 2 Krosno trainers, an Astir, a Lark and two towplanes as well as eight privately operated sailplanes. The club held their annual ground school one evening a week from February through May. The wet spring meant a late start and necessitated flying from Altona until the Starbuck gliderport was useable.

The **Regina Gliding Club** kicked off the season with an Open House on May 30. They had a glider on display at the Moose Jaw Airshow. Members hosted the Provincial competition at their Strawberry Lakes field in June and participated at the Cowley camps. The club has had continued success hosting "Corporate Days" in partnership with local businesses and organizations. Participants are introduced to soaring. Each is provided an introductory glider flight followed by a barbecue at the end of the day. The club flies a 2-33, Grob 103, 1-26 and a Jantar. The Scout towplane did most of the aerotow launches, with a Pawnee pressed into service during a landing gear repair. A self-launch DG-400 set the standard for cross country flights. Owners Mark Westphal and Orlan Dowdeswell logged close to 2400 kilometres, finishing first and second in the Prairie zone.

The **Prince Albert Gliding and Soaring Club** flies from the Birch Hills airport, using winch launches to get airborne. This club may well set the standard for having the most fun at the lowest rates. Where else can you get a \$5 launch into good soaring conditions? Many flying days end with an evening barbecue. Even on days when conditions are not suitable for soaring they have fun with club competitions ranging from spot landings, weak link construction and trailer maneuvering. The club fleet consists of two K7's and an HP-11A (which is undergoing a rebuild and did not fly in 2004) and a privately owned Phoebus C. In spite of the poor summer weather, the club flew on 29 days and recorded 260 flights.

The **Saskatoon Soaring Club** flies from the Cudworth Airport using two Blanik L-13's and an L-33. Although both aerotow and winch launches are available, the winch was used very little during the past season. Only two of the privately owned sailplanes participated. Roy Eichendorf again set the zone standard for pure glider, logging the most points in his Open Cirrus. Saskatoon pilots took part in provincial competition as well as travelling to Cowley and Invermere. The L-33 was on display at the Saskatoon Remembers Airshow generating some good interest. Due to the poor weather, total flights and hours were about half of the previous years' average, with activity on only 35 days. Many training evenings were cancelled, weekends lost, and introductory flights cancelled particularly in the early part of the season. The club purchased an enclosed trailer suitable for the L-33, and is working on installing suitable fittings.

The prairies have long been known as "next year country" and populated by optimists. When the snow banks finally disappear from around the hangars and the runways are dry, we will be ready for a great new season.

ONTARIO ZONE — Doug Scott

Though 2004 was not the best for gliding and soaring in Ontario, there were encouraging signs of a recovery in membership, numbers of flights, safety and fun. One small club, COSA, has folded, and we hope that members wishing to fly will join other clubs, so that total membership will not decline. Another small club, Erin, has moved over to York to share facilities. This is a great idea, and many folks speak of the "Lasham Model" in Great Britain, where lots of activities at one place spread the costs that might otherwise cripple one club. This might not work in more remote regions of Canada where clubs are not in close proximity, but perhaps you could combine with other air sports clubs. Have a look at Al Schreiter's thoughtful article "on the viability of clubs of certain sizes" in *free flight* 2/2003, and make sure your club membership stays over the critical size. That's size in numbers, not gross weight.

As I am typing this, I'm watching the movie, On The Waterfront. There is an incident, a man is crushed, and someone cries, "Get a doctor!" A more realistic man says, "He don't need a doctor, he needs a priest". Let's do some doctoring of our clubs, policies and procedures, including safety and marketing, before we too need last rites. Here's a great example. SOSA managed to set a standard of turnarounds in many areas by having a strong, dedicated, goal-oriented management team who motivated the club members to virtually double their per capita number of flights over 2003, modernize the fleet, and turn a tidy surplus while doing so.

Ontario continued to lead the way in cross-country activity, even though two major contests, the famed SOSA Mudbowl, and the Provincials were held in such poor soaring conditions that out of six days total we got one contest day. The lesson learned is, both events were well organized, well attended, and all the pilots who came to York for the non-event Provincials had such a good time they vowed to come back in 2005!

As I have said before, if you make people feel welcome and glad to be at the club, they will keep coming back even if the weather was not the best. Some clubs, like SOSA and Great Lakes, have made concerted efforts to make sure everyone has big fun, and it's paying off.

SOSA, home of the youth-oriented cross-country movement, continued to hold cross-country clinics. **cont. on page 14**

They hosted an Air Cadet camp to familiarize these young folks with the joys of civilian soaring in higher performance ships, and York began a mentoring program for beginning cross-country work. The entire Great Lakes club moved their operation to York for the aforementioned Provincials, including taking a two-seater to allow dual training during the contest. Six out of the top ten OLC pilots are from Ontario. Tim Wood recently moved from SOSA to York, and keeps trying to fly east towards MSC. I predict that, like Charles Yeates before him, Tim will eventually migrate to Bluenose, having effectively traversed the country, sort of like Burt Lancaster in *The Swimmer*.

The accident record in Ontario was not good, but there were no serious injuries, and we are treating this as a wake-up call, a series of learning experiences, and the clubs are now keeping a closer eye on checkouts, and general safety procedures.

Charles Petersen at York headed a very successful Freedom's Wings program using a specially modified glider to teach students with handicaps, and have licensed the first glider pilot in Canada who is handicapped. Congratulations, Charles, and welcome to Mike.

Gatineau has graciously agreed to host the SAC AGM, and we look forward to renewing friendships with their members as well as their neighbours at RVSS and Bonnechere. They are three great clubs who seem to prosper in the face of some of the most challenging airspace issues in Canada, a lesson for us all. I think everyone should visit Air Sailing, as I had one of my best soaring flights as their guest. A note to the other clubs: I'll be happy to mention you next year if you invite me to visit anytime you're having a barbecue.

TREASURER — Jim McCollum

Overview The Soaring Association of Canada recorded a modest surplus in 2004. The surplus is largely illusionary, since if the accounting were done in constant dollar terms (ie. adjusting for inflation) it would disappear. The nominal surplus was due to almost all areas of expenditure coming in below budget, since overall revenue was also down.

The main financial events of the year were: membership fees which were below budget and last year,s amount, lower than usual expenditures and a large donation to the trust funds of over \$42,000. A change in the administration of the trust fund assets, undertaken for portfolio diversification purposes, resulted in realised capital gains of a similar amount.

Fee adjustments in recent years have been geared to compensating for inflation, indeed, in almost all cases they have run below inflation and fees in real terms have been falling. This is also the case for this year. The budget is similar in overall level and pattern to 2004s.

Financial Results Total revenue declined in 2004 following a rebound in 2003. For the most part, this reflected lower membership numbers. A few clubs accounted for the change; for example, one club accounted for one third of the decline, four clubs and the Air Cadet League together accounted for over 75 per cent of the fall, while other clubs had small declines and some had increases. There appears to have been a Chac Mool* effect, with rainy spring weather in much of the country for the third consecutive year. At least one club, Gatineau, experiencing membership declines is taking decisive steps to boost membership. It is interesting to note, however, that its sister club in the Ottawa area, RVSS in Kars, ON has been experiencing a renaissance, its membership has been trending up; in 2004 it was 60 per cent above the level of a half dozen years ago.

With the weakness in membership, related revenues, such as merchandise sales, were also down. Comparing 2004 sales to 2003 can be misleading, however, since in 2003 SAC sold several thousand dollars worth of manuals and other items to the Air Cadets. As the chairman of the FAI Awards Committee remarks in his report, badge claims were at a very low level in 2004, less than one half of 2003 and one third that of 2002.

As noted, overall expenditures were at a low level in 2004, being at about the same level as two decades ago. Total expenditures were some 10 percent below the budget projection and 5 per cent below the previous year. Basically what happened was that small, temporary, savings in most areas contributed to the overall result — although it also reflects a continuing dedication by the board to expenditure restraint and the prudent use of the Association's resources.

As the year progresses, if it appears that there will be a shortfall in revenues, SAC attempts to make adjustments on the expenditure side early on — although there is a limit to how much this can be done; on the other hand. You may recognise this as the Wilkins Micawber approach to budgetary adjustment. The large drop in postage expenses in 2004 (\$2,225 or 37 per cent) reflects in part the prepayment of some postal expenses in 2003. Free flight expenses increased to a more usual level in 2004; the low level the previous year was associated in large measure with moving to a different printing operation.

Looking ahead, however, we know that expenses in some areas will rise, these include — higher municipal taxes, higher electricity rates, higher postal rates, likely higher travel costs (with the recent bankruptcy of a major low-cost carrier), and depreciation, if office equipment needs to be replaced (the photocopy machine, some 12 years old, is near the end of its service life and it is difficult to find replacement parts for it). There will also be some significant expenses associated with updating manuals and inventory replenishment. On a more positive note, FAI / Aero Club of Canada fees will be down by some 10 per cent, despite the rise in European currencies (the FAI,s assessments are in Swiss francs). The decline reflects a change in the way that the FAI makes country assessments — a change which Canada had strongly lobbied for. to page 6

^{*} Chac Mool is a Mayan and Toltec rain god — he often acted maliciously.

SAC 2004 FINANCIAL STATEMENT – SUMMARY

STATEMENT OF OPERATIONS – GENERAL FUND

	2003	2004
REVENUE		
Membership fees	\$115,000	\$110,487
Flight Training & Safety	1,951	2,160
Merchandise sales	14,200	7,819
Free Flight	2,523	2,498
Investment income	12,582	9,792
Other income	1,482	2,816
Total	\$149,688	\$135,572
EXPENDITURE		
Salaries & professional fees	40,850	41,732
Occupancy	5,537	5,792
Office	3,962	8,878
Communications	3,525	1,749
Postage	5,970	3,745
Depreciation	3,788	3,788
Merchandise cost of sales	9,340	3,938
Free Flight	22,409	26,026
FAI – Aero Club fees	6,475	6,475
Flight Training & Safety	7,643	6,897
Meetings and travel	16,615	16,229
Publicity	3,689	2,262
Other	4,959	4,130
Total	\$138,099	\$131,641
EXCESS OF REVENUE		
OVER EXPENSE	\$11,589	\$3,931

		2003	2004
GENERAL FUND	1		
Cash & deposits		\$66,040	\$54,257
Short term assets	s, net	37,664	<u>58,986</u>
sub-total		103,704	113,243
Inventory		10,139	8,319
Fixed assets		58,150	54,362
sub-total		\$171,993	\$175,924
TRUST FUNDS			
Cash & deposits		\$29,208	\$40,328
Investments		<u>521,436</u>	<u>591,761</u>
		\$550,644	\$632,089
General + Trust		\$722,637	\$808,013
Individual Trust	Fund ba	lances	
 Pioneer Trust 		\$441,192	\$513,429
• Wolf Mix		73,381	79,065
 Air Cadet 		30,856	34,329
 Peter Corley 		5,215	5,266
	total	\$550,644	\$632,089

While this report is substantially complete, some details have been omitted for brevity. A copy of the full financial report is available from the SAC office.

2005 BUDGET 2004 2005

\$115,000	\$112,000	
2,500	2,500	
10,000	11,000	
s) 3,500	3,500	
10,000	11,000	
4,000	4,000	
\$145,000	\$149,000	
\$43,000	\$43,000	
6,000	6,000	
10,000	10,000	
ternet) 3,000	3,000	
5,500	6,000	
5,000	4,000	
6,500	6,500	
27,000	27,000	
6,000	6,000	
6,000	10,000	
21,000	21,000	
3,000	3,500	
3,000	3,000	
\$145,000	\$149,000	
	\$115,000 2,500 10,000 \$,3,500 \$145,000 \$145,000 (6,000 10,000 (6,000 5,500 5,500 5,500 6,500 27,000 6,000 21,000 3,000 \$145,000	\$115,000 \$112,000 2,500 2,500 10,000 11,000 s) 3,500 3,500 10,000 11,000 4,000 4,000 \$145,000 \$149,000 \$145,000 \$0,000 6,000 6,000 5,500 6,000 5,500 6,000 5,500 6,000 5,500 6,500 27,000 27,000 6,000 6,000 6,000 6,000 6,000 6,000 6,000 6,000 6,000 6,000 6,000 10,000 21,000 21,000 3,000 3,500 3,000 3,000 \$145,000 \$149,000

Proposed 2005 SAC membership fee schedule

Category	1	l/2 season	
Club affiliated	\$116	\$58	Affilié au club
Corporate	116	58	Societé
Spousal	58	29	Époux(se)
Junior	58	29	Jeune
Air Cadet	0	0	Cadet
Associate	58	29	Associé

Comments

- Fees for club affiliated members would increase by \$2 in 2005. The increase is to compensate for the effect of inflation though it does not fully do so; in constant dollar terms membership fees fall slightly.
- Membership fees are eligible for a tax receipt. Taking federal and provincial taxes into account, the after-tax increase would be a bit more than \$1 for regular adult members.
- Taking taxation into account, SAC membership fees are well below SSA membership fees.
- Half year rates are applicable after August 1st, but for new members only.

The year ended with a surplus on a budgetary basis, which was adequate to hold members, equity in the general fund basically unchanged.

The Pioneer, Corley, Air Cadet and Wolf Mix funds received donations of \$47,802, \$2,300, \$1,250 and \$325 dollars respectively for a total of \$51,677. This is much higher than usual and a single large donation in memory of the late Douglas E. Carson accounts for this result. In addition to donations, capital gains played an important role in the growth of the funds last year.

An early SAC member, who was at one time member of the SAC board, as well as being a member of Canada's international team in the early 1950s, has taken a special interest in the Air Cadet fund, and this fund has increased tenfold during the past decade. The Wolf Mix fund has also shown strong growth, although this has come about primarily through investment earnings, particularly capital gains, rather than through contributions. At the end of the year, the assets of the trust funds stood at over \$632,000, with the Pioneer Fund at over \$513,000, the Wolf Mix Fund at \$79,000, the Air Cadet Fund at \$34,000 and the Peter Corley Fund at over \$5,000.

In the fall of 2004, in conjunction with changing the administrative of the trust fund assets slightly, the SAC office negotiated a 25 per cent reduction in portfolio management fees. While the fees charged are related to the size of the funds, this change should result in an immediate savings of around \$4,000 for the trust funds and an increasing level of savings over time.

2005 Budget and Membership Fees The budget is balanced at \$149,000, the same level as five years ago. On the revenue side is an anticipated increase in investment income. It is assumed that membership stays at the same level or increases slightly from last year, resulting in a slight increase in membership revenues. On the expenditure side the only significant change is an increase in projected expenses for the Flight Training & Safety Committee related to safety initiatives.

There is a \$2 adjustment in fees for adult members, while most other fees change by \$1. The fee increase in response to rising costs and does not fully compensate for them. In constant dollar terms and taking into consideration that membership fees are tax receiptable, fees are at a low level by the standards of the past twenty-five years.

2004 COMMITTEE REPORTS

AIR CADETS — Jim McCollum

Relations between SAC and the Air Cadet League of Canada, which have improved enormously in recent years, continued on a positive track in 2004.

There were 7o cadet members of SAC in 2004 and there are signs that there will be more in 2005. One reason for this is that a new joint soaring/Air Cadet operation in Nova Scotia, the ACES, has joined SAC. A syndicate of club members has recently acquired a LAK 17 and the club expects to have 40 - 50 cadets at their operation. The operation has several Schweizer training aircraft.

Some 325 cadets attended the Air Cadet glider pilot training program last summer. Unfortunately, with rainy weather and other complications, not all were able to finish the program within the usual time frame. Several, however, finished their licenses at SAC clubs. SAC provided all of the graduates with an "A" badge. The SOSA gliding club hosted a special training camp for Air Cadets in late summer 2004, during which some cadets obtained FAI "C" badges.

The Cadets are making significant use of SAC training materials. In 2003 they acquired several hundred copies of our basic training manual and made follow-up purchases in 2004.

The SAC Air Cadet Fund was established to provide continuing flying scholarships to graduates of the League's glider pilot training program and for a number of years provided an annual scholarship. This program was given a major boost three years ago by Frank Woodward. Frank was involved with SAC in its fledgling years and was on Canada's international team with Shorty Boudreault , Barrie Jeffery and others in the early 1950s. At the end of 2004 the Air Cadet Fund's financial assets stood at \$34,329, an increase of almost \$3,500 from the year before. The investment earnings are used cover the cost of the flying scholarships.

The SAC executive director received a special award from the League at their annual meeting in Ottawa in November 2004. In reality this award was to SAC members as a group and

reflects the efforts many of you have made to make Cadets feel welcome at your clubs and in stimulating their interest in soaring.

AIRSPACE — Ian Grant

Looking back on the year, there is little to report. I have continued to keep a watching brief on the minutes of the CARAC Technical Committees, which is the means by which Transport Canada gets user input to new regulations. There has been nothing of interest or concern on that front. From SAC members, a question was raised about the possible resurrection of the concept of a new Toronto airport at Pickering, but nothing further has been heard on this. There have also been some queries from the soaring community in eastern Ontario about release of airspace around Montreal in view of the fact that traffic volumes have reduced significantly at Mirabel airport, but again there are no developments to report. Hopefully this period of stability will continue.

FAI AWARDS — Walter Weir

As you can see from the table of badge statistics below, 2004 was a bad year for badges. In fact it was the worst year in the ten year record shown. Yes, the weather was bad and that didn't help, but there was still plenty of opportunity for C badges and the Silver height and duration badge legs. There were actually more Silver distance legs done than either height or altitude. It seems pretty clear that badge flying is eroding at its base — the beginner badge legs are not being flown.

Let's try to do better next year. I'm convinced that badge flying is an important part of maintaining and developing enthusiasm for soaring.

Sporting Code change — TP Observation Zones

Since the inception of the FAI Sporting Code, turnpoint observation zones have been defined as 90° sectors. Effective 1 October 2004, the Code has been changed to also allow the use of cylinders, or "beer cans" as they are commonly called.

The advantage to pilots is that they no longer have to plan to go around a turnpoint — they only have to get to within half a kilometre of it. This makes it easier to use the GPS since all GPS readouts show a distance from the "go to" point. There have been many instances where pilots have inadvertently missed entering a turnpoint sector when using GPS units without a moving map. The cylinder type observation zone is designed to help preclude such misses.

Don't stop reading here! There are potential trip-ups to be considered:

					_	_						
	SAC Ba	adge	an	d ba	dge	leg	sta	tisti	cs 19	995 -	2004	
	95	96	97	98	99	00	01	02	03	04	5 yr avg	% of avg
1000 km	0	2	0	0	0	1	0	2	0	0	0.6	-%
Diamond	2	4	1	0	3	2	1	2	1	1	1.4	71%
Gold	4	6	3	2	4	5	5	5	7	2	4.8	42%
Silver	12	16	8	17	17	7	8	19	19	7	12	58%
C Badges	42	39	30	34	33	15	38	57	26	18	30.8	58%
Badge leg	s 93	91	79	87	79	67	71	111	99	51	79.8	64%

• For a given flight you can only use one type of observation zone. You can't mix cylinders and sectors in one flight.

• If you are going to use cylinders you have to declare a longer task. The cylinders are 500 metres in radius and each time you use a turnpoint cylinder you have to subtract one kilometre from your total task distance. Also you have to subtract 500 metres from your start point and 500 metres from your finish point. Therefore, supposing you plan to do a 300 kilometre triangle with two turnpoints, the total distance in your declaration will have to be at least 303 kilometres.

It's possible that the use of sectors could save your flight. Consider a case where you can't get within a half kilometre of your turnpoint due to a thunderstorm. Since sectors are "infinitely" large, it may be possible to enter the sector well beyond the turnpoint and away from the storm.

In summary, to be on the safe side, it's probably wise to declare extra distance to allow the use of cylinder turnpoints. During the flight, attempt to meet the requirements for both types of observation zone at each TP. Then when the flight is over, you can decide which type of observation zone suits the way the flight was flown. While you are flying, bear in mind the fact that there is more than one way to achieve a turnpoint.

FREE FLIGHT — Tony Burton

2004 was another good year for *free flight* and I trust you have enjoyed getting it. There were one 20 page, four 24 page, and one 28 page issues in 2004.

Thanks to everyone who took the time to contribute stories or even a bit of filler material — the magazine depends on you for its content. I particularly invite pilots to send *free flight* a detailed report if they have had an "interesting" incident or accident (I'll keep it anonymous if you wish) — it makes very useful safety reading. Thanks also to all you photographers who sent me good photos, even if some were not used they are on file. Some could not be used as they were digital files which just didn't contain enough pixels for good resolution in a magazine which needs 300 dpi minimum.

The web and e-mail has become pervasive. The primary reasons are instant access and significant cost savings in distribution of printed and graphical material. A secondary reason, but primary from my point of view as *free flight* editor, is the search function — the magazine becomes accessible and searchable by anyone over an extended period of time when stored electronically as .pdf files.

One thing I want to do as time allows is to go back into the archival .pdf files and replace as many of the greyscale photos as I can with the coloured originals. I'll work on the front covers as a first step. Even if SAC can't afford colour printing as a matter of course, at least the electronic versions ...??

There is no thought of eliminating the printed original. Nothing replaces (yet) the ease and practicality of reclining with a copy of *free flight*. Arguably, paper will always last longer than any hard drive — if the medieval monks had computers rather than parchment, there wouldn't be any Western history on library shelves!

My work on the "searchable" index for *free flight* continues slowly as I have time and inclination. To date, the index has been updated with the year's issues and back into 1967. Eventually ALL issues of *free flight*, which go back fifty years, will be indexed — that's the goal anyway. This index is an immensely useful resource — these volumes contain a lot of valuable information which *does not* go out of date: soaring techniques, safety issues, training methods, etc. And of course, the history of the sport in Canada (people, contests, gliders, events) will be available with a few keystrokes.

Please let us know what you are doing at your club that is of interest or value to others across the country. I remind club executives to ensure that *free flight* is on their mailing list (if you don't have a newsletter, please have someone correspond on your activities) and give the office and *free flight* changes to your address, phone number, e-mail, or contact person.

Thanks as always to Ursula for her expert proofreading. I also prepare other material for SAC members — for example an OO "test" and most of the SAC forms, all on the SAC documents page. I enjoy the work of editor — the rest is up to you.

FLIGHT TRAINING & SAFETY — Ian Oldaker

General Comments on Safety in the Association

Accident/incident reporting improved in 2004 though we do not know if everything is being reported! The TSB usually does not enforce reporting of accidents not involving injuries in gliding and has encouraged us to perform more of the investigation function ourselves. So if pilots don't report they don't seem to get involved, despite the CARs being clear that reporting is required. However, SAC has an interest in reports that can be used to take a deeper look at the reasons why the pilot came to grief, and then to prepare better safety programs, improve our training materials and to warn pilots of trends in unsafe operations, etc.

As an organization we do not measure up to the Transport Canada recommendations for a "System Approach to Safety". We have been given good reign to develop training and make recommendations, and the committee believes that most clubs try to comply. We are possibly too fragile an organization to tie safety requirements into the insurance scheme, primarily for liability reasons. SAC is also organizationally too vulnerable for financial reasons to demand too much for fear of discouraging clubs to participate in the Association. On the other hand, we have clout within each club; we have to rely on club Safety Officers and the CFI to solve and resolve local safety issues; the CFI after all has the local responsibility.

Are we an older pilots' soaring club? The sport does not appeal as much to the 20–30 year olds, or women (who are more

than half the population). This is not unique to Canada but is typical of the worldwide decline despite other non-gliding flying organizations reporting more activity. The more complex we make it, with more rules and less available time to commit, the fewer members we will have nationally. Money and SAC finances also all tie into the problem of safety for reasons already stated. This also concerns our inability to act. Some may be looking at FT&SC to solve the poor safety record, but TC is clear in that this is a leadership issue for management, in other words it is a top-down approach for the Association BoD and clubs. In other words, it is really a club issue. Several clubs can't control their own pilots. Therein lies much of the problem. Should we just take the Canadian solution and blame the government? The ball is really in club hands because they control the launching. If you don't play by the rules you don't get a tow — there is the real power!

Some FT&SC members think the TC road map for the Systems Approach to Safety is key, and we will be examining this and working out how to implement this at our next meetings. As said, it is a leadership issue. We plan to identify our safety goals as an association, have the SAC Board of Directors and Presidents of clubs buy in, and get members to buy in. The next step is to put resources where our goals are. The following are some additional thoughts that affect safety overall:

• We don't fly enough. Make gliding more available to working pilots requiring less time spent at the field supporting gliding, ie. more time flying (summer students hired for flight lines, online booking). Set up youth camps? Air Cadets is not about gliding, it is about socialization and achievement.

• We don't take a professional approach to safety. We need to get serious about safety and human factors and implement the TC Safety Systems Approach.

• We have destructive safety cultures. Suggest a SAC National Safety Day once a year as a mandatory event. Detect unsafe cultures, weed out or change those who don't want to play.

• We are too busy to bother. We are at a crossroads. Shut down gliding for one weekend for a forced safety seminar? That will get attention. They did this in Norway after an increase in accidents recently (none fatal — they have only had one in the last 11 or 12 years — same numbers of flights as Canada per year!)

• We blame others/organizations before we look at our accountability. Members must start with themselves. What can I do to improve safety and take a positive step? Then publish numbers of those that have/have not. Acknowledge those that do. Must be positive reinforcement, not negative.

Instructor courses Courses were run in 2004 at Red Deer, Pendleton and Champlain. These courses used the most upto-date instructor's manual that had been amended prior to last season and that was issued as revision #7 in March 2003. The course in Red Deer was well attended, with the one in Ontario at GGC not so well attended. At Champlain there were four successful candidates. Our thanks to those who made their equipment available and who assisted in running them.

Training records and CAR requirements for student flight sign-offs

Discussions were held with TC and it has been determined that all training flights must have dual sign-offs by the instructor and student pilot prior to flight. These are to show the planned exercises or stages for that flight and their acceptance by the student for the dual lesson or practice flight when solo. Lesson details are required to be recorded in a Pilot Training Record (PTR) available from the Association. The PTR also has pages to record and sign off the ground school training received, required as part of the pilot's training record.

Safety in 2004 See separate report by Dan Cook.

Post Bronze badge training Again, the committee would like to see a *Coaching* system established to encourage more FAI badge and contest flying. This program would involve coaches who may or may not be instructors. SAC, together with CAS group training would train and certify the coaches. A program was underway at one Ontario club in 2004 that involved a youth group who were trained and encouraged beyond the Bronze badge and up to competition flying, with great success. We need to build on this type of success for the future of our sport!

lan Oldaker, Chairman	Joe Gegenbauer	Tom Coulson
Dan Cook, National SO	Gabriel Duford	Bryan Florence

ACCIDENTS — Dan Cook

Introduction In 2004 we have had 20 accidents reported of which two involved fatal injuries and the write off of five aircraft. These accidents can be a source of invaluable information, the analysis of which can contribute to a reduction in the number and severity of accidents down the line. This is why SAC has an accident reporting system and why the Flight Training & Safety committee spends a considerable amount of time and effort examining accidents. Its intent is not to be critical, but rather to draw some good out of misfortunate events, which will help individual pilots and clubs reduce the risk of having future mishaps. Of course, we recognize that analyzing the decisions underlying an accident, with the benefits of hindsight and considerably more time, is a much less daunting task than taking decisions in the first place. In addition, reports from club Safety Officers with their own analysis of accidents/incidents within their clubs is invaluable.

Incidents are too numerous to describe but support conclusions on accidents discussed. Please continue to forward your annual safety reports to FT&SC to help us in our analysis. Also, note that we have changed the format to include lessons learned. This will allow us to de-link the lessons learned from the accidents later and keep a separate database available on the SAC website (currently on the Roundtable).

Accident Events

1 Fatal During a passenger flight, the pilot released the Blanik L-13 off tow 250 feet higher than normal after the towpilot reminded the glider pilot/instructor that they had

reached release height. Later, observers noted the glider was low (about 300 feet agl) and they assumed the pilot was preparing to land downwind and taxi up to the launch point. However, inexplicably the pilot turned away from the field. It appeared to enter a spin, and then spiralled towards the ground until the front passenger (a power pilot) apparently raised the nose before impact. The instructor was fatally injured and the passenger suffered broken legs. Possible human factors included the rear altimeter apparently miss-set for the airport elevation. The accident occurred very early in the gliding season and the pilot had only a few flights in the glider (new to the club) that season.

Lessons learned It is easy to misread an instrument especially when flying a new aircraft type and after a winter season of gliding inactivity. Currency in all flight maneuvers/ emergencies is critical to a thorough spring checkout. The FT&SC recommends, as part of an annual spring checkout, a review of all items in the glider pilot test standards.

2 Fatal During the early stages of a winch launch, a glider (HP-18) was observed climbing rapidly, then rolling and impacting the ground. The pilot was fatally injured.

Lessons learned To raise a possible deterrent to these types of accidents the BGA gliding website posted an article on winch launching stating that the target climb speed must be 150 % of the 1g stall speed before rotating into full climb attitude (for a 34 kt stall speed you would need 51 kts).

3 Write-off Twin Grob 102 crashed on landing attempt when wing tip struck a tree on short final in an undershoot. The pilot experienced a faster than normal downwind and strong wind gradient. Approach speed was 60 knots with a low ground speed and high sink rate noticed. Pilot attempted to increase speed but could not clear trees on final approach.

Lessons learned Insufficient approach speed for wind gradient. Winds aloft appeared faster than surface winds of 10 knots (broken thermals, fast downwind). Circuit was modified in the accident but base leg would need to be closer to reference point. Pilot commented that 45 degree leg would have helped to prevent flying too far downwind.

4 Write-off The pilot of a Schweizer 1-34 flew a normal (no wind) circuit to land, and selected full dive brakes on final approach and an approach speed of 60 mph. Surface winds were reported gusting from 16–22 mph and upper winds were observed much stronger. The pilot experienced heavy sink and loss of airspeed (40 mph) on final and reduced dive brakes to extend the glide. The glider continued to undershoot on final approach until it struck the ground. The pilot was not able to recover from the dive and appeared to make no attempt to flare. The pilot was not critically injured. Human factors include low experience on type and in gliders in general.

Lessons learned Strong winds, lower performance gliders, and lack of experience and familiarity on type do not go together well. Use of dive brakes before establishing that the glider is in an overshoot situation often leads to problems. If you cannot maintain glide slope and airspeed, you must close the dive brakes completely until an overshoot situation at the proper airspeed can be re-established. Then only use enough dive brakes to prevent the overshoot situation. In addition, this pilot appears to also have been caught off guard by the

classic effect of wind gradient. The approach speed selected for these conditions was on the low side and was not maintained. It is possible that the pilot thought he was stalling (high rate of sink) and continued to push the stick forward until impact. Club analysis of training factors in the accident report did not include the techniques taught to the pilot in pre-licence training. The new SAC curriculum has identified recognition of an overshoot and the establishing an overshoot condition before using dive brakes as pilot skills that must be emphasized in training. In addition, the analysis did not indicate the club procedures to control type checkouts and requirements for low time pilots attempting early flights in difficult conditions.

5 Write-off In calm conditions, a student in a Blanik L-13 completed the circuit and arrived too high on final. The instructor took over control and performed a sideslip with what was thought to be the dive brakes, but were in fact the flaps. The instructor did not recognize the different forces on the handle and the abnormally low rate of descent. Approaching the round out, the instructor could not put the glider on the ground before the end of the runway. The instructor closed the flaps, thinking they were the airbrakes. He attempted a right climbing turn in order to land in the opposite direction in the adjacent field of corn. The right wing tip touched the ground during the turn and the glider rolled on its nose and then on its left wing. Human factors include the poor ergonomic design of handles in this type of glider and the instructor's lack of experience.

This situation over confusion with flap Lessons learned and dive brake handles in Blanik L-13s continues to catch both students and instructors. The technique of confirming visually the selection of the correct handle by looking at the dive brakes for correct operation was not done in this situation as the instructor was distracted by the urgency of the situation. Training gliders with powerful dive brakes should not need to be slipped to reduce height in an emergency. Certainly, slipping techniques should be taught but dive brakes are more effective. Human factors have proven that students will make mistakes and in urgent situations pilots can fall victim to tunnel vision and losing sight of other options. We must be continuously re-evaluating the situation and our decisions. We must guard against students putting themselves in a situation where extraordinary actions must be taken.

One way to condition oneself against tunnel vision is to expect that what can go wrong will go wrong and to practise and/or visualize as many different options you might have for each key point of the circuit. For example, write down a decision matrix for variables in the circuit. At various decision points (high/low/too close/too far) indicate what action the pilot can take. Some clubs have changed the feel of the grip with some success but this has not eliminated the problem completely due to the proximity of the handles. In addition JAR-22 requires colour coding of controls to prevent confusion. This common problem is not unique to the Blanik L-13. Looking at the airbrakes on the wing every time you reach for the handle remains the best safeguard. Remember if the result in aircraft performances is not as expected, reconfirm visually again and consider other options (SOAR technique).

6 Major Damage The towpilot taxied the towplane (a tail dragger) back to the apron following 2.5 hours of towing operations. The aircraft turned quickly in the grass parking area and the wingtip struck a nearby tree. Damage included several ribs, spars, frame, and wing support and attachment areas. Noted were possible human factors of complacency and overconfidence.

Lessons learned It is necessary to exercise extreme caution when taxiing towplanes in confined areas. Shutting the aircraft down and moving it by hand are often called for. If we cannot eliminate obstacles then we should consider the restriction of apron areas by visual boundaries, such as painted lines or other means.

7 Major Damage On a dual training flight, the glider (a Puchacz) was sideslipped on a high final approach (450 feet) and with full dive brakes to increase the rate of descent. The canopy was destroyed when it opened, inflicting some damage to the wing while remaining attached to the glider at the hinge points. The instructor successfully landed the glider.

Lessons learned Similar incidents have occurred with this type of aircraft before. The FT&SC contacted OSTIV Training & Safety Panel members and one of the test pilots of this type, and did not find a design problem. One contact however, with experience of similar problems, said that investigations suggested the closed canopy locks were not fully over-centre, hence would be easy to knock open. The latching mechanism components can become loose/worn, and sideslips with full dive brakes may cause wake vibrations that rattle the canopy.

This situation is not limited to this glider type, and side-opening canopies on other two-place gliders are susceptible to large side loads in slips. If a glider is equipped with powerful dive brakes, the FT&SC recommendation is to avoid sideslips with the airbrakes fully open. If slips are necessary, do so in a direction that the cross flow of air will not force open the canopy. Careful preflight inspection of canopy latching mechanisms before each flight continues to be paramount.

8 Major Damage During the pilot's second flight in a newly acquired glider (SZD-55), the wing touched down after 30 foot takeoff ground roll and began to ground loop. The pilot released after attempting to lower the wing with the controls, but the glider became airborne and touched down tail first. After the accident, the observed wind was 90 degrees crosswind. Grass on the takeoff area was long and the runway slightly sloped and factored into the ground loop.

Lessons Learned This type of glider can be more prone to ground loop under certain conditions (crosswinds, etc.) as is common with CG towhooks and some higher performance wing designs. The recommended procedure stated in the SAC training material, for a wing touching the ground on take off, is to release immediately. In addition, attention to grass cutting operations is essential to mitigate ground loop risks. Type transition is a higher risk activity and all conditions (runway/ wind/etc) for the first few flights should be benign.

9 Major Damage Pilot was landing an L-33 Blanik on a gusty day (wind 20-25 knots, 45 degree crosswind) and was

observed landing fast and long. The glider landed hard and bounced several times on the main wheel damaging the fuselage. Pilot had 18 hours experience total and 10 hours on type.

Lessons learned In this case, the pilot maintained a higher approach speed to landing to compensate for the wind gradient. Landing speed should be only slightly above normal to compensate for crosswinds. The L-33 has a very low crosswind limitation (7 knots) and should not be flown in these conditions, especially by low time pilots. High-energy landings increase risk for accidents exponentially.

10 Major Damage The pilot of an L-33 Blanik was high in the circuit and selected partial airbrakes to lose height. The airbrakes were sucked out when the pilot diverted attention to operate the GPS onboard. Too much height was lost to reach the field. The pilot attempted to land off-field and, on short final, struck a metal rod supporting an electrical fence damaging the wing and fuselage.

Lessons learned On many glider types, the airbrakes will suck open if you release the handle after unlocking. The pilot's attention must stay focused on the landing task and not distracted to instrumentation or other activities.

The pilot was attempting a takeoff on 11 Major Damage a paved 75 foot wide lighted runway slightly downhill. Modified tow procedure used was to apply brake (ASW-20) with end of travel on airbrake handle until taking up the slack on the towrope. Towplane then applied 80% static power and both glider and towplane were to release brakes simultaneously. On this flight the towplane releasing before the glider, the sling shot effect, and a CG hook on glider, resulted in launching the glider into the runway lights and off the strip. Ergonomic position of the release handle in the ASW-20 made it difficult for the pilot to immediately release from the tow as the pilot was holding the brake handle vice near the release handle. The wing was damaged when it struck the runway lights. Additional factors stated in this accident included complacency, impatience, slight crosswind, and alignment of glider and towplane.

Lessons learned Modified procedures may make sense at the time but they must be well thought out to anticipate risks. The best way to handle this is to discuss procedures in a knowledgeable group well in advance and "what if" to identify risks.

12 Major Damage Canopy of Jantar discovered broken when hangar unpacked in morning.

Lessons learned It is unlikely that the culprit did not notice this damage at the time the event took place. The damage was not reported likely because of indifference or fear of retribution. Why the damage occurred is likely from moving gliders with too few personnel which was not consistent with club policy.

13 Substantial Damage Towplane was tied down outside on an open airfield at a flying camp. A hailstorm damaged the fabric and control surfaces.

Lessons learned Remote operations have increased risks from severe weather. Options to deal with wind or hail need to be considered. Padded wing covers or returning aircraft to

hard cover (hangar) may be the only alternatives even if ferrying is required. Always plan for the potential of hail if CBs are forecast/possible.

14 Substantial Damage During his first flight in a newly acquired glider (HP-18), the pilot experienced control difficulties with the initial launch on aerotow. The pilot released. Selecting flaps down, the pilot was attempting to lower the nose but the glider rolled to one side and struck the ground. The glider was substantially damaged but the pilot was unhurt. Noted factors were pilot lack of currency and familiarity with glider type, CG towhook location, rear CG location in this aircraft, and club checkout procedures.

Lessons learned Transition checkouts, especially to modified homebuilts may present special risks. Pilot currency and club method of transitioning pilots to new types are critical mitigation factors. This process must be thorough. Aircraft with an aft CG location are pitch sensitive, with a CG hook they lack a straightening effect of the pull of the tow rope in the initial takeoff roll, and are prone to kiting and getting high on the towplane (a dangerous situation).

15 Substantial Damage Towplane gear collapsed on landing, causing a prop strike and damage to the wing.

Lessons learned There have been several other similar accidents in the past with sprung gear towplanes. High landing cycles have demanded careful preflight inspection for hairline cracks in the gear near the bolts for the wheels and near the kingbolts. Examine also the kingbolts carefully in the preflight inspections. Some clubs remove the gear annually to have them non-destructive tested, usually X-ray. If you operate a Citabria/Scout or similarly geared aircraft, you should consider adding this process to your maintenance practices.

16 Substantial Damage The pilot was returning from a second 2+ hour flight on a hot and humid day. On final approach, the pilot was attempting to land short and undershot the threshold failing to reduce the airbrakes. The glider settled into 5 foot high grass, began to rotate to 90 degrees, and then exited the grass landing sideways on the runway. Fatigue, dehydration, hypoglycemia were listed as potential factors. The pilot was very experienced.

Lessons learned All pilots, regardless of experience, are at risk of misjudgement if they do not guard against dehydration/fatigue. The problem is that by the time you may notice the effects, it is too late. Keep hydrated, bring food on flights longer than an hour. Do not skip meals, and take a break from other gliding activities before you fly. Consider your club's grass cutting operations. Have you planned your operations with a long enough undershoot area? Field layouts with approach hazards near thresholds are setting pilots up for failure.

17 Minor Damage Pilot landed out on a cross-country flight and groundlooped on landing. The selected field had longer grass than expected (18–24 inches) after the aerial inspection. Pilot was very experienced.

Lessons learned This type of accident is too common even amongst experience pilots. Seasonal changes to field increase risk. Freshly cut fields, cultivated dirt fields, and short crop fields provide reduced risk of groundloop. **18 Minor Damage** A glider (Grob) was inspected after assembly and discovered to have cracks in the leading edge of a wing and was sent for repairs. The wing was likely damaged in a previous disassembly and not reported.

Lessons learned A careful preflight is always required, as damage is often not reported. We can attribute many reasons why a pilot might not report damage. Ignorance, indifference, or fear of retribution could be factors. Proper training, supervision of assembly, and club policies that do not intimidate reporting (payment of deductibles, fines, etc.) can mitigate this type of problem. Not detecting this problem could lead to serious situations.

19 Minor Damage Scout tail wheel broke on normal landing.

Lessons learned This is common reported problem with this type of tail wheel assembly despite frequent inspections. Middle spring breaks first at the relief hole drilled in the spring to fit the dimple in the long spring. You need to know where to look on the DI. The club has requested a solution from the manufacturer. In the meantime, be vigilant.

20 Minor Damage Two towplanes were parked next to each other outside the hangar with brakes on. A change in wind direction and gust swung one towplane wing to strike the other.

Lessons learned Brakes are not sufficient by themselves to prevent this type of common accident. Always use wheel chocks when parking aircraft unattended outside. In addition, park all aircraft subject to possible wind effects so that if they swing or wings move up or down, they cannot strike another aircraft or objects. Check your club policies and see if your aircraft are at risk.

Analysis

Some of the accidents and several incidents reported demonstrate there is some confusion over approach speed and landing speed. Many new pilots are carrying "high energy" approaches to touchdown. Approach speeds should be used in accordance with the Pilot Operating Handbook for each glider or if not available use the SAC recommendation of 1.3 x Vstall + Vwind. Once the glider has descended, down through the wind gradient, slow the glider to normal landing speed with a minimum energy landing (notwithstanding slightly higher landing speed in crosswind technique).

We also had several accidents/incidents with the Blanik L-33 this year. This aircraft handles well but its crosswind limit is only 7 knots and airbrake use requires adding an additional 10 knots to the approach speed if they are fully opened. If reducing the airbrakes before the flare is not completed, the pilot will have to rotate so nose high that it will damage the tail when it strikes the ground first. Conversion to type briefings must be thoroughly done and supervised. Several clubs require L-33 type conversions to include dual flights in a glider with powerful airbrakes to have the candidate demonstrate the techniques stated in the last two paragraphs. Letting a low time pilot fly this aircraft on a gusty day without good conversion training is setting them up for an accident.

Type conversions continue to be higher risk flying and we do not seem to be learning anything from past accidents. Clubs must review how they are handling conversion training and formalize the process more. A fellow pilot pointing out some of the characteristics and reading the POH is inadequate. In addition, difficult wind conditions are also not the time to test your skills in a new type. CFIs need to supervise this training.

Several accidents/incidents indicate that clubs need to look at their operating procedures and should include their grass cutting operations. Has a team of club members looked for hazardous situations in the way you operate lately? Risk reduction can be easy to achieve with little effort. It also appears that it is cheaper to insure a glider than provide adequate hard shelters to protect them. This strategy may work in the short term but the long term consequence may be an inability for all of us to get insurance. There are low cost shelter solutions. Clubs need to examine their operations to find out if they are doing all that they can do to reduce risk.

Undershoot accidents/incidents and stall/spin situations point out that we have not perhaps done our past training in the best way. The new training curriculum includes new exercises that emphasize pilots should be taught to recognize an overshoot situation before using airbrakes. In addition, the training has new exercises to build stall/spin recognition and avoidance. Apparently, not all licensed pilots are aware or familiar with these exercises. CFIs have a challenge to correct this!

Air proximity incidents continue to be a challenge in many locations. Relatively minor adjustments in checkout procedures for air space limitations, flightline management, and/or pilot communication can materially assist in risk reduction.

Conclusion

The lessons learned here are not exclusive or all encompassing. You may have identified several others yourself. The SAC Roundtable has a safety subject area where you can add your own thoughts that could help other pilots. Some have commented on the Roundtable that they feel the SAC curriculum is too long. We have used lessons learned and comparison with other OSTIV countries to analyze and improve our basic training exercises. Our goal is to improve our resistance to some of these accidents. The new curriculum only adds a few more flights to the average and mainly consists of an increased number of exercises in a specific order to improve the quality of instruction. Our training is now similar to the training conducted in countries with lower accident rates. The results may take many years to achieve because many pilots have not had the benefits of these exercises and many clubs continue not to use them because they prefer to stay with current methods.

Part of the accident rate challenge is that "Safety First" is not being applied. Chris Wilson from SOSA has pointed out in his Club Safety Report conclusions that "alertness", the ability to be aware of the situation, the application of "judgement" using one's experience from knowledge gained, and the application of a generative "attitude" along with self-discipline will reduce accidents. Along the line of his recommendations, FT&SC has recommended a "Safety First" campaign for 2005.

In addition, clubs have the power to really change safety. Many members including FT&SC are frustrated with the number of serious gliding accidents. Most OSTIV panel countries are doing better than Canada. The Transport Canada website describes the systems approach to safety. Please visit this site. This program maps out that safety is a leadership issue. Clubs have the authority and the challenge to improve safety. A committee or an association cannot have safety delegated to it without having authority also. The leadership that controls the flying must control safety. Pilots will cooperate when they realize the club will not tow them or not let them use the club facilities if they choose to fly unsafely. We cannot eliminate all accidents through a safety program. Unfortunately some accidents will continue to happen even to "safe" pilots because humans are fallible. However, we can eliminate many accidents by putting more efforts into training, safety culture, and human factors understanding through club leadership. The TC website describes how to do this.

INSURANCE — Keith Hay

The 2005 insurance plan is now in place. Renewal information has been forwarded to club treasurers and the majority of the renewals have now been returned.

After the previous year's high loss ratio and the subsequent effect on our premiums, we saw a much lower level of losses for 2004. Our total loss ratio in the plan dropped to 45% from a high 96% in 2004. This drop in losses, accompanied by some of our higher loss years moving further into the past, enabled us to negotiate no change in change in premiums for 2005. While we would have liked to have been able to negotiate a decrease, our long-term record is still not strong enough. If we can maintain an ongoing trend of low losses, we hope that further relief may be in sight. The effect of bad news is much more immediate and longer lasting than good news!

Once again, as is done every year, on behalf of SAC and the committee, our broker put the plan forward for expressions of interest and quotes to the available insurance companies. Several companies elected not to provide a quote. Some companies indicated they would be willing to take on part of the plan, but at a rate at least equivalent to what we currently have. Some companies have indicated they do not wish to do small general aviation underwriting in Canada at this time. On the bright side, there seemed to be more interest expressed from some of the London insurance markets.

Before release, all rates were checked for accuracy and, as always, care was taken to ensure the final rates would be competitive with similar coverage available in alternative markets. For those who wish to defer payment of the premium, an installment payment option continues to be available.

Our long-term record is a primary determinant of premium rates. Our 5-year average total loss ratio is still 54%, while our

SAC INSURANCE HISTORY, 1993 – 2004												
	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Insured Clubs	41	40	39	32	37	37	39	41	38	35	33	36
Total Aircraft	384	417	413	393	387	411	359	376	306	276	351	368
Hull Value (\$M)	8.57	9.09	9.43	9.13	8.61	10.15	10.55	10.89	9.49	8.56	13.35	13.60
Hull Premium (\$K)	198	221	244	247	241	267	289	306	300	287	399	473
Hull Losses (\$K)	258	205	225	185	151	340	347	280	127	147	387	149
Hull Loss Ratio (%)	130	102	89	75	63	127	120	92	42	51	97	32
Total Premium (\$K)	298	323	354	356	347	423	435	466	493	508	652	804
Total Losses (\$K)	274	253	240	1616	1717	456	401	339	127	147	629	361
Total loss ratio (%)	92	79	68	454	495	108	92	73	26	29	96	45

hull average for the same period is 63%. The aviation insurance industry typically views anything over a 60% payout ratio as a concern impacting plan profitability. While our position is starting to improve, we are not yet in a strong bargaining position when it comes to negotiating policy renewal.

Unfortunately, we are no longer able to obtain \$3,000,000 liability coverage. The maximum available is now \$2,000,000. This is a change that is affecting virtually all general aviation policyholders, not just SAC. The underwriters no longer wish to carry that level of risk. The liability coverage provided under the SAC plan is still superior to that offered under other policies/bids we have reviewed since it has no sublimits which further limits the amount paid out to values lower than the stated amount. This also affects each club's premises coverage under the plan, as that limit will also now be \$2,000,000.

While we investigated incorporating some changes to higher deductible levels, the drop in premiums was not meaningful when balanced against the higher deductible. We plan on continuing to pursue future possibilities in this area. We have reorganized the safety premium, making it into a claims surcharge to be applied against those aircraft owners with claims. Proceeds from the surcharge are now redistributed to those owners with good claims history as a no-claims rebate. The rebate this year equates to approximately 1.5%. The dollar amount will be proportional to each aircraft's coverage. This provides the plan with some premium features where those with claims pay more, while those with no claims pay less.

Since the primary destination of the old safety premiums was to fund Flight Training & Safety initiatives, and these funds were no longer available, we were able to negotiate stable on-going funding from the underwriter for SAC/FT&SC committee initiatives. They see the long-term benefit to training and safety initiatives to promote a better safety record. As such they have agreed to provide \$10,000/year to SAC for funding FT&SC initiatives.

We're also working on an insurance FAQ page to be added to the SAC website to answer some of the more common questions we hear. Watch for upcoming availability. We are also looking at potential ways to better incorporate the higher hull values we are starting to see as new gliders come into the plan.

I will be doing a more extensive presentation at the SAC AGM in Ottawa on March 19 and hope to see many of you there. For those not able to make it to the AGM, the presentation should be available via the SAC website shortly after the AGM.

MEDICAL — Dr. Peter Perry

Again, requests for assistance have been sparse, as has been the case since the introduction of Cat. 4. In the past I have advised pilots against making false declarations, as this may invalidate their insurance coverage in the event of making a claim. Notably there has been an absence of requests regarding heart disease — this used to be the main topic by far.

I have written pilot health articles on a variety of topics of Aviation Medicine e.g, heart disease, diabetes, obesity, and what pilots can do to help themselves on a personal level.

More recently I have presented articles to *free flight* on the ageing pilot in view of the increasing average age of our pilot population and its insidious effect on pilot performance. In doing so, I have tried to avoid creating paranoia, e.g. "Big Brother is watching you".

On a personal basis, I ceased being a CAME in 2000, and now do not feel current enough in the current status of Medical Standards to advise pilots, therefore I have decided to stand down as Chairman of the Medical committee after 18 years in that position. I have publicized this on the SAC web page and there has been a response which I am pursuing at the present time.

Once again, my thanks go to Dr. Delaney who serves our francophone pilots.

RECORDS — Roger Hildesheim

2004 was a slightly slower record year than previously. Seven claims were received and approved, with none rejected or pending. A table showing the statistics for the year is given below. New territorial records where established by Dave Mercer (Cowley), Tim Wood (Invermere), and Tony Burton (across Wild Rose Country). New citizen records where established by Rolf Siebert (Ely, Nevada).

Pilot	Tony Burton
Date/Place	18 May 2004, Black Diamond, AB
Record type	Triangle distance, Club
FAI Category	3.1.4g
Sailplane type	Russia AC-4C, C-GJEC
Distance	515.7 km
Task completed	Black Diamond, Brocket, Vauxhall & return
Previous record	482.2 km, 2003, Tony Burton

Pilot

Pilot

Speed

Pilot

Speed

Task

Pilot

Speed

Task

Pilot

Date/Place

Record type

FAI Category

Sailplane Type

Date/Place

Record type

FAI Category

Sailplane Type

Previous Record

Date/Place

Record type

FAI Category

Sailplane Type

Previous Record

Date/Place

Record type

FAI Category

Sailplane type

Task completed

Previous record

Date/Place Record type FAI Category Sailplane type Distance Task completed Previous record

Tony Burton 18 May 2004, Black Diamond, AB Free Triangle distance, Open & Club 3.1.4a Russia AC-4C, C-GJEC 433.4 km (Open), 515.7 km (Club) Black Diamond, Brocket, Vauxhall & return unclaimed (new)

Gerard (Tim) Wood

13 Jun 2004, Invermere, BC 100 km Speed to goal, Open & Club SAC ASW-27, C-FWKR 136.1 km/h (Open), 119.8 km/h (Club) Mt Seven to "100 South" goal Open,125.1 km/h, 2001, Larry Springford Club, 113.0 km/h, 2002, Dave Mercer

Rolf Siebert

10 August 2004, Ely, NV, USA 100 km Speed to goal, Open & Club, Citizen SAC 304CZ-17.4m, N304RS 183.7 km/h (169.0 km/h Club) **GPS** turnpoints Open: 147.7 km/h, 1992, Walter Weir Club: 119.8 km/h, 2004, Tim Wood

Rolf Siebert

11 August 2004, Ely, NV, USA 400 km Speed triangle, Open & Club, Citizen SAC 304CZ-17.4m, N304RS 140.1 km/h (128.9 km/h Club) GPS turnpoints Open: 119.7 km/h, 1994, Charles Yeates 82.2 km/h, 2002, Tracie Wark Club

David Mercer

6 October 2004, Cowley, AB 100 km Speed triangle, Open & Club, Territorial 3.1.4h Genesis 2, C-GBKK

Speed	141.5 km/h (133.0 km/h Club)				
Task	GPS turnpoints				
Previous Record	Open: 131.1 km/h, 1989, Kevin Bennett				
	Club: 115.6 km/h, 2002, David Mercer				
Pilot	David Mercer				
Date/Place	7 October 2004, Cowley, AB				
Record type	100 km Speed to goal , Open & Club, Territorial				
FAI Category	SAC				
Sailplane Type	Genesis 2, C-GBKK				
Speed	167.0 km/h (156.9 km/h Club)				
Task	GPS turnpoints				
Previous Record	Open: 136.1 km/h, 2004, Tim Wood				
	Club: 119.8 km/h, 2004, Tim Wood				

This year saw the formal introduction of two new FAI record categories, 3 Turnpoint Distance and Free Triangle Distance. A "Looking for Heros" contest to populate these two new categories was also launched. See the 6/04 issue of free flight magazine for the details. The new contest rules will be posted on the SAC Roundtable. Tony has updated the record claim forms this fall to include changes from FAI.

Please use the forms currently posted on the SAC website for all record claims.

In general the quality of the claims paperwork and timely notification of claims was very good this year. Thanks to all pilots and OOs who submitted record claims this year - it was a pleasure to go through them all so smoothly.

Although Tim Wood did not submit any claims from his home base in Ontario this year, he has still been active in the quest for his personal "holy grail" of flying to Hawkesbury from York Soaring. Anyone from RVSS, GGC or MSC interested in taking up the reverse challenge of trying to get to Southern Ontario?

Now is the time of year for all of us to get out the maps and look at flying a unique task at your respective clubs. I know that both my 50 km and 300 km goal flights were flown using unusual waypoints and directions. It's a big country, try flying something unusual in 2005.

SPORTING — Jörg Stieber

Members:	Jörg Stieber	joerg@odg.com
	Walter Weir	waltweir@ca.inter.net

IGC Plenary Meeting Lausanne

In early March 2004 I attended the IGC Plenary Meeting in Lausanne. One of the objectives was to present the Canadian Proposal to accept the use of commercial, off-the-shelf (COTS) GPS units for badge documentation. Unfortunately the proposal had been submitted in haste, bypassing the Sporting committee. Not surprisingly, it was rejected with 1 vote in favour (Canada), 23 opposed and 7 abstentions. From a technical point of view there were basically three objections:

The vast number of different COTS units in the market 1 with unknown features make it impossible to issue a broad

approval unless all available units are tested.

- 2 The track recorded by some COTS units is not necessarily based on actual GPS positions. In cases of signal loss some units go into a so-called dead reckoning mode in which positions are computed and recorded based on the last known position and velocity vector (also called inertia). In other words, a pilot could cover the GPS antenna, turn short of a turnpoint and wait for the COTS unit to reach the turnpoint in dead reckoning mode.
- 3 Typically, COTS units do not record changes of the reference coordinate system (world ellipsoid) during flight, which also changes the position the unit is indicating. Some units allow the user to design his own ellipsoid. This can result in significant position errors.

Several delegates expressed privately support for the general philosophy of allowing COTS GPS for badge documentation. I am convinced the proposal would have had a greater chance of success if the time would have been taken and address these technical issues and to build support among delegates fundamentally sympathetic to the use of COTS GPS units.

New Presidency

Tor Johannessen stepped down as IGC president. Bob Henderson and Erik Mozer accepted nominations for this position. With both being excellent and experienced candidates it was difficult to decide who to support. Based on the assumption that North American IGC leadership would be preferable, Canada supported Erik Mozer (USA). Bob Henderson was elected President, Erik Mozer was appointed First Vice President.

COTS GPS /GPS altitude

Significant time was spent on further discussions regarding the use of COTS GPS units for badge documentation. I received 176 e-mails on this topic alone in 2004.

Garmin is willing to make software changes to some of their handheld units to accommodate the concerns of the IGC. Dropping the requirement for a log of barometric altitude and replacing it with GPS altitude, would reduce the cost of GPS recorder units significantly. After a request from Canada, the IGC Bureau has invited Larry Keegan of Garmin to the upcoming IGC meeting to present Garmin's plans to address concerns over data security with their units and to show that the accuracy of GPS altitude exceeds the accuracy of barometric altitude. Garmin is proposing to loan a few units to the IGC for testing.

With the progress that has been made on this issue so far, it is becoming clear that COTS, if we ever get there, will be limited to a few Garmin handheld models. I sincerely hope that the software changes required for these units to be used for badge documentation will not affect their low-cost character or easy availability.

I will be attending the ICG Plenary meeting in Lausanne on March 4/5, 2005 to support the Garmin/COTS initiative. There will be no cost to SAC.

2004 Nationals

The Nationals were hosted by CVVQ in St. Raymond, near Quebec City. The rules for the 2003 Nationals were used. Since there were only twelve competitors, all classes were combined into one handicapped class. The weather was difficult but with the help of Jean Richard's very accurate weather forecasts, six competition days were achieved. Several flights exceeded 300 km, the longest being 360 km. The winners were:

Jörg Stieber 5393 points Walter Weir5293 points Ed Hollestelle 4707 points

I want to take this opportunity to thank the members of CVVQ for being such excellent hosts to the Canadian Nationals.

2004 Seeding List

The 2004 Seeding List, based on the results of the 2004 Nationals was calculated according the seeding policy. The top seeded pilots (greater than 85%) are:

Jörg Stieber	100%
Walter Weir	98.7%
Ed Hollestelle	88.6 %

Future Rules and Task Forms

During the Nationals 2004 the Sporting Committee hosted a pilot feedback session to receive feedback on the current rules and to discuss other subjects of interest to competition pilots.

- The TDT scoring system is still well-accepted by most pilots in the competition. However, some of the earlier concerns were re-iterated (no proper finish, energy differences on time-out, difficult planning around time-out, etc). Some pilots simply prefer a traditional speed task type race to the finish line without the planning required for a good time-out location under TDT. Some pilots who compete frequently in the US would prefer a return to a scoring system which is closer to US or international rules. Unfortunately, US rules differ quite substantially from international competition rules. A choice which rules to follow would have to be made.
- There were no problems with low energy finishes during the contest.
- The 5 km start, centered on the contest site has proven to be safe and practical.
- In order to eliminate "missed turnpoints", the suggestion was made to expand the turnpoint observation zone from 500 m to a radius of 2 km and score the actual track distance. It was agreed that we may as well go to an AAT type task instead.
- The pros and cons of maintaining the 1000 point scoring system vs. a scoring system strictly based on distance were discussed. The basic question here is: should every day carry equal weight except for day factors? (*Relative Scoring*) or, should strong days with long tasks carry more weight than weak days with short tasks? (*Absolute Scoring*).

Beyond these fundamental differences here is a summary of the advantages to each scoring system:

1000 point scoring

 Allows a mix of TDT with traditional scoring systems such as AST during one contest. Strict distance scoring in km

- Very transparent and easy to understand for pilots and public.
- no need for day factors
- A pilot's score only depends on his/her performance and not on the actions of other pilots.

There was general agreement to introduce the AAT for next year. This can be done under the TDT scoring system or following either the US or international rules.

The Sporting Committee is currently conducting a further indepth discussion on the Roundtable on this subject. The discussion has brought some new aspects to light:

- Modified 1000 point scoring system
- Desire for speed score to practise final glides

2004 Online Contest Canada

The OLC Canada has further grown in popularity. New records were established in terms of pilot participation, total flights submitted and total distance recorded.

- 188 pilots participated, a 26% increase over 2003
- 2092 flights were submitted, a 12% increase over 2003
- 411,890 cross-country km documented, 28% over 2003

Besides inspiring Canadian pilots to set higher goals, the impressive flight statistics documented by the OLC are a very valuable tool in negotiations with the authorities when it comes to access to airspace, etc. After correction of some errors in respect to glider handicaps, the final results for the 2004 season differ slightly from the results shown on the OLC website. The corrected results have been posted on the SAC and CAS websites.

29th FAI World Gliding Championships

The next Worlds for Standard Class, 15m Class, 18m Class and Open Class will be in 2006 in Eskilstuna , Sweden. The preliminary dates are 5–17 June 2006.

Call for Volunteers and Thanks

Colin Bantin's resignation to pursue other interests has left the Sporting Committee short-staffed. This is a particular concern in view of the added workload brought on by COTS and the pending revision of the Nationals rules. We are currently trying to fill this vacancy and would encourage volunteers to step forward.

On a personal note, I want to thank my fellow committee members, former and present, Colin Bantin and Walter Weir for donating their time to the cause of soaring.

TROPHIES & AWARDS — Phil Stade

The introduction of Canadian pilots to the On Line Contest is now complete. As a result a number of changes to the criteria for awarding trophies have been recommended by the SAC Sporting committee. **BAIC Trophy** The committee recommends that the BAIC trophy be awarded to the pilot with the best flight of the year under the OLC Canada rules.

Canadair Trophy The committee recommends that the Canadair trophy be awarded to the pilot scoring the best six flights of the year under the OLC Canada rules.

"200" Trophy Awarded to the pilot with a total gliding time of 200 hours or less PiC at the start of the trophy season (16 October) scoring the best six flights of the year. The committee recommends that the trophy be scored using the OLC Canada rules and that the meaning of "novice" under the OLC Canada rules should be changed to match the "200" Trophy definition.

Stachow Trophy In recent years the Cowley soaring site has generated a number of applicants for the Stachow Trophy. The structure of the Cowley block airspace has resulted in several ties at 28,000 feet. It is therefore recommended that when there is a tie for absolute altitude that the winner be the pilot with the greatest altitude gain.

The other SAC trophies will be awarded as in the past.

Flight Trophy Winners

BAIC Trophy – Best flight of the year – Motorglider **Hans Binder** (Canadian Rockies Soaring Club) – Hans' 23 July flight (*47nc5471.igc*) of 1010.9 km. (825.18 OLC points) was flown from the Fairmont, BC airport:

North to 50 km west of Saskatchewan Crossing South to 15 km southeast of Fort Steele North to 22 km north of Golden South to 3 km south of Canal Flats North to 12 km south of Radium Hot Springs South to land at Fairmont airport.

The flight was in C-GLGV, a DG 800/18m motorglider. The flight took 9 hours, 47 minutes for an average of 105.3 km/hr. A great flight worthy of national recognition.

BAIC Trophy – Best flight of the year – Pure glider **Tim Wood** (York Soaring Association) – Tim's 24 June 24 flight (*460a1dc.igc*) of 781.18 km (682.21 OLC points) was flown from the Invermere BC airport:

North to Bush Arm South to 8 km southeast of Grasmere North to land out 6 km south of Golden Airport

The flight, in CF-WKR, an ASW 27, took 8 hours 46 minutes for an average of 93.4 km/hr.

Canadair Trophy – best six flights of the year – Motorglider **Hans Binder** (Canadian Rockies Soaring Club) – The six flights totaled 5512.44 km (4468.52 OLC points) all originated at the Fairmont, BC airport. Approximately 53 hours was spent on the flights for an overall average speed of about 104 km/hr. In addition to these six flights Hans recorded 44 others for a season total of 30,748 km and an average distance of 615 km per flight. A truly dedicated soaring pilot. All the flights were in C-GLGV, a DG 800/18m motorglider.

- July 23, 2004 1010.91 km 825.18 OLC points 9 hours 47 minutes, 47nc5471.igc
 North to 50 km west of Saskatchewan Crossing South to 15 km SE of Fort Steele
 North to 22 km north of Golden
 South to 3 km south of Canal Flats
 North to 12 km south of Radium Hot Springs
 South to land at Fairmont airport.
- June 8, 2004 959.20 km 751.27 OLC points 9 hours 5 minutes, 468c5471.igc
 North to Bush Arm
 South to 22 km SE of Skookumchuck
 North to 23 km SE of Golden
 South to 12 km SE of Canal Flats
 North to 6 km NE of Spillimacheen
 South to 25 km north of Canal Flats
 North to land at Fairmont airport.

 July 22, 2004 – 923.48 km – 730.04 OLC points 9 hours 13 minutes, 47mc5471.igc
 North to 23 km north of Golden
 South to 17 km SE of Skookumchuck
 North to 23 km north of Golden
 South to 25 km north of Skookumchuck
 North to 20 km north of Radium
 South to 5 km north of Canal Flats
 North to land at Fairmont airport.

4. June 4, 2004 – 886.78 km – 728.69 OLC points 8 hours 50 minutes, 464c5471.igc
North to 32 km SW of Columbia Icefields Info Centre South to 25 km north of Fernie
North to 8 km east of Spillimacheen
South to 10 km south of Canal Flats
North to 28 km north of Fairmont airport
South to land at Fairmont airport.

June 28, 2004 – 870.29 km – 719.75 OLC points 8 hours 13 minutes – 46sc5471.igc
North to 23 km SW of Columbia Icefields Info Centre South to 4 km east of Fairmont airport
North to 21 km east of Bush Arm
South to Canal Flats
North to land at Fairmont airport.

July 14, 2004 – 861.78 km – 713.59 OLC points 8 hours 50 minutes – 47ec5471.igc
North to 22 km NE of Mica Creek
South to 28 km east of Fairmont airport
North to 20 km west of Field
South to 5 km south of Fairmont
North to land at Fairmont airport.

Canadair Trophy – best six flights of the year – Pure glider **Tim Wood** (York Soaring) – The six flights totaled 4043.93 km [3514.88 OLC points] with the first five of the flights originating at Invermere airport in BC and the sixth flight originating at Arthur Ontario. A total of approximately 49.6 hours was spent in flight for overall average speed of about 81.6 km/ hour. In addition to these six flights, Tim recorded 23 others for a season total of 11,128 km and an average distance of 383.72 km. Congratulations on a great season. All the flights were flown in CF-WKR, an ASW 27.

 June 24, 2004 – 781.18 km – 682.21 OLC points 8.4 hours, 46oa10dc.igc
 Invermere to Swansea, North to Bush Arm South to near Roosevelt Border Creek
 North to land out 6 km south of Golden.

 June 22, 2004 – 773.86 km – 676.07 OLC points 8.4 hours, 46ma10d3.igc
 Invermere to Steeples, north to Bush Arm South to White River
 North to land at Invermere.

 June 3, 2004 – 678.21 km – 593.77 OLC points 8.7 hours, 463a10d3.igc
 Invermere north to Bush Arm
 South to Bull River, north to south of Luxor Pass
 South to land at Invermere.

4. June 21, 2004 – 654.11 km – 567.16 OLC points 7.7 hours, 46la10d2.igc
Invermere south to Canal Flats
North to Bush Arm, South to Fairmont
North to Edgewater
South to land at Invermere.

5. June 29, 2004 – 613.81 km – 520.09 OLC points 7.4 hours, 46ta10d4.igc
Invermere south to 6 km SE of Fairmont
North to Bush Arm, south to Swansea
North to Golden
South to land at Invermere.

August 15, 2004 – 542.76 km – 475.58 OLC points 7.5 hours, *48fa10d4.igc*Arthur, ON north to Bracebridge
East to Bancroft
West to 22 km east of Bracebridge
South to land at Arthur.

"200" Trophy – Ray Perino

The six flights totaled 2041.4 km (2316.45 OLC points) and they all originated at Invermere. A total of approximately 33 hours and 51 minutes was spent flying for an average overall speed of 60.3 km/hr. In addition to these six flights, Ray recorded an additional 34 flights for a grand total of 9095.3 km. The flights were all in C-FEPW, a PW-5.

 July 23, 2004 – 409.47 km – 475.13 OLC points 6 hours 13 minutes, 47nf5jr1.igc
 North to Golden, south to 4 km east of Canal Flats
 North to 25 km east of Spillimacheen
 South to land at Invermere August 11, 2004 – 366.55 km – 381.74 OLC points 6 hours 7 minutes, 48bf5jr1.igc
 South to 5 km SE of Fairmont
 North to 6 km east of Spillimacheen
 South to 25 km SE of Fairmont
 North to photo landing five km NE of Spillimacheen

 July 22, 2004 – 323.06 km – 374.49 OLC points 5 hours 47 minutes, 47mf5jrl1.igc
 North to 9 km NE of Radium Hot Springs
 South to 10 km SE of Fairmont
 North to Golden, south to land at Invermere.

4. June 17, 2004 – 323.08 km – 373.61 OLC points 5 hours 15 minutes, 46hf5jq1.igc
North to 5 km north of Parson
South to 5 km SE of Fairmont
North to 6 km north of Parson, south to land at Invermere.

5. June 4, 2004 – 314.48 km – 364.86 OLC points 5 hours 22 minutes, 464f5jq1.igc
North to 6 km east of Parson
South to 6 km NE of Canal Flats
North to 5 km NE of Brisco
South to land at Fairmont.

6. July 14, 2004 – 304.73 km – 346.62 OLC points 5 hours 7 minutes, 47ef5jq1.igc
North to 12 km NE of Edgewater
South to 10 km north of Fairmont
North to photo landing 5 km NE of Parson
South to 5 km SE of Fairmont, north to land at Invermere.

Stachow Trophy – highest flight of year – Gord Taciuk

A height gain of 7040m (23,100 ft) on 7 October 2004 results in a win for Gord. The flight originated at Cowley and took just over 5 hours to complete. After release lift was not steady enough to get into the wave and the flight returned to the airfield where lift was encountered as Gord was preparing to enter the circuit. A long struggle to 28,000' followed and the results were recorded on a borrowed barograph. Gord received his Diamond Altitude for this climb. Congratulations Gord.

Competition trophies

These trophies were awarded at the Nationals at St-Raymond (more details in *free flight 5/04*):

CALPA trophy – Club class Champion – *Jörg Stieber*

Dow trophy – best task flown Club class 156.1 km @ 71.6 km/h – *Nick Bonnière*

Carling O'Keefe trophy – Best team – not awarded

SOSA trophy – Best novice – Jean-Guy Hélie

Note: the **MSC trophy** (15m class Champion) and **Wolf Mix trophy** (Standard class Champion) were not awarded as separate classes were not flown.

Other Trophies

Walter Piercy trophy (instructor of the year) Winner – Paul Fortier, Rideau Valley Soaring

Paul amassed 93 instructional flights during the year for a total of 45 hours instructing which represents almost 30% of the club's instructing effort for the season. Not only that but Paul has been CFI since 1988, carrying this important job for the club, and being the club's NavCanada liaison person. He has also held the post of chief tow pilot, maintenance expert on gliders and towplanes, and continues to hold the position of chairman of the SAC Technical Committee.

Paul Fortier is one of those people who work diligently in the background but whose contributions over the years are much valued. He is a deserving recipient of the Walter Piercy Award.

Hank Janzen Award

(club or pilot with best contribution in the year to flight safety) Winner – **Chris Wilson**, SOSA

Chris Wilson has served as the SOSA Gliding Club Safety Officer for the past seven years. During that time he developed an analytical framework to help the club develop a better understanding of the causes of accidents and incidents. He also encouraged the use of the "Blue Book" anonymous reporting system while regularly analysing these reports during the gliding season. His desire to really understand the reasons for accidents and incidents while preserving confidentiality has been a hallmark of his tenure. Chris also made sure that both the instructor body and general membership put the focus on the reasons why an accident occurred while avoiding *blame*.

Chris Wilson has been a glider pilot for 30 plus years and he has extensive cross-country gliding experience. He is also one of the most senior instructors at SOSA and student feedback has been highly positive over this time. He comes highly recommended for this award by his club.

Roden trophy (club soaring skills development)

This trophy is awarded to the club that, for its size, develops the soaring skills of the largest numbers of its pilots and is consistently aggressive in badge development. Badges provide glider pilots at all skill levels with a strong motivation to continually increase their skills and accomplishments in the sport.

The trophy is being awarded to **Canadian Rockies Soaring Club.** Pilots in Canada qualified for 18 C badges, 7 Silver badges and 12 Gold badges or Diamond legs in 2004. Of this national total, the club earned two C badges, one Silver badge and six Gold or Diamond legs for a Roden point score of 61.3. **SOSA** is second with15 A/B badges, 15 Bronze badges, 2 C badges, and 1 Silver badge, givin a score of 34.3.

Congratulations to the Canadian Rockies Soaring Club for showing that it actively promotes the post-licence development of its pilots.