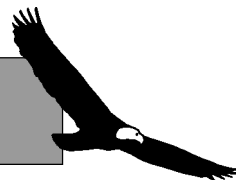


free flight • vol libre

2/07
Apr/May





MANY THANKS to the Winnipeg Gliding Club for organizing the recent AGM on relatively short notice and for the entertaining wine-and-cheese get-together at a local home. Along with the business meeting was a safety report by Dan Cook and an Insurance presentation by Keith Hay. Dr. Anthony Segal, an internationally respected glider pilot and retired medical doctor gave a very interesting presentation on *Survivability Loads on the Pilot and the Crashworthiness of Glider Cockpits*. The latest "Required Reading", posted on the Documents webpage, are the annual 2006 Directors and Committee reports (though the hot ones are in *free flight* also), financial summary, and 2007 AGM minutes.

After thirty years of service as chairman of the Flight Training and Safety committee, Ian Oldaker is stepping down. Dan Cook, who has worked closely with Ian the past couple of years, will be assuming the position. On

behalf of all of us, I want to express my sincere appreciation to Ian for his many contributions at the club, national, and international levels.

"If you don't know where you're going, you'll probably end up somewhere else."

With this quote in mind, the SAC directors know that planning is an ongoing process. At our November BoD meeting, the directors went through a comprehensive evaluation questionnaire that was developed by the *Institute for Voluntary Organizations* (Strachan Associates, 1986). The evaluation is based on questions about board organization, meeting structure, communications, decision making and effectiveness. On analyzing our responses, we determined that long-term and short-term planning and goal-setting were essential components for success of our organization.

Strategic planning (Brandick, 1989) is "the process of self-examination, confronting difficult choices and establishing priorities. Members envision their organization's future and develop the necessary procedures and operations to achieve that future". In other words, know where you are going! With this in mind, we looked at planning as an examination of:

Where are we now?	Where do we want to go?
How are we going to get there?	How will we know when we do get there?

Past Boards have defined who we, SAC, are (our mission statement), what our goals are, and the means to achieve them (objectives). However, evolution happens. SAC is at the point now where our bylaws have been outstripped by events and the Procedures (ie. objectives) Manual is in disarray and out of date. A start on revisions was made last year – the plan is to complete it over the next few months.

So, how do you see the role of SAC in the future? The Board is currently planning for the next year, while looking ahead to the next two to five years. Directors will be visiting clubs to listen to concerns and gather and share ideas. SAC is your organization, and directors are dedicated to meeting your needs.

Our individual directors bring many professional skills to the organization – communications, insurance, legal expertise, etc. Most of the operating needs of SAC are dealt with by our committees. We are fortunate to have strong leadership there, with the assistance of many dedicated committee members. As well, a recent initiative is to involve members with specific strengths as advisors to committees as required. By addressing both short-term and longer-term planning, there will be changes coming. The goals and objectives of SAC are much different than when it was formed. With careful planning, change can be carefully directed to meet the evolving needs of, and pressures on, the soaring community.

By the time this issue of *free flight* is in your hands, most clubs will have resumed flying. Fly often, fly safely, and have fun.

free flight • vol libre

2/07 – Apr/May

The journal of the Soaring Association of Canada
Le journal de l'Association Canadienne de Vol à Voile

ISSN 0827 – 2557

2007 IGC plenary	4	meeting highlights ♦ <i>Jörg Stieber</i>
60 years later	6	a personal retrospective ♦ <i>Charles and Kris Yeates</i>
climbing the busy thermal	8	safely keeping clear ♦ <i>Lloyd Bungey</i>
a well-executed flight	9	marry me? ♦ <i>Brian Resor</i>
the SAC group insurance plan	10	what's our current status? ♦ <i>Keith Hay</i>
2006 accident report	12	what are they ♦ <i>Dan Cook</i>
Sporting committee 2006	14	events and changes ♦ <i>Jörg Stieber</i>
"Competing in Gliders"	19	book review ♦ <i>Terry Beasley</i>
the Dundalk landout	21	how not to spend your wife's birthday ♦ <i>Luke Szczepaiak</i>



Cover

Sunset reflections on an autumn
outlanding (story on p21).
photo: Luke Szczepaiak

DEPARTMENTS

- 16 Training & Safety** — Ian Oldaker retires from committee after 30 years, instructor and safety awards for 2006, 2 flights - 2 incidents
- 18 Miscellany** — SAC membership stats 2006, Corley Scholarship winner, maiden flight of DG-1000 Club sailplane, Roden trophy changes for 2007, flight trophy winners of 2006, notice of record, Cu Nim/ASC glider simulator

2007 IGC plenary meeting highlights

Jörg Stieber

Chairman, Sporting committee

The Fédération Aéronautique Internationale (FAI) administers, sets standards and keeps records for every international air sport from paragliding to space flight. At 102 years this organization, which is headquartered in Lausanne, Switzerland, is almost as old as aviation itself. Most nations around the world are part of the FAI. Soaring is represented by the International Gliding Commission (IGC) as one of the ten air sports commissions making up the FAI.

I attended the IGC's plenary meeting on 2-3 March. In the following is a summary of the highlights and issues that affect us:

Boswell Accident Report During a gliding contest in the UK, a photographer standing on the roof of a car parked outside the airfield was struck by the wingtip of a glider on final glide. The photographer was killed; the glider made a rough landing without major damage or injuries to the pilot. The official report covering this accident and the lessons to be learned for future contests were discussed. The BGA produced a briefing document for Contest Directors and team managers on contest finishes which will go into our contest documents. Generally, with our 2 km/500 foot finish circle, we should be okay.

OSTIV François Ragot published a technical OSTIV paper, titled *Best Speed Theory*, that is said to incorporate some novel ideas. I recommend that SAC fund the purchase of one copy.

FLARM A low cost, GPS-based collision warning device, FLARM was introduced a few years ago. Today, 5000 FLARM units are in operation all across Europe in gliders, hang-gliders and paragliders. They are also increasingly popular with VFR power planes. Despite the proven success and superior capabilities of FLARM, the air regulation bureaucracies continue to push radar based solutions such as mode-S transponders.

Gliding Simulators Several gliding simulator software products have reached a degree of realism where they can be a valuable tool for flight training. It was reported that a student in Lasham who had received intensive simulator training, was able to solo after five (real) flights. (See agenda link, point 6.3.5 at end of this article.) In view of our short season and unreliable weather during the soaring season, I believe the use of flight simulators could be very beneficial for Canadian clubs in accelerated flight training and keeping students interested during the off season.

Grand Prix This style of competition has become very popular. The IGC will keep pushing this concept as a very media effective way of promoting soaring to a general audience. Unfortunately, Air Sports Limited, the organization that covered the qualifying Grand Prix race January 2006 in New Zealand and produced the excellent video *Gladiators of the Sky*, has pulled out as a sponsor.

Sporting Code changes

As of 1 Oct 2007, the restriction on how many and what records can be claimed in a single flight will be lifted.



The SOARING ASSOCIATION of CANADA

is a non-profit organization of enthusiasts who seek to foster and promote all phases of gliding and soaring on a national and international basis. The association is a member of the Aero Club of Canada (ACC), the Canadian national aero club representing Canada in the Fédération Aéronautique Internationale (FAI), the world sport aviation governing body composed of national aero clubs. The ACC delegates to SAC the supervision of FAI related soaring activities such as competition sanctions, processing FAI badge and record claims, and the selection of Canadian team pilots for world soaring championships.

free flight is the official journal of SAC.

Material published in *free flight* is contributed by individuals or clubs for the enjoyment of Canadian soaring enthusiasts. The accuracy of the material is the responsibility of the contributor. No payment is offered for submitted material. All individuals and clubs are invited to contribute articles, reports, club activities, and photos of soaring interest. An e-mail in any common word processing format is welcome (preferably as a text file). All material is subject to editing to the space requirements and the quality standards of the magazine.

Images may be sent as photo prints or as high-resolution greyscale/colour .jpg or .tif files. Prints returned on request.

free flight also serves as a forum for opinion on soaring matters and will publish letters to the editor as space permits. Publication of ideas and opinion in *free flight* does not imply endorsement by SAC. Correspondents who wish formal action on their concerns should contact their Zone Director.

Material from *free flight* may be reprinted without prior permission, but SAC requests that both the magazine and the author be given acknowledgement.

For change of address and subscriptions for non-SAC members (\$26/\$47/\$65 for 1/2/3 years, US\$26/\$47/\$65 in USA & overseas), contact the SAC office at the address below.

President	John Toles
Vice President	Sylvain Bourque
Executive Director	Jim McCollum
Treasurer	Jim McCollum
Legal Counsel	Robert Wappel
Secretary	vacant

SAC office: 107 - 1025 Richmond Road
Ottawa, ON K2B 8G8

tel: (613) 829-0536 fax: 829-9497
e-mail: sac@sac.ca
website: www.sac.ca

Deadline for contributions:

5 January, March
May, July
September, November

L'ASSOCIATION CANADIENNE DE VOL À VOILE

est une organisation à but non lucratif formée d'enthousiastes et vouée à l'essor de cette activité sous toutes ses formes, sur le plan national et international. L'association est membre de l'Aéro-Club du Canada (ACC), qui représente le Canada au sein de la Fédération Aéronautique Internationale (FAI), laquelle est responsable des sports aériens à l'échelle mondiale et formée des aéroclubs nationaux. L'ACC a confié à l'ACVV la supervision des activités véliables aux normes de la FAI, telles les tentatives de record, la sanction des compétitions, la délivrance des insignes, et la sélection des membres de l'équipe nationale aux compétitions mondiales.

vol libre est le journal officiel de l'ACVV.

Les articles publiés dans *vol libre* proviennent d'individus ou de groupes de véliables bienveillants. Leur contenu n'engage que leurs auteurs. Aucune rémunération n'est versée pour ces articles. Tous sont invités à participer à la réalisation du magazine, soit par des reportages, des échanges d'idées, des nouvelles des clubs, des photos pertinentes, etc. L'idéal est de soumettre ces articles par courrier électronique, bien que d'autres moyens soient acceptés. Ils seront publiés selon l'espace disponible, leur intérêt et leur respect des normes de qualité du magazine.

Des photos, des fichiers .jpg ou .tif haute définition et niveaux de gris peuvent servir d'illustrations. Les photos vous seront retournées sur demande.

vol libre sert aussi de forum et on y publiera les lettres des lecteurs selon l'espace disponible. Leur contenu ne saurait engager la responsabilité du magazine, ni celle de l'association. Toute personne qui désire faire des représentations sur un sujet précis auprès de l'ACVV devra s'adresser au directeur régional.

Les articles de *vol libre* peuvent être reproduits librement, mais le nom du magazine et celui de l'auteur doivent être mentionnés.

Pour signaler un changement d'adresse ou s'abonner, contacter le bureau national à l'adresse à la gauche. Les tarifs au Canada sont de 26\$, 47\$ ou 65\$ pour 1, 2 ou 3 ans, et de 26\$US, 47\$US ou 65\$US à l'extérieur.

EDITOR

Tony Burton
Box 1916 Claresholm, AB T0L 0T0
tel & fax (403) 625-4563
e-mail t-burton@telus.net

Any service of Canada Post to above address. Courier service to:
335 - 50 Ave W

COMMERCIAL ADVERTISING

SAC office (613) 829-0536
e-mail sac@sac.ca

Date limite:

5 janvier, mars
mai, juillet
septembre, novembre

As of 1 Oct 2008, a "virtual finish" will be introduced for gliders. This means that gliders no longer have to land to "finish" on badge or distance record flight tasks. Any point on the GPS track can be selected as a finish point. Walter Weir has been pushing for this for years to give gliders the same options as motorgliders.

Flight documentation by commercial-off-the-shelf (COTS) GPS units will replace cameras for badge flight documentation effective October 2008. Guidelines on the requirements for COTS units will be established nationally. Since COTS GPS are not equipped with calibrated pressure sensors, barographs will still be required.

ATMOS Project

The OLC is collecting a huge amount of flight data from a growing number of air sports every year. The FAI's objective is that these data be preserved for the benefit of the world aviation community. Unfortunately the talks between the FAI and Reiner Rose, the man behind the OLC, broke down and the FAI has decided to proceed without cooperation from the OLC.

The OLC has had a tremendously positive impact on the soaring community worldwide. I am concerned that without cooperation between FAI and OLC, an unhealthy competition will result, weakening the credibility of both organizations. I will be seeking a mandate from the SAC Board to write a letter to the IGC Bureau requesting that they urge FAI to make another attempt to find common ground with the OLC people with the goal to establish a strategic cooperation.

Club Management

The Gliding Club of Santiago de Chile made an excellent presentation on how their club managed to survive various life threatening crises ranging from devastating floods to four lane highway projects and housing/commercial developments, to preserve their club and airfield at a location, which is now surrounded by the city. Some of their strategies were:

- Retaining the services of a professional crisis management company.
- Reaching out to the local community (taking down the airport fences, making the facilities available for community events, car races, etc; organizing community airshows, providing emergency air transportation, supporting atmospheric research projects of the local university).
- Promoting the airfield as a green space in the city.
- Hosting international events (boost for the national prestige)

Membership

Australia made a presentation about challenges and strategies for clubs to retain more members. A copy was forwarded to the SAC Board. A lot of good work is done in this respect in Australia, New Zealand, Britain and many other countries. For our own efforts to succeed, I believe it is vital to establish a dialogue and exchange ideas with other national soaring organizations working on the same problem. It is vital to involve the clubs as well, since many of the strategies, particularly for membership retention, have to be implemented at the club level.

The next IGC plenary will be Feb 29/Mar 1, 2008 in Rome.

The complete minutes and a summary of the voting results are posted at the FAI website <http://www.fai.org/gliding/meetings/>

All reports can be accessed through the agenda:

http://www.fai.org/gliding/igc_plenary07

Editor's note: The club membership presentation was given by Australian delegate Terry Cubley. He used the analogy of a water tank representing a club: water flowing in the top represented new members, a hole halfway down the side represented the continued leakage of members dropping out. The contents at the bottom were the "sludge" (!) of committed members. Some clubs were increasing in membership but in summary, he felt that gliding was its own worst enemy.

Hmm - I've been called a lot of things before, but never "sludge".

Sixty years later

Charles and Kris Yeates

MY FIRST SOLO took place using a Tiger Moth at the decommissioned No. 5 FSTS airfield near Brantford, Ontario when I was a teenager. After the first hesitant flight, my instructor Tom Senior asked, "Want to do it again?" Wow, Did I! What a confidence builder. Flying back to the Brant Aero Club grass field afterward, it seemed the world had become an adventurous place.

As the adventure continued there was a switch to using mostly energy in the air rather than fossil fuel — Soaring to be more specific. Over the years the focus has varied: learn handling skills; understand weather patterns; compete with other pilots to compare abilities; accept the challenges of each flight. This has led to flying in Canada, the USA, Poland, Czech, England, Germany, Argentina, Australia and New Zealand.

Technology of the sport has been transformed. Construction materials moved from wood and fabric through metal to glass and beyond to carbon fibre. Sailplane L/Ds have increased from the low twenties through the forties to sixties. Navigation has moved from finger on crumpled map to electronic locators. Weather information has become more detailed and useful day by day. World record flying has moved from thermals and ridges to mountain waves. Others can comment on equipment price versus income over the years.

My serious competition efforts ended, voluntarily, at the age of 75 after winning the US National Championship for the World Class. Quit on a high, eh? Since then, Kris and I have concentrated on flying two-place ships in a variety of locations where soaring conditions are better than at home. This winter we celebrated the sixtieth anniversary of my soaring by vacationing in Australia. Ian Aspland of Brisbane asked us to join his Kingaroy Soaring Club to gain access to their Duo Discus and he gave free use of his van. Ian has been a friend since we met at Brantford in 1961. He was on an OE trip looking to SOSA for a soaring opportunity. (OE is Overseas Experience that many Ozzies seek following graduation.)

Kingaroy The peanut capital of Queensland, Kingaroy is 150 kilometres northwest of Brisbane. The soaring club has been operating there for over fifty years and all facilities are in fine condition. The semi-tropical weather is very kind. The town council there has upgraded the airfield to jet standards but it remains a friendly general aviation site populated by sailplanes, ultralights, a small crop sprayer/charter company, and homebuilts. The Bunyans, a range of low hills to the southwest, separate the basin from the higher Darling Downs where juicy thermals abound.

Many top competition pilots are amongst the eighty-six club members. Several LS-8/18s, Ventus 2CMs, and an ASG-29 are with private owners. The club operates a Duo Discus, two Discus, an ASK-21, and an Astir-77. Interestingly, the club has spearheaded development of 6- and 8-cylinder auto engines for Pawnee towplanes. While the club operates weekends only, the president has a local business and will duck out to provide a midweek tow or two. Oddly, almost no ab-initio pilot training is done.

Kris and I enjoyed a full month there, flying the Duo for 32 hours in good to marvelous conditions. The people were extra pleasant, and the casual suppers on weekends were special occasions. Several members are or were with Cathay Pacific, Singapore Airlines, and various Australian aviation companies. Flight controllers from Brisbane belong. Remarkable sights included a YAK-18 from Pakistan that was refurbished by club maintenance director Neil Dunn. Another was a stunning self-designed home built jet that looked like a small Grumman Panther. It is powered by the same jet engine used in Sea King helicopters. Restrictions on its flight area will be lifted after a few more hours. Ex-club member John Gross previously designed, built and flew his own sailplane. Genius exists in out of the way places.

Lake Keepit In northern NSW, Lake Keepit was quiet on the weekday we passed. Only an ASH-25M took off for a local flight. The neighbouring lake reflected the five-year drought, as it was only ten percent full — a sad fact for the nearby towns depending on its water. This was the site of my heart attack in 1992. The Tamworth Regional Hospital put me in an eight-person ward for extensive tests. By the window was small, white bearded "Old George". All week he mumbled. When the male nurse carried him to the showers, he mumbled. When two women visited (wife and daughter?), he mumbled answers to their questions. Friday morning two nurses joined George and swept the privacy curtain around. "George," said one, "we must give you an enema." Mumble?? To the sound of gloves being snapped on, a nurse said, "Roll over on your side, George" Mumble, MUMBLE!! After a moment everyone in the ward heard George say in a loud, perfectly clear voice, "GET YOUR FINGER OUT OF ME ARSE!!" Even the nurses collapsed in laughter ... but I digress ...

Tocumwal Commercial operations have ceased. All equipment was sold at auction. Wish we had been there — a Duo with fresh CofA went for A\$90,000 while an LS-4 in super condition went to the Waikerie club for A\$40,000.

Corowa Corowa is a few kilometres east of Tocumwal, near the NSW / Victoria border. We talked with Eugene Blunt <deird@optusnet.com.au> who manages the operation of visiting pilots who brought their sailplanes from Europe — four containers with six sailplanes in each. Their flights through December and January were remarkable. Up to twenty-seven sailplanes were being launched daily for cross-country flights. Via the Internet, we heard six pilots completed their 1000 km flights on one long day. Occasionally thick smoke from



the terrible brush fires in eastern Victoria cut off soaring but, generally, notable flights were frequent. Many of the gliders are available for hire. Have a look at <http://www.australian-soaring-corowa.com>.

Waikerie Waikerie is beside the Murray River in South Australia. The commercial operation has ceased. Other than occasional drop-ins like us, they have two Japanese syndicates that separately operate a Duo Discus T and two Nimbus 4DMs. Two have been put up for sale. The repair shop has a sign "*The Marks Brothers – You Screw 'em, we glue 'em*", but the management keeps it hidden. We visited friends from earlier days and digested lots of smooth local wines. Christmas was spent in Adelaide on the beach with a family we met 20 years ago when touring in John and Marguerite Chesborough's Mooney. Boxing Day saw us driving back east.

Temora Temora is northeast of Tocumwal in New South Wales. Tom and Jane Gilbert invited us to stay in their home. We met in Lezno, Poland, when competing in an International World Class Contest. Tom operates a glider repair shop that he moved from Camden Town, near Sydney. The gliding club caters primarily to visiting sailplane owners but the club's Janus was available for us to fly. Kris and I had fun for two weeks and collected 20 hours, some of them in very strong conditions. Tom took time off work on the best afternoon to whip off an Australian 300 km O&R record of 150.3 km/h in his SZD-55. Tom tnjgilbert@internode.on.net rents his Discus and his SZD-55 to selected people.

But quite delightful at Temora is the Air Museum full of WWII aircraft that fly regularly. The sponsoring family has invested thirty-million dollars so far — two Spitfires, an F-86, a Vampire, Gloster Meteor, Boomerang, Canberra bomber, Whirraway, Cessna jet trainer, T-28, Ryan ST and a Tiger Moth. Practice aerobatic flights were flown in one or another almost daily. There is nothing like standing on the grass with your glider alongside the runway as a Spitfire winds up or does a high speed pass at 500 feet. The museum aircraft stay inside a five mile by three mile by 6000 feet box on the west side of the runway while gliders take off from the grass and stay to the east while in the airport vicinity. Works like a charm.

Narromine Narromine is 250 kilometres north of Temora. Two Japanese commercial glider operations plus the Narromine Gliding Club www.narromineglidingclub.com.au operate separately from this huge airfield. It is a major soaring centre. At least 30 gliders were launched daily during January. Beryl Hartley is the club contact for bookings and is the daily organizer for the abundance of itinerant glider pilots. For January, Kingaroy brought down the Duo and a single Discus. As well, six Kingaroy private owners brought their ships and so Kris and I tagged along for another two weeks.

The weather patterns are opposite ours at home. The day after a front or trough passage, soaring is weak but conditions strengthen steadily as the next weather system approaches. Two days after Kris and I completed a 500 km O&R using dry thermals, pilots reported long flights under cu bases as high as 13,000 ft agl. John Buchanan flew his Ventus 2 at 155 km/h over a 500 km O&R course to set an Australian record. Lisa Trotter set a 300 km O&R feminine record at 148.4 km/h. Chris Woolley was the iron-bottomed man — he flew 2710 km of cross-country over three successive days. He missed his 1000 km task on the last day only because he had to land before dark. His approach was complicated by the sudden phenomenon of wind-whipped dust being stripped from the airfield and taken, in a curving sheet, up to the high cloud base of the approaching trough.

Views from the back seat

Wow, my turn; not often crew is given such an opportunity. Yep, the soaring was everything my pilot hoped for and I got to observe Australia from above. As this was not our first trip Down Under, it was rather like going home. Although sharing a ladies' shower with a five-inch Huntsman spider was a new adventure.

Before the trip, I read Tim Flannery's *The Weather Makers* and was geared to look for the impact of climate change during our travels. Unfortunately, it was all too obvious. Everyone was talking about severe drought, extremely low water levels in storage lakes, farmers having to walk away from their properties, major fires that consumed homes and a million acres of bush in Victoria, and the once mighty Murray River green with algae. I could go on but it's all depressing. While a tragedy for Australia, it evidenced that climate change is a global problem.

Offsetting all that was welcoming hospitality, catching up with old friends and making new ones, watching a town Christmas tree being assembled on a thirty degree, sunny day (for a Canadian that's an oxymoron), drinking great wines, slurping fresh mangos, eating Christmas dinner outdoors, having to stop the car to allow a mob of sheep to cross the road ... Australia for soaring is amazing. For me too it is a wonderful place. The trip was a great addition to life's special memories.

Postscript

As we wrote this story, an odd memory surfaced from Brantford days. My grandfather returned from the First Great War with a favourite song that he hummed now and then to himself, he thought. Its chorus began with the lines: "There's a long, long trail awinding, into the land of my dreams." I realize that I have been humming the same tune. The adventure continues. ❖

Climbing the busy thermal

Lloyd Bungey
free flight
84/3

BECAUSE OF THE SIMILARITIES of performance of most gliders, the usual way of outclimbing another sailplane on the same level is by slowly gaining a few feet at a time while positioned 180° opposite on the same circular path. Occasionally, however, the situation arises where the other pilot is unable or unwilling to fly as steeply or as slowly as (you think) is necessary to get the most out of the thermal. What should one do in this situation? In the many years I have been soaring, I have never seen this question answered in print, rarely heard it discussed in hangar flying sessions, but occasionally seen it performed in flight.

The safest way of rapidly outclimbing a pilot, who is unwilling or unable to fly in the manner needed to get the most out of the thermal, is to go off and find another thermal once you have climbed up to his (her) level.

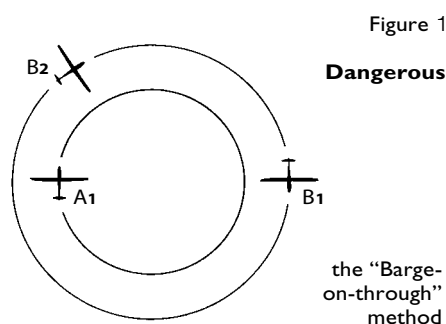
The most dangerous way to climb past another glider not using the same circle as you is by ignoring him and bulling your way through. Pilots adopting this policy should be quickly educated by the other pilots in the club (out back behind the hangar, if necessary) before they do, literally, thermal through somebody.

The problem with maintaining a smaller diameter circle as you approach a glider flying one of larger diameter is that, unless the second glider is flying very much faster, it is impossible to maintain visual contact with the aircraft flying the wider circle and you will very rapidly be placing blind faith in his seeing and avoiding you (see Figure 1).

What you should be doing, however, is enlarging the diameter of your circle as you approach his altitude and arranging things to be opposite him while in his altitude band. If the thermal is not properly centred then it is possible to use speed changes to milk a little extra from the better portions of the thermal and thus outclimb the second ship. If you can succeed in gaining a couple of hundred feet separation in this manner than it will be safe to resume your original narrow diameter circle.

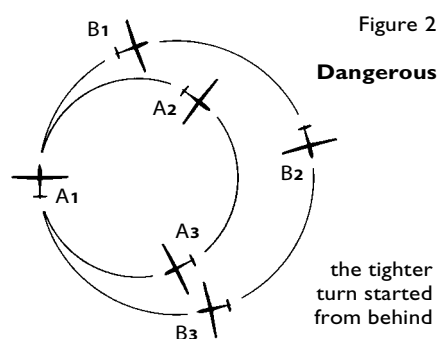
It is possible, with care, to use a tight turn or two through the core of the thermal to get the extra height needed. Too often, however, I have seen this maneuver started from the wrong position, leading to a highly dangerous situation where the overtaking glider cannot see the glider he is trying to pass and relying on the other pilot to avoid a collision (see Figure 2).

In order to carry out the maneuver reasonably safely, it is necessary first to get yourself in a position where the other glider is flying on your tail (see Figure 3). Not literally on your tail, but in such a position that it is about 120° behind you. In this position, you will still be able to see the other glider prior to steepening up your turn and will be able to maintain two way visual contact for about a full turn by which time the other glider will be positioned about 120° ahead. At this point, you should resume the wider circle since to carry on further you will be placing yourself out of the other pilot's area of vision which could lead to unpredictable maneuvers on his part as he attempts to regain visual contact. ➡ 20



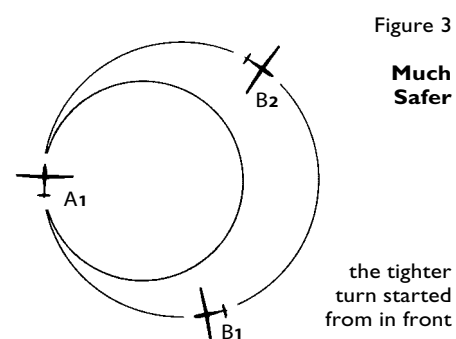
Glider A is flying a circle of $2/3$ the diameter of glider B and is not prepared to move out of the stronger core lift to adjust for B's shallower (less confident) turn. Although opposite B when A is at A1 and B is at B1, by the time A has turned 360° and is back to A1, B is only 210° around his circle and is at B2.

In this position A cannot see B as B is under his nose (the aircraft is banked). He is thus relying entirely on B for collision avoidance.



At A1, A finds that he is catching up to B who is at B1 so he steepens his turn intending to utilize the core of the thermal to outclimb B. By the time he is at A2, B is at B2 and has disappeared under A's nose. A must hold steady his turn as any change could result in a collision with the unseen B.

This situation worsens by the time he is at A3, since B (assuming he has blithely held course) is now at B3, directly under A.



When at A1, A can still see B over his shoulder at position B1. By tightening up his turn the relative positions will improve throughout 360° until A is back at A1 while B has moved around to B2. Both aircraft have maintained visual contact. If A has not gained enough height separation to continue his tighter turn (and adjust it more centrally) then he must resume the shallower turn favoured by B, slow down and attempt to drift back to the starting position (relative to B) and repeat the maneuver.

A well-executed flight

Brian Resor
from
SOARING

SATURDAY, 7 January 2006 was a weak blue wave day in central New Mexico. As a result, it was a quiet winter day at the airport. That didn't matter to me because I had an important mission to fly, and I launched. I eventually did find a little wave in my trusty old Standard Cirrus, worked my way from the secondary to the primary, then flew the full length of the Manzano Mountains.

On the way back I was high so I "messed around" a little bit on the way home before coming down. All in all, it was an enjoyable flight. I immediately reviewed my flight trace once on the ground and was pleased with the results.

Later that night I stopped at my girlfriend Megan's house to pick her up for our date, this time dragging my laptop along. I asked her if she wanted to see my flight in *SeeYou*, as I always 'suggest' after a good flight.

"Sure," she said, as usual.

I played the flight back as she watched. I explained all my trials and battles with the sky as I worked my way to the wave, climbed, transitioned upwind, cruised over the mountains, and then turned around for home. As the little virtual glider was heading home the stupid cat jumped in her lap to compete for her attention.

I told her as the animation continued, "You might want to watch this next part. There is an interesting phenomenon in the air up over those mountains." She concentrated on the computer screen again. Right away, the little glider started deviating for no apparent reason. It didn't take long for her to realize what it was doing.

"Oh, you're going to write something with the glider..." As the *M of Me* was written, it all became clear to her. In my glider earlier that day I had written "Marry Me" in the sky and she was now getting to watch it on the computer as the little computer glider was spelling it out. My plan had worked perfectly!

I had a speech prepared and was going to go down on one knee and everything, but she blurted out "Yes!" before I could even get out of the chair I was sitting in.

It sure was a fun proposal for both of us. I got to go out and enjoy an afternoon of flying in the middle of winter after being stuck on the ground for several weeks. I also got to perform a lot of maneuvers that I typically don't do in a normal glider flight (I thought I'd make those

corners nice and sharp and that means lots of wing-overs). The weather that day had been producing only very weak wave and the high winds were suppressing it. I spent a few hours in one to two knot lift just patiently trying to get high enough to transition upwind to the primary. Also, getting to the primary wave was a bit of a nail biter due to the sixty-knot winds up there that day. They primarily produced relatively good four-knot lift, though, so it was easy sailing from that point on.

Creating the letters was tricky. They aren't perfect, that's for sure. But, they worked! I didn't have the ability to view my track while in the cockpit. I based my letters off of the few roads and peaks that were visible to me.

The lowercase *A* was the hardest letter to make and turned out almost illegible. I should have just gone with a lowercase *E*, which is easy to "write." I also spelled *MARRY* with only one *R*. As I was finishing that first *R*, I felt like I might run out of mountain ridge and wave. My fiancé is smart so I figured she'd get the idea with one *R*. The whole phrase is about seventeen miles long and it was all written within a couple thousand vertical feet in forty minutes. In fact, for most of it I remained in the wave and had to really pay attention to keeping myself below our eighteen thousand foot limit. I got the feeling during some of those letters that another force was suggesting what I was doing was a great idea.

It was wonderful for Megan, too. The element of shock that hit her in the instant when she deciphered the phrase was priceless and I will remember it for many years to come. Our lives both changed in a matter of a split second, all while watching a boring little glider trace. She certainly never suspected it to happen that way and I never imagined that my plan would work out so well. Of course, a nice side effect is that my wife and my glider will probably be great friends for many years to come!



The SAC group insurance plan

... what's our current status?

Keith Hay

Chairman, Insurance committee

FIRST, I WANT TO THANK Richard Longhurst for his continued years of service and guidance of the Insurance committee. He continues to be a valuable source of information and advice. I also want to recognize our broker Grant Robinson of Jones Brown Inc. It is a great benefit to SAC to have a broker with the expertise and background that Grant has with aviation insurance, group plans, and the SAC plan in particular. Grant and the staff at Jones Brown also provide SAC with the bulk of the work in administering the plan throughout the year as well as managing the renewals.

All this would not be possible without the cooperation and assistance of club treasurers in distributing and collecting the renewals for their club. Thanks to all.

2006 in review

Our claims record continued to improve this year, with 2006 having our lowest claims rate in many years.

2006 saw the SAC insurance plan move from 1 January to a 1 February renewal date. This was the first step in re-aligning the insurance year towards the SAC membership year and start of flying season. This should ease some of the financial stress on clubs by bringing their insurance premiums closer to the start of the revenue stream. This should help to reverse the trend we have seen over the past couple of years where it is taking noticeably longer to get all renewals in to the broker.

Failure to have premiums paid by the renewal timeline or not to have SAC membership paid up and submitted to the SAC office in a timely manner causes extra administrative work for everyone concerned and could delay settlement of a claim or result in the total denial of a claim. Current SAC membership is one of the requirements for coverage under the SAC plan. While some might say "we're not flying yet, so it's not a big deal", claims can occur in the off-season and be substantial as in the case of the Ontario ice/snow storm several years ago that collapsed a hangar roof.

Should your coverage require changes or no longer be needed, also please let us know promptly so that misunderstandings not occur. While most members and clubs are diligent with getting their premiums and SAC memberships in promptly, we have noticed a trend towards "lagging" premium payments. With the availability of the installment premium plan, there should be no reason for late premiums. We will be sending out reminder notices to members with late payments to encourage them to submit their applications and premiums promptly.

For 2006, SAC continued to apply a "Claims Surcharge" for those having claims within the last three years. This amount is in turn rebated to all owners with a claims-free record in the form of a "No Claim Bonus" at each renewal. For 2006 the plan rebated a total of \$7632 to those owners with claims-free records. As \$9276 had been levied in 2006 to those owners with recent claims, the surcharge difference will be used to help pay claims-free rebates in the 2007 year.

Going forward for 2007

Renewal packages this year were sent out to each club treasurer or contact in mid-January in advance of the 1 February renewal date. We have had some success this year in pushing up the date we have been able to get quotes from underwriters, in part due to moving the renewal preparation away from December.

The policy renewal process for 2007 started in September 2006, earlier than in previous years. This was in part because we had indications through our broker that the aviation insurance market in general was "softer" this year, with the entry of at least one new underwriter, and with underwriters in general more willing to negotiate.

As well, our group claims record has been improving over the last 3-4 years, helped by the fact that some of our worst years are starting to 'fade into history' past the underwriter's window of review. So, for the first time in many years we knew as early as late summer 2006 that, in all likelihood, we would have competitive bids from companies other than our current underwriter. Our improving claims record is one of the biggest reasons that insurance companies have been more willing to work with us this year. Let's continue working on keeping it that way!

This year we had positive interest in the plan from two underwriters in addition to CAIG (our current underwriter). Other underwriters we approached declined to participate at this time for a variety of reasons. This compares with many previous years in which the interest from other underwriters was more like "if your current underwriter doesn't want you, we'd be willing to provide coverage at the same or higher premiums".

In the end, the other two responding underwriters were not prepared to better the policy package and overall premium decrease that we were able to negotiate with CAIG. Over the years, CAIG has been excellent at handling our claims as well as continuing to offer coverage to us, even during those years when our claims were well over 100% of the premiums they earned.

All the above factors combined enabled us to negotiate substantial changes to the SAC insurance plan for 2007. We have been working on trying to get most of these changes for several years now, including options for deductibles and differential hull rates between club and private ships. It is satisfying to finally be able to present an improved group insurance plan to the SAC membership for 2007.

1. Decrease in base rates

For the first time in many years, primarily due to our improving safety record, we were able to present a negotiated decrease in insurance costs to present to the SAC Board. On average the base premium decrease for 2007 was approximately 2.5% for club aircraft and 16.5% for private aircraft. Actual decreases will vary for individual aircraft. The difference between club and private aircraft is due to the new differentiation in hull rates. Additional premium savings are available via the deductible options outlined below.

2. Hull deductible options

For 2007, we are introducing a new hull claims deductible option on aircraft with hull values over \$15,000. This option will allow clubs and individuals some flexibility in the amount of risk they are willing to shoulder. The standard hull deductible remains at \$500 each and every occurrence. The options are as follows:

Option 1: Hull Deductible, 5% of insured Hull Value.
Premium savings of 5% of Hull Premium.

Option 2: Hull Deductible, 10% of insured Hull Value.
Premium savings of 10% of Hull Premium.

3. Differential private/club hull rates

Several years ago, the liability rates were split between club and private ships in light of higher liability risk and payout for club ships. While we have tried in the past to get the same distinction for hull risk, 2007 will mark the first year that we have been able to obtain distinct club and private ship hull rate schedules. On average, club hull rates are about 0.5% higher than private hull rates.

4. Annual checkflight and pilot questionnaire

This year will introduce a mandatory pilot questionnaire and claims declaration for *all* aircraft. This is a change from previous years where this was only required for new aircraft/pilots.

All pilots flying the insured aircraft as P1 must complete the annual SAC spring checkflight process for the application to be valid. While it has been generally understood that SAC members do annual checkflights as per SAC FT&SC and club guidelines, this formalizes the process and provides evidence of due diligence to the insurer and FT&SC. For clubs, this will require a statement covering all their members flying aircraft as P1. For private ships, each owner and principal pilot must provide both hour currency and date of last checkflight. Note that the requirement is for the last checkflight to have been in the *preceding* 12 months. This recognizes that some private owners start flying before their club's soaring season starts up in the spring.

5. Shift in renewal date

2007 will see the continuation of the process to realign the insurance year with the 1 April SAC membership year and the general start of flying season. This will ease some of the financial stress on clubs, in part by bringing their insurance premiums closer to the start of the revenue streams. The 2007 policy will be written for a 13 month term from 1 February 2007 to 1 March 2008. The premium being charged is still based on a normal 12 month policy, with no additional charge for the 13th month of coverage

6. No Claim bonus

Again, SAC will apply a "Claims Surcharge" for those with claims in the last three years. This amount is in turn rebated to all owners with a claims-free record in the form of a No Claim Bonus at each renewal.

7. Safety fund credit

CAIG is continuing to provide \$10,000/year to SAC specifically for funding FT&SC initiatives and programs. They see the long-term benefit to training and safety initiatives to promote a better safety record and control future losses to the plan. Lower losses result in benefit to the insurer, SAC and each of us as individual members and clubs.

Many members will have seen the exchanges on the Roundtable on the Safety Fund Credit clause in the insurance agreement, and particularly some SAC members' individual concerns with the Safety Fund Credit. I have discussed this extensively with the SAC Board and they have seen the same type of clause in some ➡ p19

SAC INSURANCE HISTORY, 1994 – 2006

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Insured Clubs	40	39	32	37	37	39	41	38	35	33	36	32	29
Total Aircraft	417	413	393	387	411	359	376	306	276	351	368	337	336
Hull Value (\$M)	9.09	9.43	9.13	8.61	10.15	10.55	10.89	9.49	8.56	13.35	13.60	12.7	12.3
Hull Premium (\$K)	221	244	247	241	267	289	306	300	287	399	473	446	454
Hull Losses (\$K)	205	225	185	151	340	347	280	127	147	387	149	263	115
Hull Loss Ratio (%)	102	89	75	63	127	120	92	42	51	97	32	60	26
Total Premium (\$K)	323	354	356	347	423	435	466	493	508	652	804	733	726
Total Losses (\$K)	253	240	1616	1717	456	401	339	127	147	629	361	273	115
Total loss ratio (%)	79	68	454	495	108	92	73	26	29	96	45	38	16

2006 accident report

Dan Cook, Safety Officer

IN 2006 WE HAD SIX ACCIDENTS reported that include the write-off of two aircraft. There was one non-SAC related gliding accident in which the pilot was injured in a landout, but the information is not included in this report. 2006 is a marked improvement from previous years where the average has been about 18 accidents per year with a fatality. There has been speculation that the reason is the implementation of the SAC Safety Management System but it is too early to interpret any direct results from this program. It could just be the fact that there has been more discussion about safety and we are all a bit more self-aware. Whatever the reason, it is a trend we need to keep working on if we wish to sustain a better track record.

Ideally, if safety systems function properly we will have to address fewer reports of accidents and rely more on the reporting of incidents to identify risk mitigation strategies. Safety systems require continuous analysis of hazards and risk to take appropriate actions to improve safety. Club Safety Officers need to continue to seek this information from their pilots for their analysis and forward their finding to FT&SC to keep the national system functioning. You are on a great start but please keep up the work to implement the process.

For the purpose of classifying accidents: major damage indicates repairs of \$10K or more, substantial damages \$1K to less than \$10K, and minor damage less than \$1K.

Accident summaries

Write-off LS-4 on initial climb-out, the towplane suffered a power loss due to fuel starvation at 150 feet. The glider pilot immediately released. Insufficient runway remained to land straight ahead so the pilot executed a 110 degrees turn to the right to avoid the trees and landed on another runway. Landing on very soft terrain a ground loop followed, damaging the right aileron and fuselage. The tow-pilot was able to restart the engine and continue climb out.

Lessons learned: Tow pilots to apply proper procedures in fuel management and to execute the approved take-off checklist. Some clubs have a hazard/risk zone in towing operations where a glider pilot has few low risk options during launch interruptions.

Write-off Self-launching glider lost most of its power at 320 feet agl at a soaring camp operating site. The pilot thought enough power remained to make a circuit around the heavily wooded area. On downwind the glider lost more power and settled into the trees.

Lessons learned: Motorgliders require special handling techniques for launch interruptions because of the added drag from the windmilling propeller. Landing straight ahead is usually the only option below a critical height. The critical height to turn back to the field with a windmilling propeller can be significantly higher than a conventional glider by hundreds of feet. A partial power loss should be treated as a complete power loss.

Minor Damage ASW-27. Pilot was towing glider to the line as directed by the club down a newly-designated taxiway (long, uncut, uninspected). Wing dolly snagged the top of a hidden, abandoned steel tiedown post, damaging one aileron and scuffed some gelcoat a bit. No SAC accident report.

Minor Damage L-33 pilot intended to touch down on the runway then let the glider continue to roll close to the hangar end of the runway. As the wheel touched, the pilot closed the partially deployed spoiler to let it "taxi", but the result was the glider became airborne. The reflex reaction of the pilot was to open the airbrakes. The glider then "quit flying" and dropped onto the runway at about stall speed. Minor damage to wheel shroud resulted from the hard landing.

Lesson learned: L-33 approach normally with "partial spoiler", but in the L-33 you must *not* fully open the airbrakes during the flare or hold off. It simply quits flying and drops abruptly.

Minor Damage Grob 102 was damaged in its trailer towing to and from winter storage. The club had made a trailer change for the two Grob 102s, which resulted in improper tail security and to damage of the rudder.

Minor Damage SZD 51-1 Junior – outlanding, hit rock.

Incidents

- Ka6 slightly damaged while being rolled onto the wrong handling dolly.
- Grob G103 Acro had a small hole punched under the wing when someone likely lowered the wing onto the Ka6 tail dolly.
- K13 tail was lifted too high by a pilot and caused the nose skid to impact the left wing of an ASW19, causing a dent in the gelcoat.
- K13 was moved into the hangar near a workbench and was slightly dented in the rudder's trailing edge.
- Towrope was progressively getting shorter at a club. Pilots were either bouncing around in the prop wash or electing to stay higher on tow. Current rope was about 120 feet versus 180 feet normally used.
- Glider gear-up landing. Pilot hears a bang in flight (gear dropped), returns to field and on downwind checks raises gear.
- PW-5 pilot making first flight on type finds canopy was rather noisy. After landing the canopy levers were opened and pushed up, the entire canopy came off. DI did not detect that emergency canopy release had been pulled and not re-installed properly.
- Krosno rudder pedals slip forward in flight because locking pin not fully seated in locked position. Lack of lubrication.
- Krosno canopy unlocks in flight. Passenger's knee may have moved locking lever that does not have a positive latch mechanism. On-going problem.

- Grob 102 took off with airbrakes not locked. Confirmed visually but not pushed over-centre to lock. Familiarity on type may have been a factor. A similar incident occurred with a Puchacz.
- Several incidents of gliders taking off or attempting to take off with tail dollies attached. Several gliders involved are L-33 Blaniks.
- Standard Cirrus wing dropped in a crosswind takeoff, and the glider started to groundloop. Pilot released without further incident. C of G hook and underestimation of the strength of the crosswind were factors. This is a recurrent theme; in this case the pilot did the right thing! With other pilots, are we highlighting the need to release immediately?
- Cross-country pilot returns to field and, after a quick pass, lands and groundloops. Winds gusting to 25 knots. Pilot landed crosswind to reach tie-down area easily. Wing was observed to touch the ground with the tail high.
- Air proxy was reported to Transport Canada between a glider and a King Air twin engine aircraft.
- Air proxy reported between two gliders in the circuit. One not using active runway made radio call that was not intelligible. Effective communication would have been acknowledgement from the second glider in circuit.
- Air proxy between two-seat glider on downwind and a 1-26 which passes 15 metres overhead in the opposite direction. 1-26 blown downwind and trying to get upwind to start circuit.
- Thermal entry by glider causes conflict with glider already in thermal.
- Solo student makes a slow low approach and landing in 20 knot headwind. Did not adjust circuit base leg closer to compensate sufficiently for the wind and additional speed for the wind gradient.

Analysis

There were two major accidents and one incident associated with launch interruptions reported. Many clubs have a hazard/risk zone (height and location) in tow operations where the glider pilot has few options for a safe landing if there is a launch interruption. Some of these zones may be seasonal such as soft fields in the spring or corn crops in the late summer. Has your club identified them? Is there risk mitigation that can be done? Some clubs have modified or restricted their towing operations (short term) until they could afford a more powerful towplane (long term) to reduce the risk of low level launch interruptions. The FT&SC has produced a guide for motorglider pilots and CFIs on the website to help them prepare pilots for such emergencies.

Landing and take-off continues to be our most vulnerable stages of flight for the majority of accidents. "Options" in the take-off checklist CISTRSC-O is the time to assess the wind strength and direction and how it will effect your take-off and possible launch interruption. If conditions appear to be marginal, make a change such as runway or time of launch to opt for better conditions. If the decision is made to go ahead, plan to release if the wing touches the surface and have landing areas determined for each phase of the launch until you can make a normal circuit.

Hangar rash and line incidents will continue to plague us.

Carelessness can only be countered by training and a well disciplined approach to moving gliders, conducting a DI, flightline operations, etc. CFIs may need to be more formal in this training if investigation shows that new members are having the majority of incidents. If experienced club pilots are the culprits then complacency is creeping in. In this case hangar rash and line incidents could indicate a more insidious problem that could develop into more serious accidents. CFIs should immediately hold a pilots meeting to get to the root of the problems. Finger pointing is not the answer – working together to identify hazards and solutions to reduce risk is the way ahead.

Air proxies are becoming critical internationally and we manage a few incidents each year. Aviation experts claim that for every incident that is reported, ten are not. Air-space is an issue and knowing, communicating effectively, and avoiding places where there will be higher collision conflicts is half the battle to minimizing risk. The second half of the battle is seeing and avoiding. New scan techniques have been written about in *free flight* and have been included in our SOAR manual. Are we disciplined enough to change our own technique? Is our own technique working or are we just lucky? Latest techniques are based on human factors and the limitations of human sight. They are designed to stack the odds of detection in your favour. Why not learn to use them.

Several take-offs, or take-off attempts, with wheel dollies attached and incidents of spoilers, canopies, etc unlocked or open indicate a lack of a walk-around before the flight or the rushing of checklists. Pilots are responsible for their own safety but we can structure our operations/organization to build in additional safeguards to protect them and our equipment. Flightline supervisors who do not see a walk around before the flight should not allow a launch to continue. Training ground personnel and wing runners to be alert to these problems can also help avoid a potential disaster.

I also received a report from a club referring to their continuous training program, which includes:

- Mandatory calls must be made out loud (even solo), at 100 and 300 feet.
- Group briefing each day (weather, field condition, traffic, any abnormalities and procedures)
- Conduct two pre-season "intensive" checkflights.
- Training program also includes an unannounced "checkflight". Items are reviewed with the CFI.
- A review exam of 25 questions that is completed by all to stimulate thought and currency. This exam is reviewed in group.

Does your club have a recurrent training program or do you fly just a couple of circuits to get the "cobwebs" out each spring? An annual checkflight should include at least the items on a licence checkflight.

Conclusion

You have seen we have made some major improvements in our accident rate. Just being more aware and discussing safety openly can improve safety culture. The trend in reporting is that the number of incidents is greater than the number of accidents. This is ideal and an indication that the safety system in clubs is working ➡ p20

Sporting Committee 2006

Jörg Stieber, chairman

IGC Plenary Meeting I attended the IGC Plenary Meeting in March 2006. Agenda, key decisions and minutes of the meeting posted at <http://www.fai.org/gliding/meetings>. I plan to attend the 2007 IGC meeting on 2-3 March in Lausanne. (This report is on page 4.) There will be no cost to SAC for my attendance.

The concept of using certain commercial off-the-shelf (COTS) GPS units for badge flight verification to Gold level, which has been championed by Canada, will come to a final vote. If there is a "yes" vote, pilots will be able to use certain (yet to be determined) COTS GPS units for badge flights, starting 1 Oct 2008, in place of photographic evidence which will be phased out by then.

2006 Online Contest Canada

The 2006 OLC had about the same participation and total kilometres as last year:

Total flights scored in Canada:	1,942
Highest no. of flts scored by a club: Canadian Rockies –	495
Total km scored in Canada:	416,358
Highest km scored by a pilot: Hans Binder –	30,546
Highest km scored by a club: Canadian Rockies –	116,846

A complete summary of the 2006 OLC season is posted at: <http://www.sac.ca/documents/OLC-2006-results.pdf>.

Under the rules introduced by the OLC organization for the season 2006, Canadian pilots' flights in the US are no longer eligible for scoring within the OLC Canada. For pilots flying in the US as well as Canada this means they can only see all their flights combined on the OLC North America. Typically, pilots who fly in the US and Canada will follow the OLC North America while pilots who fly in Canada only, follow their regional OLC.

Due to the significant inequity in soaring conditions east vs. west, a meaningful competition at the national level is not possible under the present rules. Consequently, the results of the OLC 2006 were not interpreted in the context of the Canadian Decentralized National Championships (CDNC). Not surprisingly, under the rules of the OLC 2006, the results of the all-category are identical for the OLC BC/AB with the results of the so-called OLC-Canada.

The OLC eliminated the category for "pure gliders" in the '05 season. We believe, for the situation in Canada with few and very widely scattered gliding operations, particularly in the west, it makes sense to maintain a pure glider category to recognize pilots who attained their achievements under more limiting circumstances without the confidence and flexibility that comes with the iron thermal in the back. The table opposite at the top, comparing gliders, sustainers and self-launchers, clearly shows the advantage of motorized gliders. The only question is really if sustainers are closer to pure gliders or motorgliders.

2006 Nationals Rules After extensive discussion with the competition community we decided that it is too much effort to maintain and update software for uniquely Canadian scoring for essentially one contest per year. A majority of Canadian competition pilots favoured the use of US scoring software and scoring rules that was proven and debugged in many contests. As a consequence, section 11 (scoring) of the rules for US Sports Class Nationals was adopted for scoring and integrated into the Canadian rules. The scoring rules for Sports Class were preferred over US Standard or 15m Class rules to provide for handicapped scoring. *WinScore*, the standard US scoring software, which is being professionally maintained, has been adopted for scoring.

2006 Nationals The Nationals were hosted by SOSA. With 14 competitors in the handicapped Racing Class and 9 competitors in Club Class, the turnout for National Championships in Ontario was disappointing. I believe a number of local pilots did not show because the forecast for the first week was not promising which turned out to be true. However, we saw some good days at the end of the contest. A total of 5 contest days were achieved.

The US scoring incorporated in Canadian rules worked reasonably well, however there were a few incompatibilities which will have to be addressed for 2007. July 3 was declared a non-contest day due to deteriorating conditions not allowing all competitors a fair opportunity to start. Of the few competitors who went on task everyone landed out with only two pilots achieving marking distance. This gave rise to various protests and a major controversy (more details below). Unfortunately, the publication of scores and news from the contest was slow and a fair bit behind the events. The Sporting committee will stress the importance of timely publication of scores with organizers of future contests and recommend that the Contest Manager appoint a publication manager with the exclusive responsibility of publishing a daily bulletin of scores and news.

On the positive side, the Club Class turned out to be very competitive with SOSA pilots in club ships taking first and second place. In total, there were five club ships in the competition and three junior pilots.

Jim Carpenter flew SOSA's brand new DG 500 in Racing Class with a rotation of contest novices in the rear seat. From the perspective of getting junior/novice/club pilots involved, the Canadian Nationals 2006 were certainly a success. The winners were:

Racing Class:

1. Dale Kramer	3673 points
2. Dave Springford	3579 points
3. Nick Bonnière	3571 points

Club Class:

1. Sergej Morozov	3518 points
2. Anthony Kawzowicz	3409 points
3. Kerry Kirby	3007 points

On behalf of all the participating pilots, the Sporting committee thanks the members of SOSA, particularly Contest Manager Martin Brassard, CD Dugald Stewart, Virginia Thompson, and Dave Springford, for their effort ➡ **p20**

OLC NOTES	Pure Glider	Sustainer	Self Launcher
Launch Opportunity (Location)	Can only launch from locations when and where gliding operations are being conducted.	Can only launch from locations when and where gliding operations are being conducted. Can fly powered to advantageous entry points such as wave or sea breeze.	Can launch independent of the availability of towplanes, from locations that are best suited for the attempted flights. Can fly under power to advantageous entry points such as wave or sea breeze.
Launch Opportunity (Time)	Even if towplanes are available, depending on demand and turn-around time, the optimum launch window will likely be missed.	Even if towplanes are available, depending on demand and turn-around time, the optimum launch window will likely be missed. Not a problem when not connecting due to early launch, can sustain until conditions improve.	Can launch at times where no towpilot is available. Since there is no dependency on external factors, it is easy to launch during the optimum window and make best use of the conditions of the day.
Landout inconvenience	Unlike a contest that runs for 7–10 days, it is not feasible to have a crew standing by for an entire OLC season. Pilots are unlikely to push into uncertain conditions (blue) or push the limits of the day with the prospect of landing out far from home and having to find a retrieve crew on a Sunday evening.	Not a factor.	Not a factor.
Extra weight of the engine	Not a factor.	Not very significant.	Significant extra weight. However, while central competitions are often decided in marginal conditions, the winning OLC flights are conducted in strong conditions where the extra weight of the engine installation is not a factor. Compared to central competitions, the penalty for engine start/landout is minimal.

	US Sports Class Nationals 2006	FAI 2005 (current)	Canadian Nationals 2006
Competition Class	Any (Sports class) Max takeoff weight: 750 kg	Open: max 750 kg 18m: max 600 kg Std: max 525 kg World – 300 kg 2-seat MG: up to 850 kg 15m: max 525 kg Club – no water	Open, 18m, 15m, Standard Club Class, World Class (All FAI class definitions)
Competition Tasks	Turn Area Task Modified Assigned Task	Racing (assigned task) Pilot Selected (speed) Pilot Selected (dist.) Turn Area (speed) Turn Area (distance)	Turn Area Task Modified Assigned Task
Start	Circle 5 mi. or more but less than 20 mi.	Line or circle	Circle radius 5 km
Finish	Circle radius 2 mi. or less; minimum finish altitude set by CD.	Line or circle, with specified floor and ceiling.	Circle radius 2 km, floor 500 feet agl.
Scoring	Speed only (distance score only for outlandings)	• Speed/Distance, • Dist. only • Place Scoring (Grand Prix)	Speed only (distance score only for outlandings)
Competition Day	11.1.3 Every entrant has to have a fair opportunity to compete and at least 25% of contestants have to achieve a handicap dist. of not less than Min. Task Dist. (50 mi.) <i>Definition of Contestant:</i> Land out or reach half MTD before returning to the contest site. This excludes all pilots who don't go on task.	8.2.1 a) launch opportunity for each competitor b) more than 25% of competitors fly at least 100 km Note: competitor = participant	<i>Old (2005) Canadian Rules:</i> More than 20% of the entrants who launch achieve a distance more than 80 km. <i>2006 Rules:</i> According to Section 11
Penalties	<i>Task Penalties</i> – applied against daily score – subject to penalty factor. <i>Contest Penalties</i> – applied against cumulative score for: • Safety • Unsportsmanlike conduct • Underweight / Overweight • Failure to submit flight documentation • Airspace violations	8.2.5 Applied against daily score, daily score can't be less than zero. 8.9.4: Penalties for disciplinary and safety infractions on non-contest days are applied against the cumulative score.	Section 9 Applied against daily score, daily score cannot be less than zero.
Protest time period	24 hours	14 hours (2 hours on last day)	24 hours
Jury	3.1.4 Contest Competition Committee Chaired by CD + 3 members appointed by CD: • Non competitors • Experienced competition pilots, contest officials or pilots with a good understanding of competitions.	2.2 International Jury No competitors, not involved with running of the competition	CD, 2 members of the task committee (competing pilots), 2 additional members appointed by the CD, preferably non contestants.

Training & Safety

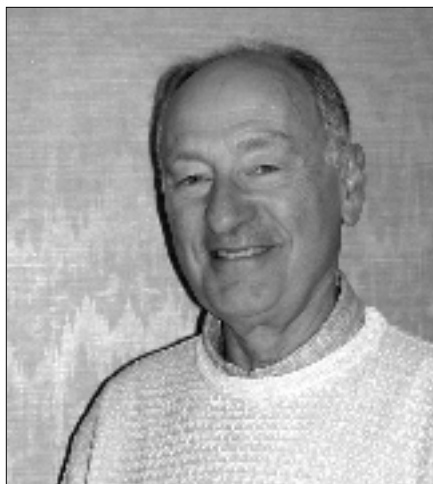
Ian Oldaker retires from FT&S committee after 30 years

If you Google "Ian Oldaker" you will get about 350 hits. I also did a search preparing for this article using the *free flight* search index and had about 130 hits. All this is to say that Ian has made a significant contribution to soaring over many years as an instructor within SAC and as a member of FT&SC.

His list of accomplishments includes the development of the current instructor manuals and SOAR training manual and the SAC Safety Management System documentation. In addition, he has prepared hundreds of articles on safety and training, which have been printed in *free flight*, the Transport Canada *Safety Bulletin*, and the OSTIV Congress. He has participated in the OSTIV Training and Safety Panel in Europe and has been the chairman of that committee since 2004.

Ian has received numerous gliding safety awards including the Canadian Airline Pilots Association (CALPA) award in 1993 and the Canadian Aviation Safety Award from then Transport Minister David Collinette in 2000. This award was for exceptional contribution to aviation safety in Canada. The Transport Canada citation reads:

"As a pilot with over three decades of experience as an instructor, he has been a mentor to many up-and-coming Canadian pilots and continues to encourage the development of partnerships within the glider aviation community. Over the years Mr. Oldaker has been a strong and active voice in the promotion of aviation safety, and has volunteered countless hours



to SAC as the chair of the Flight Training and Safety Committee. His leadership has greatly contributed to the continuous improvement of aviation safety. He continues to motivate others within the community to promote a strong organizational safety culture to extend safety beyond the pilot."

Ian is retiring from the FT&SC after thirty years as chairman. However, he will remain as a resource person to the committee when needed. He intends to assist with the production of manuals and act as an instructor course conductor when available.

A simple "thank you" does not serve justice to the amount of work and dedication he has put in. We wish the best for him on his future projects and are unanimously grateful for his contribution.

Dan Cook

INSTRUCTOR and SAFETY Awards for 2006

The nominations for this year's winners of these two SAC trophies were few but of excellent quality, so choosing the winners was difficult. It is clear however that all nominees are very supportive of their clubs and put in a lot of their time to foster flight training of new pilots as well as look after and improve the safety of their pilots' flying and of the clubs' operations. These pilots included:

Eric Richard	AVV Champlain
Richard Sawyer	York Soaring
Jean-Guy Hélie	CVV Quebec
David Ellis & David Gossen	Toronto Soaring
Anthony Kawzowicz	SOSA

Even if your nominee did not win this year, the effort should not go unnoticed, so we encourage you to submit their names again. Since there was a nominee from my club, I

asked Dan Cook to select the winners. I am therefore pleased to announce the winners for 2006:

Hank Janzen Trophy *Contributions to safety*

David Ellis & David Gossen
Toronto Soaring

When it was found that wind farm companies were planning to surround the Toronto Soaring club with large wind turbines, and had not planned for any aeronautical activities, David Ellis (president) called an emergency meeting at the club and "The Team" was activated.

Ultimately, David Ellis and David Gossen (treasurer) shouldered the burden, attending many town meetings and strategizing with lawyers. (Special mention is given of the

efforts of the lawyers at Willms & Shier, specifically John Willms and Paul Manning, without whose guidance and diligence the club would have been at the mercy of the political process.) They found there was little hope of legal action resulting in reserved airspace, so they embarked upon a more constructive initiative.

The two Davids met with company project planners, the township and neighbours, and tried to mobilize various aviation groups.

The meetings with the project planners and the township were fruitful. A meteorological tower was relocated from the planned position off the end of one of the club's runways to remove that hazard. In addition, the company followed through by agreeing to consider locating the turbines off the approach/departure paths for a reasonable radius of the airfield to prevent them from becoming a hazard to club operations. The town agreed to include the club operation in the Town Plan as a unique characteristic of the township, a nod to our 35-year history.

The wind farm project has stalled, but now is expected to proceed with the renewed push for Green Energy. The outcome is not certain and their work is far from over, but David Ellis and David Gossen gave freely and tirelessly of themselves to expertly steer an industrial giant to become as good neighbours as possible under the circumstances. All for the safe operation of their club in the aeronautical sport they love.

Walter Piercy Trophy *Instructor of the Year*

Anthony Kawzowicz
SOSA

During the year, Anthony flew 155 instructional flights for 65.4 hours. Last year he flew only slightly fewer! Anthony was responsible for training four of our eleven solos this year as well as two of our four new licensees. He also competed in the Canadian Nationals, flying SOSA's Jantar to 2nd in the Club class. He also flew a new multi-place Canadian speed record for a 300 kilometre triangle in SOSA's DG-505 together with John Brennan.

Anthony arrives at the field early (0800) to meet with his students and get them flying before the weekend rush. He truly believes in mentoring students and is constantly in communication with his students to set up times to fly. The students love to fly with Anthony, and his results speak for themselves!

Anthony was also involved with the renovation project of SOSA's clubhouse. Over several weekends, he assisted with the finishing touches to the clubhouse. Never one to sit around idly, he also helps with other tasks around the airport such as glider waxing and grass cutting while waiting for the weather to improve (or the sun to come up).

2 flights – 2 incidents a ratio calling for change!

The spring of 2006 brought the usual good soaring weather we love and that reinforced my goal to spend more time heading into the foothills and mountains southwest of Calgary. My experience with thermals, wave and turbulence in these areas had grown substantially over the past eight years and my comfort level and confidence were good. Finding lift was no longer the mysterious process it once seemed. It should have been clear to me that I had moved into a time when experience, comfort and confidence had become allies of risk rather than advocates for safety.

Two flights helped me change my attitude and behaviour. The first began on a beautiful spring day that held lots of promise if conditions didn't overdevelop. Starting west, the plan was to circle Calgary. Once I reached the mountains west of Black Diamond I turned north and enjoyed strong conditions. I had set 9000 feet as my minimum altitude along the Rockies. A line of clouds let me cruise about 20 kilometres without concern but as blue sky stretched out in front of me, I had a choice: move west further into the mountains or retreat to the east and landable terrain. Now at 10,000, I was still well above my retreat height so I turned west where the lift seemed more likely.

It was at this point that my experience, comfort and confidence conspired to place me in danger. The clouds ahead held the promise of the lift I would need... but what if they didn't? I slowly descended while trying to catch a good thermal – the risk level rose. The air seemed quite buoyant and I was certain good lift would be contacted soon. My comfort level was no longer high as I descended

below 9000 but I had been in this situation before and so the search for lift continued and retreat was delayed – 8500 – now over unlandable terrain with marginal height for escaping to safer area, I had to find lift! ...

Five minutes later I was enjoying the view from 11,000 feet secure in the certainty of continuing the flight but convinced that what had just happened should not occur again. The rest of the flight included a first-time aerial visit of Banff, great views over Lake Minniwanka, some wave to 1500 feet above cloudbases, and photos to remember it all.

I had learned another lesson... or had I?

Late May I took off and connected with several reasonable thermals that topped out at about 8500 feet several kilometres east of the first mountain peaks. My focus was on the good thermals that must be under the line of clouds over the rocks. I need 9000 to be safe but that would only take a couple of turns in lift once I got below those clouds, so I flew on.

Within moments it was clear conditions had changed. Significant sink quickly put me at 7000 feet even as I ran for landable terrain to the east. That wasn't enough altitude to clear the 15 kilometres of forest ahead with certainty, so as the tops of the hills rose to meet me I headed for a clearing along the Sheep River, the *only* open area within reach.

Fortunately I had walked this field twice during the previous five years so I knew where the hazards were. The landing went better than expected but with 1000 feet of field left, a slight downhill trend and then a 200 feet drop-off to the river below, I intentionally ground-looped the aircraft and bring it to a

stop. With the exception of a slightly bent tail wheel yoke, the outcome was much better than it might have been.

It's taken some time to see the relationship between these two flights but I have come to a conclusion.

Experienced pilots are no less likely to get into a danger zone of their own creation than any one else. The confidence that got me to where I was comfortable taking on these challenges needed to be tempered by the certainty that the new level of risk being taken required a new level of discipline and increased margins.

In response to this "new" insight I will be increasing my altitude margins for the new season. This deals with the physical aspect of the risk incurred over difficult terrain but perhaps other changes are called for. After all, I had chosen a minimum altitude before but had still allowed myself to push that boundary apparently in the hope it would all work out. My solution for 2007 will be to add a cross-country decision point review to my pre-takeoff checklist; another opportunity to set and reinforce my own limits.

Perhaps you have seen some of your own tendencies in these incidents. I hope you'll find the motivation to quickly make changes to your attitudes and procedures so that 2007 and all your years of flying to come will be safe and enjoyable.

Phil Stade, Cu Nim

**Only some of us learn from other
people's mistakes, the rest of us
are the other people.**

Directors & Officers

President/Prairie

John Toles
(306) 652-7909 (H)
j.toles@sasktel.net

Vice President/Eastern

Sylvain Bourque
cell (514) 592-0283
bourques@videotron.ca

Ontario

Eric Gillespie (416) 703-6362
ekg@cunningham-gillespie.com

Alberta

John Mulder (403) 730-4449 (H)
jamulder@telusplanet.net

Pacific

Dave Collard 1-866-745-1440
dacollard@telus.net

Exec Director & Treas

Jim McCollum
(613) 692-2227 (H), 829-0536 (B)
sac@sac.ca

Safety Program Director

John Toles

Committees

Air Cadets

National Office

Airspace

Ian Grant
(613) 737-9407 (H) 995-2031 (B)
granti@igs.net
members: Roger Harris
Scott McMaster

FAI Awards

Walter Weir (905) 263-4374 (H)
waltweir@ca.inter.net

FAI Records

Roger Hildesheim (613) 838-4470
lucile@istar.ca

Free Flight

Tony Burton, (403) 625-4563
t-burton@telus.net

Flight Training & Safety

Dan Cook, (250) 938-1300
cookdaniel@shaw.ca
members:

Gabriel Duford gabriel.duford@videotron.ca
Bryan Florence florence_bryan@emc.com
Joe Gegenbauer gegb@shaw.ca
Richard Sawyer cfzcv@sympatico.ca

Insurance

Keith Hay (403) 949-2509
insurance@sac.ca

Medical

Dr. Richard Lewanczuk
(780) 439-7272
rlewancz@gpu.srv.ualberta.ca
member: Dr. WL Delaney

Membership/Marketing

John Brennan john_brennan@sympatico.ca
Charles Petersen cfpeter@total.net

Sporting

Jörg Stieber
(519) 662-3218 (H), 662-4000 (B)
joerg@odg.com

members:

Walter Weir waltweir@ca.inter.net
contest letters: Al Schreiter alschre@ican.net

Technical

Paul Fortier (613) 989-1634 (H)
paulfortier7@juno.com

members:

Chris Eaves xu-aviation@sympatico.ca

Trophies

Phil Stade (403) 668-7757 (H)
asc@platinum.ca

Video Library

Ted Froelich
2552 Cleroux Crescent
Gloucester, ON K1W 1B5
(613) 824-6503 (H&F)
fsacvideo@aol.ca

Web Site

John Gruber (403) 880-6805
flyboy9000@hotmail.com
members:

Tony Burton t-burton@telus.net
Bob Lepp boblepp@aci.on.ca
Martin Vanstone mvanstone@ltinc.net

Miscellany

SAC membership 2006

Club	10 yr avg.	2006 total	% avg
ACES	8.5	11	129
Albarni	13	1	8
ASTRA	10.5	11	105
Air Sailing	16.7	14	84
Bonnechere	5.1	6	118
Cantons de l'Est	8.5	10	118
Central Alberta	13.1	16	122
Champlain	64.4	41	64
Cu Nim	59.7	53	89
Edmonton	49.9	39	78
Erin	22.2	11	50
Gatineau	83.9	59	70
Grande Prairie	8.1	6	74
Great Lakes	22.4	27	121
Guelph	27.0	23	85
London	32.6	29	89
Montreal	93.4	80	86
Outardes	23.9	12	50
Pemberton	9.2	6	65
Prince Albert	15.7	16	102
Québec	51.7	53	94
Regina	19.3	11	57
Rideau Valley	30.9	30	97
Rockies	27.3	39	143
Saskatoon	18.3	16	87
Silver Star	12.2	17	139
SOSA	163	163	100
Toronto	19.4	18	93
Vancouver	82.1	78	95
Winnipeg	57.5	45	78
York	99.9	100	100
Non-club	25.4	31	126
Air Cadet League	11.4	24	211
<i>totals</i>	<i>1206</i>	<i>1096</i>	<i>90.9</i>
<i>membership in 2005</i>		<i>1103</i>	

Two clubs, MSC and Gatineau, with declines of 17 and 14 members respectively, more than accounted for the SAC decline of 7 in total membership in 2006 from 2005. GGC's decline has been a combination of long time members retiring from soaring or moving elsewhere and very few new members the past three years. Both clubs are focussing on ways to rebuild membership. The only other club showing a significant decline was Bluenose (-9); it did not operate in 2006 and may cease altogether. Some former members became members of the new ACES club in Debert, NS. Other clubs had small changes.

Taking a longer perspective, there has been a decline of 285 members in SAC from 1990 to 2006. The base year was somewhat unrepresentative as there was a temporary upward blip in membership in 1990 and 1991. The decline over this period is more than accounted for by clubs that ceased operations altogether. Three clubs – Bluenose, COSA, and Cold Lake – account for 50% of the drop.

Jim McCollum

Roden Trophy change for 2007

National trophies have been created with the intent of having pilots set new goals and to work hard to achieve them. With that in mind the Roden Trophy is awarded to the club that, for its size, best develops the soaring skills of its pilots and is consistently aggressive in encouraging badge flying.

The current formula for awarding this trophy was based on the number of badges and Diamond legs that a club awards and its members achieve. Each badge type and Diamond leg is given a weighting reflecting the difficulty required to obtain it. The Roden Trophy score is the sum of the weighted values divided by the number of the club's SAC members. The past weighting was:

A, B and C badges – 1X
Bronze and Silver badges – 2X
Gold badges, Diamond legs,
and National records – 3X

Beginning this year, all badge *legs* will now be used in the formula since counting completed badges doesn't adequately reflect an ongoing club effort to recognize and encourage all post-solo achievement. Bronze badges will be valued at 3X to reflect their major importance to clubs as the "kick-start" step in continued growth in post-solo pilot skills and working towards other badges. Here's the new list of achievements along with their weighting:

A, B and C badges – 1X
Bronze badge – 3X
Silver badge legs – 2X
Gold and Diamond badge legs – 3X
National records – 2X

The hope is that these scoring factors will see clubs encouraging their pilots to attempt more badge flights and see more clubs submitting Roden Trophy applications. However,

this inducement to skills advancement won't work if clubs don't track badge work on an on-going basis through the season. Good planning, safe flying and timely submission of badge and trophy applications to each of you in 2007.

Phil Stade, trophies chairman



Corley Scholarship winner for 2006

My name is Scott Kennedy. I was awarded the 2006 Peter Corley Memorial Scholarship, and I have been asked to say something about myself.

I learned to glide at York Soaring Association's Air Cadet course in the summer of 2005, and I've continued gliding when I've had breaks from school. This past summer, I earned my C badge on my first hour long flight. I am currently a full-time student at the University of Waterloo, in its Computer Engineering co-op program. After I complete the undergraduate program, I intend to go back to school for my Master's degree. I don't have any firm career plans yet, but I hope to eventually take on the role of a project manager at a computer hardware or software company.

XU Aviation Ltd.

We've moved into a 8000 sq.ft. hangar with special built repair bay and state of the art spray booth. See us at <www.xu-aviation.com>



Chris Eaves

major and minor repair and inspection in:

- steel tube, wood and fabric
- stressed skin aluminum
- composites

ph (519) 452-7999, fax 452-0075

Flight Trophy winners of 2006

The widening choices of cheaper GPS units is an opportunity for pilots to participate in the OLC in even greater number. The beginning of the flying season is a great time to encourage club members to make use of the OLC. What are your flying goals for 2007?

"200" Trophy – Best 6 flights by pilot under 200 hours P1 at start of season – 1705.9 points
1731.9 km total, 288.7 km average
Richard Jones – Toronto Soaring

Canadair Trophy – motorglider
Best 6 flights of the year – 4146.1 points
5019.7 km total, 836.6 km (!) average

BAIC Trophy – motorglider
Best flight of the year – 750.1 points
Hans Binder – Canadian Rockies

Canadair Trophy – pure glider
Best 6 flights of the year – 3553.1 points
4141.9 km total, 690.3 km average
BAIC Trophy – pure glider
Best flight of the year – 648.2 points
Tim Woods – York Soaring

Roden trophy – Club soaring skills development
ACES, Debert, NS

Congratulations to this new club. See Roden trophy requirements on facing page.

Phil Stade, chairman

Notice of record

The following record claim has been submitted and approved:

Pilot	Tracie Wark
Date	18 Jan 2007
Place	Lake Keepit, Australia
Record type	Free Triangle Distance, Citizen, Feminine
FAI category	3.1.4d
Sailplane type	LS-6, VH-KYL
Distance	523.2 km
Task	LK Keepit
TP#1	S30°53.942' E150°31.425'
TP#2	S30°06.624' E148°57.602'
	S29°09.165' E150°04.119'
	LK Keepit
	S30°53.942' E150°31.425'
Previous record:	Not claimed

Roger Hildesheim, chairman

Canadian National Soaring Championships

June 23 – July 2
Montreal Soaring Council
Hawkesbury, ON

Practice days: 21-22 June
Racing class (15 metre and Standard)
as well as Club class are welcome. More
info, contact Bob Katz 514-989-2212,
<nationals2007@gmail.com>
<www.sac.ca/nationals>

Cu Nim/ASC glider simulator

What started as a distraction for glider pilots/computer geeks during an Alberta winter has made its first tangible step towards reality. After being introduced to the idea of a gliding simulator at the Alberta Soaring Council fall planning meeting, a few Cu Nim pilots started dreaming of a gliding season that did not end with the first snow or training that did not terminate with the approach of a storm front.

After a bit of research through the winter on simulators being used by gliding clubs for training students and instructors, it seemed as though a gliding simulator might hold some solutions the problems faced by our club; namely instructor shortage, brief gliding season and the time restrictions of student pilots.

With the collection of a Blanik L-23 (C-GVSL) from a barn in Creston, BC, our training simulator is off to a good start. Previously owned by the Vancouver Soaring Association and then written off after an unauthorized and unmanned flight courtesy of the wind, the cockpit with complete controls front and back is intact and should make an excellent platform for the simulator.

The next step will be to connect the controls to potentiometers or switches and place LCD screens behind the panels to simulate instruments (via Sim Meters). A control panel will magically relay this information to gliding simulator software (Condor or Xplane) and video projected to a screen in front should immerse pilots in the experience. At least that's the plan. We will let you know how it goes.

Peter Neary

Book Review

COMPETING IN GLIDERS (winning with your mind)

by Leo and Ricky Briigliadori

This is a book that should be owned by every serious competition and OLC pilot. It is certainly not a "How I done it, by the Champ!" book but a well thought out, very detailed analysis of all aspects of contest flying.

The first thing that you will notice is that the book is very heavy! This is due to the fact that it is printed on very high quality paper that was wholly justified in order to reproduce the numerous superb photographs of which some fifty are double page spreads. The book has 5 parts: Technique, Strategy, Tactics, Human Factors, and Organization. A particularly nice feature is the inclusion of detailed descriptions of many very real flights, some with a very successful outcome and others not so good. Some of these stories are accompanied by SeeYou traces.

The book is very well illustrated with numerous graphs, diagrams, and charts, all in colour. Finally, the quality of translation into English is excellent. (Note: the authors are father and son. Both are well known on the European and World Competitions scene).

The book is available from Knauff and Grove Inc. <www.egliders.org> US\$62.95 plus shipping.

Review by **Terry Beasley**

insurance report

from page 11

of their own individual experiences. This type of clause and its administration is quite common in aviation policies across the country. The SAC policy is valid in all provinces and the insurance company (CAIG), brokerage (Jones Brown) and broker are all licensed and regulated to do business across Canada. Since both Jones Brown and SAC are based in Ontario, their business and policies are subject to annual audit and review by Ontario regulators.

In part at Jones Brown suggestion, we have submitted the clause to the Ontario regulators for review. While we have not yet received a final reply, I have had several exchanges with the regulatory board as they have had some difficulty understanding why there is a question regarding what they view as a rather straightforward clause. Once we receive a final reply, we will forward it to the SAC Board.

For those with any questions or comments regarding the SAC insurance plan, the quickest and easiest way to reach us is to use the Insurance committee e-mail address, <insurance@sac.ca>. I do try to reply within a couple of days, though it sometimes may take somewhat longer depending on holidays and more complex issues.

Thanks go to the Winnipeg club for hosting the SAC AGM this year. For those members who were able to attend, I was happy to have been able to present information about the insurance plan and was glad that my presentation and individual discussions were able to answer any questions you had.

I will be posting a version of the presentation to the SAC website for those of you who were not able to join us Winnipeg.

Here's hoping a fun, challenging, and safe year of flying for everyone in 2007. ❖

better. Dealing with incidents through analysis and improving our risk mitigation will improve safety. SAC has introduced the Safety Management System (SMS) at the national level. Many clubs are stalled at the analysis phase and are having difficulty producing the Club Safety Program Manuals due to the work involved. Working to complete this manual will continue to bring the club safety culture to be more proactive rather than reactive. The process will allow you to look inward at what needs to be done to address active hazards and latent conditions in your safety net.

The bottom line is we all benefit. Now how can I get more clubs to send in their annual safety analysis listing all the incidents?? ♦

free flight CD – \$6

Content ↑ price ↓

Now **141** issues of *free flight* (2/1983 to present) and **57** selected large format soaring photos – great for club events & computer wallpaper. Order from editor.



Maiden flight of the DG-1000 Club on 22 Feb 2007

DG has delivered almost one hundred of the DG-1000S and T models, and now has the Club version completed and test flown. The DG-1000 Club two-seat sailplane has been developed with pilot training in mind as well as high performance and cross-country flights and aerobatics. It features:

- Simple ground and air handling.
- Automatic control hook-ups.
- State-of-the-art wing sections giving excellent performance (max. L/D about 41 and min. sink with two about 0.65 m/s), and low bug and rain sensitivity.
- Ballast box in the fin. It is easy to adjust the glider to the same CG position for solo

Quite often it will be necessary to make three or four of these tighter turns until sufficient separation to go your own way is achieved. Usually you will need to fly quite slowly for two or three complete circles to get the position you need to initiate the steeper turn through the core.

Now some advice to the victim of the process. If somebody manages to climb up to your level in a thermal by adopting a steeper angle of bank, then maybe you should try flying steeper too. Of course, it may be that you have a heavy load of water aboard and he does not, in which case he is going to get by you without any trouble, and without the need for the maneuvers described which are only needed when the gliders are similar in performance. If, however, you should be victimized by a pilot performing as shown in Figure 1 or Figure 2 you do have a means of revenge – trying rolling out and disappearing from position B2. He can't see you but is expecting you to reappear in his vision in a turn or two. When you don't show up when he expects, he hasn't a clue where you are and doesn't make any adjustments for fear he will fly into you. All he can do is hold his turn and pray – heh, heh, heh. ♦

and dual flying by adding weights into the ballast box. This is an advantage for pilot training as the student can perform solo flights with the same CG position (hence handling characteristics) as used when flying with the instructor.

- Height adjustable rear seat shell for improved visibility from the rear cockpit, especially for smaller pilots.
- Ergonomic seating positions, effective and quiet ventilation system.
- Rigid, high spring mounted landing gear. As an option, the fixed landing gear can be easily converted to a retractable version.

DG Flugzeugbau recommends ordering the DG-1000 Club with the wingtip disconnect option – this feature enables the glider to be converted to a DG-1000S, a plus when selling.

and time to make these Nationals happen. A detailed account of the Nationals was published in *free flight* 4/06.

2006 Seeding list The 2006 Seeding List was compiled based on the results of the 2006 Nationals. The top seeded pilots (>85%) are:

Jörg Stieber	97.48%
Walter Weir	97.40%
Dave Springford	97.39%
Nick Bonnière	91.31%
Ed Hollestelle	90.87%
Willem Langelaan	88.79%
Jerzy Szemplinski	86.77%

The complete Seeding List is posted on the SAC documents web page: <<http://www.sac.ca/documents/Seeding-List-2006.pdf>>.

Nationals fallout As indicated, declaring 3 July a non-contest day resulted in numerous protests from a particular pilot followed by Roundtable postings, letters to the SAC Board and the FAI asking that the Nationals be de-sanctioned. The Sporting committee provided a detailed report to the Board and posted to the Roundtable. Many hours of volunteer time were consumed in this process, unfortunately. The controversy has caused significant damage to competitive soaring in Canada, the extent of which will be seen in future years in terms of low participation levels at Nationals and a lack of volunteers coming forward. One member of the Sporting committee has resigned because he didn't consider this a good use of his time.

At the root of the controversy was a technicality in the US scoring rules that declares pilots who land back at the field to be non-contestants. It is important to note that 3 July would clearly not have been a contest day under the international (FAI) rules, nor under the Canadian rules before inclusion of Section 11. Under Section 11, the day would have automatically been cancelled if the pilots who landed back would have started and landed at the nearest airstrip instead, 5 kilometres from the start line. I am certain the jury made the correct decision to declare the day a non-contest day in accordance with Section 11 on the basis that not all contestants had a chance for a fair start.

Comparison of Canadian and international rules

The Board has directed the Sporting committee to ensure that Canadian rules are not in conflict with FAI rules. The table (on p15) compares Canadian rules with US rules and FAI rules in a number of key criteria. The analysis shows that Canadian rules are well aligned with FAI rules. The Canadian competition rules are currently being updated for the 2007 season. Some changes are mandated by the Board, others are necessary to address shortcomings that came to light during the 2006 Nationals. ♦

The Dundalk landout

(or how not to spend your wife's birthday)



Sunset, two hours drive north of SOSA

Luke Szczepaiak, SOSA

It was late in September 2006, I woke up, wished my wife a happy birthday and went to work. I was pretty happy with what I managed to do during the season. One of the goals that had not been accomplished however, was a declared 300 km flight. Being so late in the season, I almost abandoned all hopes of completing it. Around 10 am an e-mail from Jerzy Szemplinski arrived – "Luke, I will be at SOSA around noon, maybe you can try for your 300". With nothing pressing I went "hat in hand" to my boss.

The afternoon now free, I headed home, changed into some flying clothes, grabbed my PDA and camelback and headed to the club. I D'd the club LS-4a and, with help from Mira Rezek, towed the ship to the flightline where I saw Andy Mazur and Tomas Rezek ready to go. After some help from Jerzy, Tomas and I had declared our turnpoints of Lucan and Dundalk. There were no towpilots other than Jerzy, so he couldn't fly until later that afternoon.

I headed out on course after about ten minutes of climbing. The conditions were good, but I felt that I was flying too slowly, and thought I had been chasing Tomas and Greg Finley who had joined us at the flightline. After a few mistakes I got lucky and had a good climb that took me almost to 6000 and continued on my way, this time being more conservative. When I arrived at the Lucan turnpoint, I was greeted with lake effect moving in from Lake Huron. I thought I was way behind and I was surprised to learn that I was the first one there. Tomas arrived right behind me, and we both headed back towards the cu. On our way we saw Greg's ship heading towards Lucan.

With the lake effect moving in from the west, both Tomas and I elected to do a downwind dash back to SOSA. The going was much faster and we were near Kitchener around 1600. With some cu left in the sky we headed north again towards our second turnpoint, Dundalk. By this time Jerzy had launched

from SOSA in his SZD-55 and met us south of Elmira. We reached Belwood lake as the autumn sun continued on its eastward journey. Tomas elected to turn south and was shortly followed by Jerzy, who encouraged me by saying that he is only heading home to pick me up when I land at York, or Toronto Soaring. Not heeding the warnings, I didn't switch gears, and pushed on.

The thermals became weaker and each climb seemed to take too long. Instead of climbing to the top of the thermal I kept heading north... Elation, I made the Dundalk turnpoint; horror, the time of day and year finally sunk into my thick skull. It was 1730, 26 September and any lift that was left out there wouldn't be easy to find. With the altimeter unwinding, I calmed down and prepared myself for an outlanding.

The landing into a farmer's field was smooth. I contacted Jerzy who was already at SOSA waiting for the call. He explained that Tomas and Andy would come to get me. After getting my directions, Jerzy asked me which trailer belonged to the LS-4, and I answered, "Oh... it's the Cobra trailer".

Next came the call to Shannon, my wife. Wonderful lady – she was both encouraging and supportive. I told her that I would give her a call when we were on our way back to SOSA. The hours seemed to drag on and I tried to find things to pass the time. I disconnected the controls, cleaned up the tape, talked to one of the farmers. As day turned to night I headed out to the highway to wait for the retrieve. Four hours after I had landed I got a phone call from Tomas saying that he was getting close and Andy wasn't far behind him. Tomas was driving my car with the trailer, and Andy had his truck, as the field was fairly muddy and I didn't think my little Honda could make it in and out, let alone pull the trailer.

About five minutes before Tomas pulled up, my heart dropped to my feet. "Oh my God," I

thought, "I bet they've got the wrong trailer". In my mind I replayed the short conversation I had with Jerzy – I had forgotten that there was a second Cobra trailer for the club's SZD-51 Juniors!

When Tomas pulled up, there was no more doubt. We had to go back and get the right trailer. Not to drag Andy out again, and after getting permission from the owner's son, we decided to pull the LS-4 as much out of the field as possible. As we neared the edge of the field the father arrived. He was surprised to see all the activity, but I invited him to look at the glider and described what had happened. He suggested that when we come back with the right trailer we should use his tractor instead of the truck as not to rut the field. We would probably not be getting back until much later but his son said that he would be up and would drive the tractor.

It was now 2230. Tomas and I said our good-byes to the owner and Andy, and headed for SOSA with the Junior trailer in tow. We called our wives to let them know what was going on. Mira, Tomas' wife, opted to meet us at the farm later at night. By 0130 we had the proper trailer hooked up to my car and headed on another two hour journey back north. As advertised, the farmer was awake and we hooked up the trailer to his tractor and pulled it to the glider. We had the ship de-rigged and out of the field by 0400. I said my thanks and goodbyes to the farmer, as well Mira and Tomas who headed home.

I arrived at SOSA around 0600, parked the trailer and went home to a shower and a worried wife. I was back at the office by 0800.

The key lessons I drew out of this memorable adventure is that good preparation on the ground is necessary as well as the ability to adapt to changes in the air. I hope I won't make as many mistakes on my next try. ❖



A long-suffering retrieve crew at 4 am. From the left, the farmer, Tomas and Mira Rezek.



Club Official Observer list must be updated for 2007

Before any badge claims can be processed in 2007, all OOs must be revalidated by inclusion on your club OO list.

Senior OOs / CFIs — submit your OO list to Walter Weir <waltweir@ca.inter.net> immediately if you have not already done so. The list can be updated at any time and is valid for three years — until 2010.

DG-505 ELAN ORION
DG-808C COMPETITION
DG-808S COMPETITION
DG-1000s
DG-1000T TURBO



www.dg-flugzeugbau.com
www.ams-flight.si

High Performance Sailplanes Limited
planeurs de grande finesse
905.274.1286
willem@langelan.com

LS4B AMS
LS8-s
LS8-st
LS10

Solaire Canada
519.461.1464
ed@solairecanada.com
www.solairecanada.com

Come and soar with the bald eagles! PEMBERTON SOARING CENTRE

Operating daily April to October in Pemberton, BC

- excellent mountain scenery with thermals to 12,500 ft
- camp at the airport, B&B, or stay in Whistler
- area offers a wide variety of summer activities

Glider rentals: L-13 & Super Blanik, L-33 Solo

Instruction: glider pilot courses or book a number of lessons, X-C training/off-field landing practice

ph (604) 894-5727, fax (604) 894-5776

e-mail: pemsoar@direct.ca webpage: www.pembertonsoaring.com



MZ SUPPLIES

5671 Ferdinand St, Osgoode ON K0A 2W0
(613) 826-6606, fax (613) 826-6607

<wernebmz@magma.ca>

<www.mzsupplies.com>

Ulli Werneburg

Exclusive Canadian dealer for the following outstanding aviation products:

CAMBRIDGE Aero Instruments

- Top of the line CAI 302 computer with vario and GPS navigation and FR
- CAI 302A basic GPS navigation and FR
- CAI 303 Navigation display for use with 302/302A

SAGE Variometers

Simply the best mechanical variometers in the world.

SCHLEICHER Sailplanes

Manufacturers of the
ASW-27B, ASW-28, ASW-28-18T,
ASH-25, ASH-26E, ASW-22, ASK-21
and the new ASG-29 18m
flapped sailplane.

Varicale

Canadian dealer for Sportine Aviacija



LAK 19 Standard Class/18

LAK 17a flapped 15m/18m

Both available with turbo

LAK 20 Open 26m 2-seater

for details contact:

Nick Bonnière bonnfutt@magma.ca

www.magma.ca/~bonnfutt/Lak17



L33 Solo

Easy to fly

Great club and cross-country ship
Type approved in Canada
Outlasts fibreglass
Great value

For all-metal quality, nothing beats a Blanik!
Tel (509) 884-8305 • www.nwi.net/~blanikam/ba/home.htm
Box 1124, Wenatchee, WA, USA 98807-1124

L23 Super Blanik



Type approved
Superb cockpit visibility
Proven all weather durability
Over 50 L23s flying in North America!

Trading Post

Personal ads are free to SAC members (give me your club). \$10 per insertion for non-members. Send ad to editor. Ad will run 3 times unless you renew. **Tell me when item has been sold.** Subject to editing for length (usually 6 lines max).

single seat

1-26C, C-FZDF, 1957, 1900h, current annual to May 14/06. Open trailer. Asking US\$10,000. For further info contact Orlan Dowdeswell, (306) 789-3302 or <odowdeswell@accesscomm.ca>. At Regina.

HP-11A, 1969, 200h, NDH, Winter & Filser varios, T&B, Two radios, O2 with mike in mask, bailout bottle. Hydraulic brake, two chutes, Winter baro, hangar dolly, tie-downs, Schreder trailer, tool box, rigging clamp and miscellaneous spare parts. Best offer over \$8000. Horst Dahlem, (306) 955-0179 or <dahlem@sasktel.net>.

PW-5, C-GLDY, well cared for PW 5 in excellent cond. \$35,000 with good Avionics trailer, \$26,000 without trailer, obo. Evelynne, <evcr@telus.net>, (250) 342-9602. Pictures and more info at <http://web.mac.com/ewsflys/iWeb/PW5/PW5_Intro.html>.

PW-5, C-FEPW, 1998, 700 h. No damage history, excellent condition. Custom Avionic trailer. Asking \$30,500. Ray Perino, Invermere, BC (250) 688-5052 <perino1@shaw.ca>.

HP-14T, C-FAXH, 1480 h, glider & trailer in vg cond. New MicroAir 760 with boom mike, ILEC 588 glide computer, ELT, O2, new winglet-fences. Low maint. A/C giving good value for your dollar. \$19,300 obo. E-mail me <spencer.robinson@rogers.com> for current photos, (416) 620-1218.

ASW-15, C-FZUZ, 1200 h. The end of an era – Oscar Boesch's world-famous airshow glider "Wings of Man". In A1 cond. and no hard landings. (416) 769-4000, <oscarboesch@rogers.com>.

Jantar, C-GVTZ, 2419h, refinished in 1995. PIK encl. trailer. \$16,000. Ray Ochitwa, Vancouver, <nowhere@telus.net>.

Kestrel-19, C-FDZV, 1974 1300 h, owned by AME since new. New polyurethane in 2005, looks better then new. Easy rig trailer, Borgelt B-50/Winpilot. At SOSA, \$22,000. Steve <os.burany@utoronto.ca>.

ASW-20, 1982, 830h. All ADs. Good cond, fair gel-coat. Basic equip, Borgelt B40 vario, B500 final glide/nav comp, built-in GPS. Both instruments under warranty. Dittel ATR 720 with boom mike, v.g. pee tube system for in-flight comfort. Older diluter demand O2. Simple, safe Wedekind rigging fittings. Komet trailer. US\$32,000, in Quebec, (450) 647-2745 (days) or <soarsveinxx@yahoo.com> (remove xx).

ASW-20, C-GGGE, 1979, 1200h, Komet trailer, refinished wings, excellent cond. Asking \$45,000. (403) 282-2723, <kevin.karin@shaw.ca>

ASW-20A, C-GTRM, 1981 Komet trailer. Offers. (604) 657-7241, <horst_pilz@telus.net>.

Slingsby Dart, T51/17R, 961 h TT, new canopy, Ball vario, Microair radio with boom mike, O2, excellent trailer with good rigging aids. Owned and maintained by AME in Red Deer, AB. \$13,500 obo. Contact Blaine, (403) 886-5401 or Ernie, (403) 616-6397 for further detail. Photos at <http://web.mac.com/ewsflys/iWeb/Dart17/DART17_Intro.html>.

SZD-36 Cobra, C-GQWQ, 1977, 897h. No damage. L/D 38/1, A-1 condition, kept in hangar. Modified PIK-20 fiberglass trailer. Located in Toronto. Asking \$15,000. Charles Kocsis <karoly_cobra@yahoo.com> (416) 908-5638.

Pik20D, 1977, 1285h. Factory trailer, water, O2, Terra 760D, chute. This model has both flaps & spoilers. \$25,000. Brian (604) 467-0020 or <pikfly@shaw.ca>.

Genesis 2, 1998, 331h, 100% race ready. Excl. cond., CAI302, 303, SageCV, WinPilot, ATR720C, trailer, chute. US\$45,000. Dave Mercer, <djmrcer@telus.net>, (780) 987-6201, Alberta.

Nimbus 2B, C-GAJM, 1977, #25, 1120h, 20.3m, 49:1. Flaps, tail chute, 110L water ballast, Filser LXFAL flight computer/GPS/final glide calc, chute, trailer, and all glider covers. An absolutely beautiful flying machine, and proven competitor. Based at York. \$37,500. Peter Luxemburger <iluv2soar@yahoo.ca>.

two-place

RHJ-8, 1979, 1400h. Side-by-side reclining seating, adjustable pedals for pilots to 6'-4". T-tail. Elevator and rudder gap seals, increased rudder length, wing root fillets, winglets. Best L/D 34 at 50 kts, thermal 40-42 kts, stall 35 kts, roll rate under 5 seconds. Parallel hinged single piece canopy, improved ventilation. New open trailer. \$23,000. John Firth <bc382@ncf.ca> (613) 731-6997.

Ka-7, C-FKZS, #7255, 727h. Fuse restored '96 - wings in 2001, Ceconite with dope used. Not flown since '01 (club folded). Basic panels - mech. varios with TE and MacCready ring, radio with dual PTT. Open trailer good cond. \$10,500. Keith (306) 249-1859 or Don (306) 763-6174, <k.andrews@sasktel.net>.

Super Ximango, motorglider, 1996, TTAF 266, TTEN 245. All-composite, 2-place side-by-side w/bubble canopy. 57.3 foot wing folds to 33.3 ft. Rotax 912 4-cycle engine with liquid cooled heads, 81 hp. Hoffman 3-position feathering prop. Full panel. US\$104,000 (replacement cost over \$195,000) Much more detail on SAC Classifieds web page. <gcfinlay@rogers.com> or call Greg at home (519) 884-7973 or cell (519) 841-9221.

misc.

Runway mower — SOSA is selling its "Howard Price Hydropower 180" finishing mower. It runs well and has served us well. We've upgraded to a new grass-cutting system. \$2000 obo. For more info see <http://www.howardpriceturf.com/products.htm#hydropower180>. Herrie ten Cate, cell (416) 358-2177, home (416) 656-0562.

Parachute, National 360 premium backpack parachute, well maintained, new container, straps, and storage bag, excellent cond. Fully adjustable harness, very comfortable and clean, shows little wear. Navy blue, \$595 plus shipping, no offers. Wayne Eaves, (905) 840-0058, <golden_eagle65@hotmail.com>

suppliers

Canadian Soaring Supplies — Borgelt instruments and soaring software. Svein Hubinette, 343 - 150 rue Berlioz, Verdun, QC, H3E 1K3, (514) 765-9951 <svein@videotron.ca>.

Solaire Canada — LS series of sailplanes, LX glide computers, Dittel radios, Colibri FRs. Ed Hollestelle, <ed@solairecanada.com>, (519) 461-1464.

ZS Jezow PW gliders — Today's technology, polyurethane finished, instrumented, type approved PW-6U and PW-5 from CM Yeates & Associates. Avionic trailers with fittings also available. Ph/fax (902) 443-0094. E-mail <yeatesc@ns.sympatico.ca>, or see <www.3.ns.sympatico.ca/yeatesc/world.htm>.

Invermere Soaring Centre — Mountain soaring, camping, glider rentals. Mountain flying instruction in Lark or Duo Discus. Trevor Florence, Box 2862, Invermere BC, V0A 1K0, cell (250) 342-1688, ph/fx (250) 342-7228. Website: <www.soartherockies.com> e-mail: <info@soartherockies.com>.

High Performance Sailplanes — Planeurs de grande finesse. AMS-flight DG ELAN Std class and 2-seaters. DG Flugzeugbau GmbH 15m, 18m gliders/motorgliders and 2-seat gliders. <willem@langelaan.com>

MZ Supplies — Dealer for Schleicher sailplanes and parts, Becker radios, most German instruments, See-You flight software. Ulli Werneburg, 5671 Ferdinand Street, Osgoode, ON K0A 2W0 ph (613) 826-6606, fax 826-6607 <wernebmz@magma.ca>.

Sportine Aviacija — LAK sailplanes <www.lak.lt>. LAK-17a – 15/18m flapped; LAK-19 – 15/18m standard; LAK-20 – 2-seat 23/26m Open. Exclusive dealer for Canada, Nick Bonnière <bonnfut@magma.ca>.

XU Aviation — Glider repairs in all materials. Chris Eaves <xu-aviation@sympatico.ca>. (519) 452-7999, fax (519) 452-0075.

magazines

GLIDING & MOTORGLIDING — world-wide on-line magazine for the gliding community. Edited by Val Brain, <www.glidingmagazine.com>.

GLIDING KIWI — Editor, John Roake. Read world-wide with a great reputation for being first with the news. US\$40. Personal cheques or credit cards accepted. NZ Gliding Kiwi, 79 Fifth Avenue, Tauranga, New Zealand. <gk@johnroake.com>.

SAILPLANE & GLIDING — the only authoritative British magazine devoted entirely to gliding. Bi-monthly. US\$45 per year airmail, US\$35 surface. <beverley@gliding.co.uk>.

SOARING — the monthly journal of the Soaring Society of America. Subscriptions, US\$43 price includes postage. Credit cards accepted. Box 2100, Hobbs, NM 88241-2100. <info@ssa.org>. (505) 392-1177.



Touring Motorgliders **SINUS and VIRUS**
Self-launch Glider **TAURUS**
Advanced Ultralight **SHORT WING VIRUS**
Trikes **SPIDER and TWISTER**

just plane cheap fun!

Guy Deschênes, Canadian Distributor
PIPISTREL <www.pipistre.si>
80 Johanne, Shefford QC, J2M 1X8
(450) 574-8147 <guyplane@hotmail.com>

return address:

Soaring Association of Canada
Suite 107 – 1025 Richmond Road
Ottawa, Ontario K2B 8G8



SAC Clubs SAC Clubs SAC Clubs SAC Clubs

Atlantic Zone

AIR CURRENCY ENHANCEMENT SOC.
Robert Francis (902) 893-3251
robfrancis@tru.eastlink.ca

AÉRO CLUB DES CANTONS DE L'EST
Marc Arseneault
341 Ave. Alexandra
St-Lambert, QC, J4R 1Z1
marcarseneault@sympatico.ca

AÉRO CLUB DES OUTARDES
Bromont A/P, QC
Francis Ringwald (450) 770-0297
http://aeroclubdesoutardes.iquebec.com

AVV CHAMPLAIN
St. Dominique A/P, QC
Alain Thirion (450) 442-2946
airfield: (514) 771-0500
info@avvc.qc.ca
www.avvc.qc.ca

CVV QUEBEC
St. Raymond A/P, QC
Richard Noël ickx@videotron.ca
www.cvvq.net
club phone (418) 337-4905

MONTREAL SOARING COUNCIL
CLUB DE VOL À VOILE DE MONTRÉAL
Hawkesbury, ON
Peter Trent (514) 739-6182
ptrent@colba.net
club phone (613) 632-5438
www.flymsc.org

Ontario Zone

AIR SAILING CLUB
NW of Belwood, ON
Stephen Szikora (519) 836-7049
stephen.szikora@sympatico.ca

ARTHUR GLIDING CLUB
10 Courtwood Place
North York, ON M2K 1Z9

BONNECHERE SOARING
5.5 km N of Chalk River, ON
Iver Theilmann (613) 687-6836

ERIN SOARING SOCIETY
7 km east of Arthur, ON
Peter Rawes (905) 838-5000
www.erinsoaring.com
info@erinsoaring.com

GATINEAU GLIDING CLUB
Pendleton, ON
Roger Hildesheim (613) 838-4470
www.gatineauglidingclub.ca

GREAT LAKES GLIDING
NW of Tottenham, ON
Craig Wright (905) 542-0192
postmaster@greatlakesgliding.com
www.greatlakesgliding.com

GUELPH GLIDING & SOARING ASSN
W of Elmira, ON
Paul Nelson (519) 821-0153 (H)
www.geocities.com/ggsa_ca/

LONDON SOARING CLUB
between Kintore & Embro, ON
Cal Gillett (519) 425-1679
info@londonsoaringclub.ca
www.londonsoaringclub.ca

RIDEAU VALLEY SOARING
35 km S of Ottawa, ON
club phone (613) 489-2691
info@rideauvalleysoaring.com
www.rideauvalleysoaring.com

SOSA GLIDING CLUB
NW of Rockton, ON
(519) 740-9328
www.sosaglidingclub.com

TORONTO SOARING CLUB
airfield: 24 km W of Shelburne, ON
David Ellis (705) 735-4422
www.torontosozaring.ca

YORK SOARING ASSOCIATION
7 km east of Arthur, ON
club phone (519) 848-3621
info (416) 250-6871
www.YorkSoaring.com
walterc@sympatico.ca

Prairie Zone

PRINCE ALBERT GLIDING & SOARING
Birch Hills A/P, SK
Keith Andrews (306) 249-1859 H
www.soar.sk.ca/pagsc/

REGINA GLIDING & SOARING CLUB
Strawberry Lakes, SK
Orlan Dowdswell (306) 536-4119
or (306) 789-3302
www.soar.regina.sk.ca

SASKATOON SOARING CLUB
Cudworth, SK
Clarence Iverson (306) 249-3064 H
cinversion@shaw.ca
http://www.ssc.soar.sk.ca/index.htm

WINNIPEG GLIDING CLUB
Starbuck, MB
(204) 735-2868
info@wgc.mb.ca
www.wgc.mb.ca

Alberta Zone

ALBERTA SOARING COUNCIL
Phil Stade (403) 933-4968
asc@platinum.ca
Clubs/Cowley info: www.soaring.ab.ca

CENTRAL ALBERTA SOARING CLUB
Innisfail A/P, AB
Shane Cockriell (403) 346-0543
shane-o@telusplanet.net
www.cagcsoaring.ca

CU NIM GLIDING CLUB
Black Diamond, AB
Al Hoar (403) 288-7205 H
club phone (403) 938-2796
www.soaring.ab.ca/free-flt/cunim

EDMONTON SOARING CLUB
N of Chipman, AB
John Broomhall (780) 438-3268
www.edmontonsoaringclub.com

GRANDE PRAIRIE SOARING SOCIETY
Beaverlodge A/P, AB
Terry Hatfield (780) 356-3870
www.soaring.ab.ca/free-flt/gpss/home

Pacific Zone

ALBERNI VALLEY SOARING ASSN
Port Alberni A/P, BC
Mark Harvey (250) 748-1050
countryroad@shaw.ca — http://avsa.ca

ASTRA
Harry Peters (604) 856-5456
petersh@uniserve.com

CANADIAN ROCKIES SOARING CLUB
Invermere A/P, BC
Martin Jones (403) 241-6599
exec@canadianrockiessoaring.com
www.canadianrockiessoaring.com

PEMBERTON SOARING
Pemberton A/P, BC
Rudy Rozsypalek (604) 894-5727
info@pembertonsoaring.com
www.mountain-inter.net/soaring/

SILVER STAR SOARING ASSN
Vernon A/P, BC
Mike Erwin (250) 549-1397
www.silverstarsoaring.org/

VANCOUVER SOARING ASSN
Hope A/P, BC
Fionna Bayley (604) 682-4569
club phone: (604) 869-7211
www.vsa.ca — info@vsa.ca