

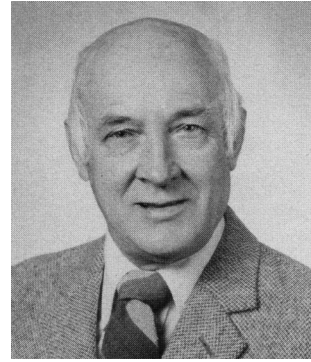
# free flight • vol libre

3/87  
May/Jun



## POTPOURRI Gordon Bruce

*Being privileged to be with Bob Carlson for four years on the SAC Board allowed me to watch and see him turn out a copious amount of work. How he was able to do it in his 26-hour day I know not and we are fortunate for his contributions. I do know I won't work that hard, for I'm older than he and not blessed with his energy. Thank you Bob, very much.*



*The AGM was distinguished by its quiet nature and lack of the usual Jack-in-the-box attendees and Dixon disagreeing with the rest of the Board (which is quite usual). The requested increase in fees was approved by the members and allows us to catch up with the past two years inflation and fund the Flight Training and Safety Committee to a level required for them to continue their excellent work. The workshops were well attended and stimulated lively discussions and interesting points of view. The AGMs require much planning and thought to be successful. The Montreal Soaring Council, with Kate Estebany in charge, is to be congratulated for organizing and running the facilities with efficiency and cooperation.*

*For the coming year, the Board will stress the improvement of our administrative procedures, including a rapid response to members and clubs. This, of course, will require good will from all concerned and attention to simple detail by clubs and SAC Ottawa. Please use your Zone Directors, and all possible will be done to straighten out any problems. Many of our members have become a bit cynical over the past few years which, beset with hard times, has seen cut memberships, curtailed activities and introduced the inevitable rash of misunderstandings. Now is the time to come together and be our usual generous and positive selves. Speak out, but be constructive and helpful.*

*Our second aim for the year is to vigorously attack the accident problem in an effort to lower our accident rate. Our insurance rates are easing upwards for a number of reasons but high amongst these is our annual collection of accidents. Lurking behind all this, as is their job, are the paternal eyes of Transport Canada, who, if required, will not hesitate to take over the direct supervision of our training. They do not want or wish in any way to do this, for their budget is more limited than ours and we, so far, have exhibited a high standard of control and self discipline, sufficient enough to keep their hands off. But as sure as the prairie skies are blue, they will step in if we continue to increase our accident rate. What to do? The Flight Training and Safety Committee will continue to do their work on this subject, but in the meantime, you and I can do something, especially CFIs. Let us, for this summer, resolve to cut drastically the number of wheel-up landings and all manner of accidents occurring in that phase of flying which commences when a decision to land is made until touch down. For starters, read John Firth's observations in *free flight*, Mar-Apr '87, page 12, on loss of control during circuits and his actions to investigate, for his own edification, how the ship he flies reacts under all kinds of conditions met during the circuit. To quote one paragraph which applies to all gliders:*

*"... take an hour above 3,000 feet to throw it around a bit, pulling steep turns with various amounts of flap, and induce it to stall. You may be in for a surprise which will save your ship, your life, and our insurance rates."*

*It appears absurd for a high time pilot to get into an incipient spin whilst making a landing approach. Like it or not, the fact is the pilot did not know his ship. Now either we do these things on our own, or someone else will require that it be done. Have a great summer, and look after yourselves.*

---

## LAST MUSINGS

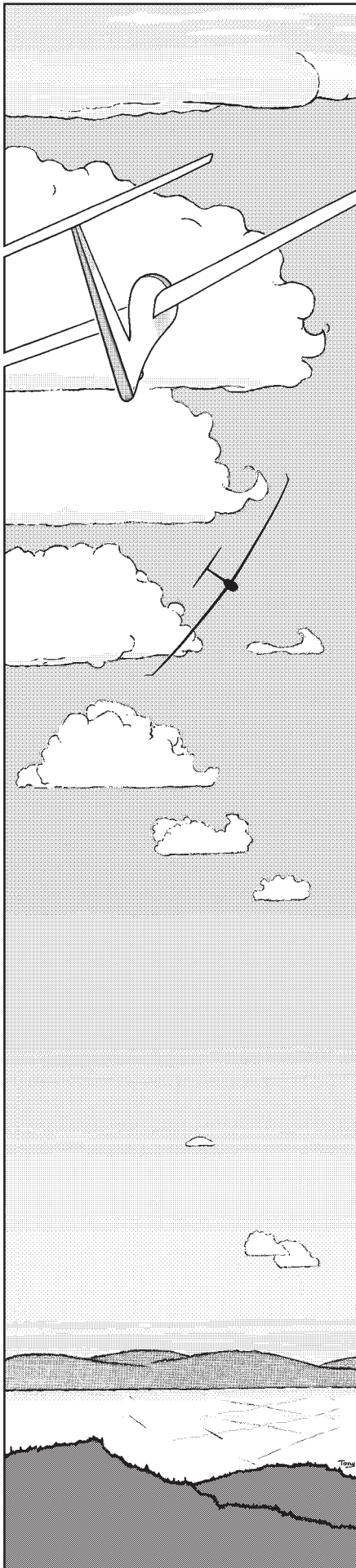
Bob Carlson

Four years ago, I began these essays to provide a personal view of how SAC and the National Office operated. Along the way, I hoped that I would be able to share a few thoughts and fresh perspectives. Well, I suppose I managed what I set out to do; at least, I like to think I did. What I didn't anticipate was the amount of politicking and defending that became necessary and the difficulties of managing, from Toronto, the National Office function. Over these years, a number of dedicated pilots have contributed in a variety of ways to the management of SAC. My thanks to you for your help — it was and is appreciated.

Your new President is Gordon Bruce, who comes to the job from a distinguished career in the Canadian Armed Forces, from the presidency of the Montreal Soaring Council, and a very busy career as a retiree. I am sure that the worst job that Gordon will do for SAC will match my best. Give him your support, he will appreciate it. To help Gordon, you have Nancy running the office with enthusiasm and increasing skill, and a group of volunteer Committee and Board members. All are remarkable. They need your considered and considerate opinions and support. Remember please that SAC is not "us" and "them" — what we make of SAC, we make ourselves. A final word. There's been a lot of "I" in the preceding paragraphs. Sorry about that — it's the only way it would come out. My closing feelings are summed up by a "haiku" of which I am fond, by the late Takahiro Onishi:

REFRESHED AND CLEAR, THE MOON NOW SHINES  
AFTER THE FEARFUL STORM





# free flight • vol libre

Trademark pending    Marque de commerce en instance

3/87 May-Jun

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

ISSN 0827-2557

- 
- 2 Bringing back the magic  
editorial — Paul Brice
  - 4 Cruising the superhighway  
memories — Bruce Hea
  - 6 Flying with the sandhill cranes  
magic — R.B. Richards
  - 7 Life up front  
towpiloting — Larry Morrow
  - 8 Basic instrument care  
installation — Rudolf Brozel
  - 1987 AGM and 1986 Reports (insert)*
  - 10 The all-important difference  
airmanship — Douglas Murray

## DEPARTMENTS

- 3 **Opinions** — club membership, ESC donation to SAC instructor manual, increasing SAC membership with cadets, comments on "Bernoulli, bah!".
- 9 **Safety** — "that was close" — re incident reporting, sunburn, a few safety thoughts.
- 11 **Club News** — Air Sailing's flying plans to improve skills, ham radio, Quebec Soaring, VSA start, world contest donors.
- 12 **Hangar Flying** — DG-500 flies, CASG XC soaring seminar news, British quirk in day devaluation at their Standard Nats, K-13 lives on, 5-nation southern contest, hazardous thoughts.
- 14 **FAI** — badges, change of chairman

---

## Cover

Hooking the younger generation. Kestrel pilot Jean Bellavance shows three fascinated lads a sailplane cockpit during a past Baie St. Paul Wave camp. Photo by Robert Binette.

# BRINGING BACK THE MAGIC

**Paul Brice**

from SAILPLANE & GLIDING

**Paul, a Booker GC instructor with some 1,000 hours, two Diamonds, and a PPL, has some good advice for the disheartened pilot**

Where has all the magic gone? This is a question that many pilots ask themselves a while after gaining their Silver C, for part of the gliding magic is the sense of achievement after hurdling each test or badge. The sort of day required to complete a Silver distance, duration or height appears quite regularly during the spring and summer at most sites. Pilots with sufficient spare time and money, adequate training and certain amount of "go" often achieve their Silver C within a year of going solo.

The first solo, Bronze and Silver C all represent numerous tangible achievements, each one spurring the pilot on to the next. But after the Silver, the badge awards become considerably more difficult and sometimes more expensive to get. The flat-site pilot will often have to travel hundreds of miles in the hope of finding wave to gain Gold and Diamond heights and the 300 km and 500 km badge flights normally require much better than average days. Consequently, the badges — and as a result the apparent achievements — are less frequent and the pilot becomes disheartened.

Ask your club pundits about their most satisfying cross-country flights of the season. After the one or two obvious ones on cracking days, reflection might lead them to mention a flight possibly inconspicuous by its actual distance (100 km maybe) but highly satisfying because *they had made the most of what was offered*. A 100 km or 200 km which produces no badge can be far more meritorious in certain conditions than a 300 km romp in ideal conditions. And certainly the elation of crossing the finish line after a 100 km completed is far greater than that of sitting in a field after 120 of a failed 300 km. Good cross-country flying comes from a sense of purpose, practice, and the right mental attitude.

There is a great tendency amongst pilots waiting for their Gold distance to waffle around within twenty miles of home and then saunter back claiming they have gone around places they could see in the distance and which they never declared beforehand. This achieves nothing. First, the 300 km Diamond is a declared flight and secondly it requires photographic and barographic evidence. I know many pilots (including myself) who have had bitter experiences of losing badge claims and contest days on bad TP photography or poorly set-up barographs. It all needs thought and practice.

Setting the right task for the day is another problem, so practise it. Get help at first — often it pays to ask the pundits what they're doing. If it's a 750 km day, then you might consider a 300 or 500 km attempt! If they're trying to do a smallish task very fast, then declare it yourself — they'll mark some thermals and with luck you may be able to follow for a while (avoid doing this in competition or badge flights because it's only unsporting and irritating for the leader). Even if it takes all day, make a proper start, stagger around, go through the turnpoint photo sectors (take pictures, if possible, to examine afterwards) and make a safe final glide. Don't let the desire to get around reduce your acceptable safety standards.

If you have the opportunity to fly a high performance glider, get help in declaring a suitable task. Crosswind legs in a light wooden glider can be soul-destroying and impracticable in a strong breeze.

However impressive it may sound, getting away from 300 feet is more often the result of a tactical mistake or poor airmanship than supreme competence. Generally, the lower you get, the weaker the thermals become and the fewer your options, so don't glide too fast because you'll come down much quicker. Look at the sky. Fly where the lift is even if it is a little off track. Avoid obvious areas of sink. Be prepared to change gear with varying conditions and if it all goes to worms, fly anywhere to stay up.

And when you land out time after time, ask yourself why. Look at the barograph trace, examine the photographs. Ask for advice. In the end perseverance will bring results, if slowly. Feel your sense of achievement and the return of the magic — even if you land out. If you are content with your gliding — whatever form it takes — then be grateful for the magic. This article is not a dig at non-cross-country pilots. It is an attempt to encourage those who think gliding has lost some of its charm to get out and feel the great sense of achievement from cross-country flying. Don't worry about badges. They'll come in good time. □



## 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 which represents 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, issuing FAI badges, record attempts, and the selection of a Canadian team for the biennial World soaring championships.

free flight is the Association's official journal.

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. Prints (B&W) are preferred, colour prints and slides are acceptable. Negatives can be used if accompanied by a print.

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 SAC Zone Directors' names and addresses are given elsewhere in the magazine.

All material is subject to editing to the space requirements and the quality standards of the magazine.

The contents of free flight may be reprinted; however, SAC requests that both free flight and the author be given acknowledgement.

For change of address and subscriptions to non-SAC members (\$18.00 per year/\$24 out-side Canada) please contact the National Office, address below.

**President** Gordon Bruce  
**Vice President** Harald Tilgner  
**Executive Secretary** Nancy Nault  
**Corporate Treasurer** Jim McCollum  
**Corporate Secretary** Nancy Nault

**SAC National Office**  
485 Bank Street, 2nd Floor  
Ottawa, ON K2P 1Z2  
(613) 232-1243

# 5

Deadline for contributions  
5th day of each ODD month

## L'ASSOCIATION CANADIENNE DE VOL A VOILE

est une organisation à but non lucratif formée de personnes enthousiastes cherchant à protéger et à promouvoir le vol à voile sous toutes ses formes sur une base nationale et internationale.

L'ASSOCIATION est membre de l'Aéro Club du Canada (ACC) représentant le Canada au sein de la Fédération Aéronautique Internationale (FAI), administration formée des aéro clubs nationaux responsables des sports aé-riens à l'échelle mondiale). Selon les normes de la FAI, l'ACC a délégué à l'Association Canadienne de Vol à Voile la supervision des activités de vol à voile telles que tentatives de records, sanctions des compétitions, délivrance des brevets de la FAI, etc. ainsi que la sélection d'une équipe nationale pour les championnats mondiaux biennaux de vol à voile.

vol libre est le journal officiel de l'ASSOCIATION.

Les articles publiés dans vol libre sont des contributions dues à la gracieuseté d'individus ou de groupes enthousiastes du vol à voile.

Chacun est invité à participer à la réalisation de la revue, soit par reportages, échanges d'opinions, activités dans le club, etc. Un "courrier des lecteurs" sera publié selon l'espace disponible. Les épreuves de photos en noir et blanc sont préférables à celles en couleur ou diapositives. Les négatifs sont utilisables si accompagnés d'épreuves.

L'exactitude des articles publiés est la responsabilité des auteurs et ne saurait en aucun cas engager celle de la revue vol libre, ni celle de l'ACVV ni refléter leurs idées. Toute correspondance faisant l'objet d'un sujet personnel devra être adressé au directeur régional dont le nom apparaît dans cette revue.

Les textes et les photos seront soumis à la rédaction et, dépendant de leur intérêt, seront insérés dans la revue.

Les articles de vol libre peuvent être reproduits librement, mais la mention du nom de la revue et de l'auteur serait grandement appréciée.

Pour changements d'adresse et abonnements aux non membres de l'ACVV (\$18.00 par an) veuillez contacter le bureau national.

### EDITOR

Tony Burton (403) 625-4563  
Box 1916  
Claresholm, Alberta T0L 0T0  
Address for Courier Service:  
c/o Claresholm Local Press  
Claresholm, Alberta

### COMMERCIAL ADVERTISING

National Office (613) 232-1243

Date de tombée  
le 5 de chaque mois IMPAIR

5

# OPINIONS

## FURTHER COGENT RAMBLINGS

I have some more thoughts on the subject I opened in Opinions in the last issue regarding strengthening the gliding movement. A major problem has been that for the most part, there have only been two kinds of pilots in our sport — plebes and aces — and the centre has been excluded. In fact, there are two sports. Go to the average club and see the clear cut division for yourself, and see how little cross flow there is between them. Cliques of experienced pilots are clubs formed within clubs because the operation fails to accommodate their needs.

Our dismal record has been in the emphasis of catering to any idiot that wanders across the field rather than first catering to the people we already have. As a result, club members have dropped out the bottom, drifted out the middle, or climbed out the top if they were really interested in growing in the sport. It need not be so.

There is something for everybody at all levels provided a club "reinvests" its training efforts. We at Air Sailing are consolidating our training, yet the operation will provide more flying revenue ... the weeded garden will prove bigger and better lettuce.

If our club operation runs half as well as planned, do you think we will have a problem obtaining and especially, keeping, new members? *(Steven gives more club focus on rationalizing the training, the goals, and the challenge for the ab initio, the intermediate, and the senior pilot in CLUB NEWS.)*

Already our planned intake of students has been reached, and they're eager and have a sense of purpose, the goal being the Silver C. Some experienced and burned out members are coming forward knowing that assignment to the back of a K-13 doesn't mean for all day or for all season. Private owners are also volunteering more. It's not all Utopia, but it's a good club and a nice bunch of people, and the faces aren't cycling past as if we were in a train station.

Steve Newfield  
CFI, Air Sailing

## HOW TO GET TO 3,000

At an AGM three years ago, you made it quite clear that you wished to maintain federal government support. This support will end in October, 1988 unless we can produce 3000 members by then. Day members don't count — parachuting has already tried and been rejected. We've

had a lot of talk and suggestions, all we seem to do is hold our own. I have a new/old thought for you. Air Cadets. Why doesn't each club adopt an Air Cadet Squadron? Why not enlist their enthusiasm and energy to make your club busier and better? Yes, teenagers are rambunctious and sometimes noisy. So what! We complain that there are not enough young people interested in our sport. I can't think of a better precommitted lot.

The Brampton Aero Club adopted an Air Cadet Squadron and are the better for it. Many of their active members and instructors started from the Cadet base. For 25 cents each, we can print sufficient extra copies of "free flight" to send a copy to each cadet that you involve. We can bulk mail the copies to their squadrons or to your club. You choose the way. You decide who pays, and how much. Why not give it an honest try? You may have to change some of your hoary habits. Is that necessarily so bad if we all benefit? Integrate the talent and show them there is something to gliding beyond circuits. It's called SOARING.

I am indebted to Walter Chmela for some of the preceding thoughts.

Bob Carlson  
SOSA

## ESC DONATION TOWARDS SOARING MANUAL

To SAC

Dear Sirs:

The members of the Edmonton Soaring Club and, in particular, those who knew Dan Wolski when he was a member of our club in the late sixties were saddened to hear of his death. We remember Dan as an extremely capable pilot and dedicated instructor.

Enclosed please find cheques and a money order totalling \$260, donated to the Soaring Association of Canada in memory of Dan Wolski. If possible we would ask the funds be used toward the reprinting of the Soaring Association of Canada Instruction Manual. We feel it would be a fitting tribute to the aspect of soaring that Dan enjoyed as much as his love of aerobatics.

Yours very truly,  
Marty Slater  
for many ESC donors

*The SAC Board has approved this request.*

continued on page 5



## CRUISING THE SUPERHIGHWAY

**Bruce Hea**  
Cu-Nim

The November, 1975 sun was brilliant, scarcely a cloud to be seen, the winds westerly at 25. Could the mountain wave be working at our field, Black Diamond?

At 12:20, Dick Mamini towed off in his ASW-12 Romeo Mike, and headed west. In less than half an hour, he reported through 10,000 feet ASL, almost 7,000 feet above the field's 3,345 feet. He had had a turbulent climb, but was now definitely in clear air wave five miles west of the field. Hallelujah! We've got us a wave day!

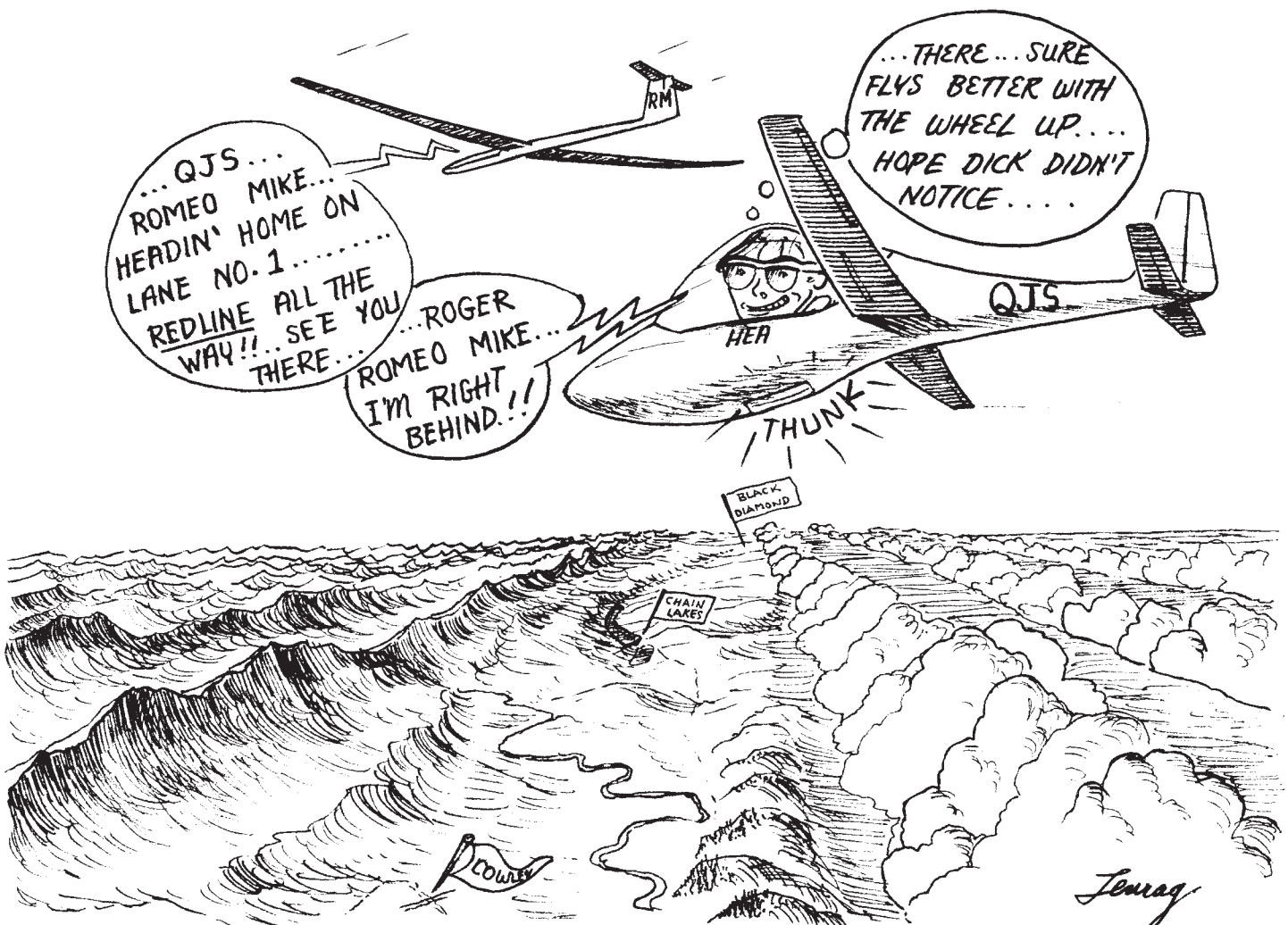
There's no question in my mind that my partner, just back from a year in England, will get first ride in our Libelle, QJS. I

breathe a little prayer that the wave will still be working when my turn comes. At 13:30 a number of ships are trying to work thermals locally, and QJS calls in to say he'll be in shortly. I'm glad to have a partner who is not addicted to long flights.

Strapped in, ready to go. Things are just a little overcrowded — winter flying suit, gloves, oxygen mask, maps, wool toque, etc. A call from Romeo Mike. He's been to Cowley, 70 miles south, and is on his way back to Black Diamond, redline all the way. Wow! Will there be anything left for me? No time for further speculation, we're on tow, moderate to rough, and paying strict attention to staying in position. I enter

a possible wave area, thrown around a bit, but picking up altitude. Maybe that primary is just ahead, so I hang on. Three or four miles further on I release in a sure thing at 9,100 ASL. Once you've felt that smooth surging lift you can never fail to recognize it again. Here we go, 400 to 500 ft/min up. "Romeo Mike, QJS has you visual." Dick replies, "We are working the secondary." OK, up to 12,500 and press on to the primary.

Oh, oh, I'm down to 9,300 and those foothills are rising fast. Turn back and try to climb again in the secondary? What are those wispy bits forming just in front. Flick on the gyro. It looks like we're just enter-



ing lift, tighten those shoulder straps and press on. And then it happened. A sharp double-whammy that was over in an instant. But not before I am thrown against the shoulder straps, and all the dust and dirt (I thought I had a clean ship!) was up to the canopy. The G-meter reads +4 and -3. I stiffen and wait for the next blow, slowing from 75 to 60 knots. Makes you feel slightly foolish as we (my ship and I) enter silky-smooth lift... 600 ft/min up in primary wave just back of the eastern slopes of the Rockies. Wave, you are just where you are supposed to be.

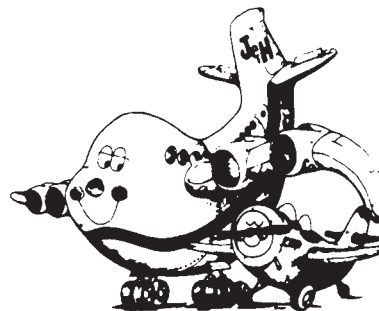
I glance back to check on those "wispy bits" and what a sight! A huge roller-shaped cloud a hundred yards behind me, three thousand feet thick, aligned with the eastern slopes and stretching south to Cowley and beyond. Those inner waves of joy, excitement, and laughter swept through me, as I turned to a more southerly heading, trimmed to 80 knots, still climbing, yet sweeping swiftly SSE along this super-highway. It seemed only minutes and we were passing Chain Lakes. High enough now to see that beyond the primary, at wave window intervals three miles wide, were two more continuous rollers of lenticular cloud. This superhighway has three lanes!

As I entered the northern edge of the Livingstone Block I remembered that our primary wave area had been opened by phone request the night before. But this was not the day for altitude record attempts, it was a day to cruise the superhighway. Even in that brilliant sunshine at 20,000, cockpit comfort started to disappear, but why go higher? From here, the world looks beautiful.

Somewhere to the south and below me, Romeo Mike reported he was heading back again, and noted that I'd probably notice a headwind component. How right he was! At 85 knots and at this height, we are literally creeping homeward. Inadvertently I slide off the primary wave and quickly decide to slip over to the secondary. In an instant the vario pegs on the down side and I hope I haven't pulled a boo-boo. It seems we're going down forever, but then the vario needle flicks off the peg. Wheel into wind, on course, and climbing 200 ft/min right above the white marker of lane 2. Over Chain Lakes and we slide over to lane 3. Ahead, there are signs that the wave is deteriorating. No real worries. Still high enough and creeping along. Can always turn east and land in the flat prairie wheatlands. I start to relax as I recognize Longview, north of Chain Lakes. Just 15 miles to go home at Black Diamond and still 9,000 feet. Headwind seems stronger or more northerly. And then I spot it; in that turbulent tow and subsequent wave entry I never did put the gear up! You can fly for years and still be embarrassed. Gear up. We slip along more easily and somehow I feel better correcting this slip.

Now, back over the field with enough altitude left to fly to Calgary! How rich we are; how beautiful to know we live beside it. Someday we'll be cruising that superhighway again. Just be there at the right time on the right day. □

## We're big and small in aviation.



Johnson & Higgins Willis Faber Ltd. handle a major percentage of the world's aviation premiums. We cover them all — from fleets of jumbo jets to classic Cubs. And our list of aviation clients continues to grow, as a measure of our ability to handle complicated insurance of any kind.

Big or small, in the air, on the ground, or on the ocean, complicated or straightforward — whatever your insurance problems are, we'd like a crack at them.

For the finest, most complete coverage possible, come under our wing.

### Johnson & Higgins Willis Faber Ltd.

Box 153, 595 Bay Street, Toronto, Ontario M5G 2G9  
(416) 598-1877. Tony Wooller direct: (416) 595-2842

## OPINIONS .... continued from page 3

### COMMENTS ON "BERNOULLI, BAH"

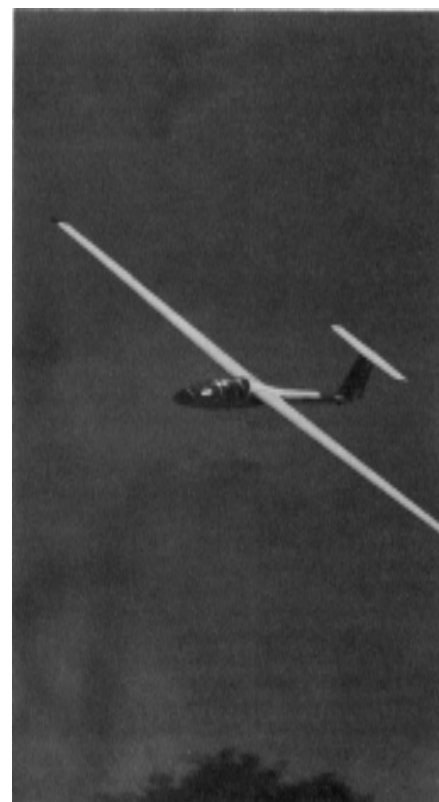
I would like to offer some comments regarding Mr. Koehler's theory of flight. This theory is not new and was already introduced by Newton himself in the second book of the "Principia Mathematica". It no longer appears in textbooks on aerodynamics, except maybe in a historical context, because it does not yield the correct dependence of lift on angle of attack. Indeed experiments have firmly established that aerodynamic lift varies as  $\sin \theta$ , not  $\sin^2 \theta$ . Had this theory been correct, aircraft would have had to have enormous wing areas in order to maintain flight at small angles of attack, whereas at large angles the lift/drag ratio predicted to vary as  $\cot \theta$ , would become quite small.

The most serious flaw with this theory is that it assumes wrongly that all the aerodynamic force is generated by the lower surface of the wing, i.e., by the collision of the air particles against the lower wing surface. It has been proven that about 60% of the lift is produced by the "suction", i.e., the negative pressure on the upper surface of the wing, which is why it is important, among other things, to keep the upper side of the wing particularly "clean".

The failure of the Newton theory is due to the fact that it relies exclusively on mechanical arguments and does not take into account the actual nature of the fluid flow around the wing. Progress was achieved in aerodynamic theory when the importance of the assumption on the nature of the fluid flow was recognized. Once the potential flow is established, one uses Bernoulli's equation to calculate the pressure distribution along the wing surface.

I don't see any difficulty, either conceptual or computational, with Bernoulli's equation. Bernoulli's equation and its differential equivalent, Euler's equation, are both statements of the principle of conservation of energy along a streamline and are both derived from Newton's 2nd Law which is at the origin of the Newton lift theory proposed by Mr. Koehler.

James Malebranche, MSC  
10 Aurora, Poite Claire, PQ H9R 3E7



Seth Schiffer

# SOARING WITH THE SANDHILL CRANES



Heidi Myers

R. B. Richards  
Regina Gliding Club

To soar like a bird, a thought. To stand on the ground and look up at the birds, wings set, soaring, gliding with effortless magic and wish I could do that. A hunter with countless hours watching birds through 8 x 30 binoculars, I admired their dips and slips, the wing-overs of the snow goose, the slow beat and glide of the sandhill crane. If only I could do that.

I knew there was a gliding club, but where? An inquiry at the Flying Club brought forth the information that the gliding club's field was located on the north side of Strawberry Lake near Odessa, an hour's drive from Regina.

Early in the morning of the last Sunday in July, I arrived at the field which boasted a metal quonset hangar, a small office building, a wind sock hanging listlessly and a sign declaring the area a wildlife preserve. Twenty dollars down, a demo flight that lasted 35 minutes in a 2-33, join the club and arrange to start lessons next Sunday. Take a medical exam, obtain a student flight permit in a pleasingly short time and solo four weekends later with one flight of 57 minutes unaware that an hour aloft meant anything. I'm hooked. This is pure enjoyment.

"Would you like to fly the 1-26?", the Chief Instructor inquired of me the next day. The transition from the 2-33 to the 1-26 resulted in a couple of takeoffs that caused me to wish there weren't so many accomplished pilots congregated at the end of the runway around the radio trailer.

On Saturday, the 6th of September, the fall sun had warmed us to the point of removing our sweaters around noon. When my turn to use the 1-26 was announced after several of my promptings of, "I'll go if no one else is ready", this pushy new student at the club took off. It was a beautiful blue day, typical of a prairie late fall harvest day. Gentle thermals here and there had with my limited experience and elementary knowledge enabled me to gain 1500 feet after releasing at 2000 feet agl.

The sandhill cranes were migrating south that day. Often on fall days, I had watched them through binoculars while out locating geese. Many times I had heard them and had to search high to see them drifting idly south, their great wings seemingly still with their finger feathers feeling the currents and adjusting their path. I sat there pointed into the northwest wind, not going anywhere, almost stationary relative to the club's field to the south. A flock of cranes about a mile north set their wings to thermal and take advantage of nature's energy, freely presented.

Well now, let's check this out. Perhaps we could fly together. Nose down bit to get

going, slide over and join the cranes in a counterclockwise circle. Without a conscious thought for the airplane, but with my eyes on the birds, the circle was joined. It seemed almost a matter of course that we were on opposite sides of the circle at the same altitude and climbing together. They watched me with keen blinking eyes, and I watched them. Then I realized that I was unconsciously following them with more or less bank as their fingers pointed the way and we stayed opposite each other, the twelve of them and me in the 1-26. Up and up we magically rose, the instruments almost ignored, three on the vario. The sheer enchantment of flying with the birds, the great sandhill cranes, was nirvana. Who said man couldn't fly with the birds.

Then, with a flick and a roll to the right, they left the thermal heading south again at 7100 feet. We had been in the thermal together for almost 2000 feet, how long I do not know. Lift still showed on the vario so I stayed in a little longer, savouring the experience before turning for home. There was nothing more I wanted that day.

The pattern and landing drew a comment that it looked good, and it was, despite it being only the sixth time I was in the 1-26. The cranes had left their magic with me, for the good landing seemed almost natural. The feeling of flying with the birds will always be the ultimate memory for me, but their magic did not stay — future landings have not been quite the same. □



# LIFE UP FRONT

Larry Morrow  
Winnipeg Gliding Club

Glancing at the outside air temperature gauge I note it now indicates 95 degrees. Inside the cabin it is warmer still. The oil temperature is slowly dropping from the last tow. I am presently sitting in a Citabria towplane waiting for the next glider to be hooked up.

As usual there is a delay. By adjusting the engine idle speed to a smooth spot it is possible to observe the action behind me in the mirror. My arrival has heralded a small flurry of activity. By noting the type of glider, experience tells what the upcoming take-off and tow will be like. This tow will be a Lark with two people aboard. Their all-up weight will be almost equal to that of the towplane. In this heat it adds up to a long one. Another hint as to what to expect comes from observing the pilot. In this case, the individual is wandering around the glider in a parachute scratching himself, obviously not overly prepared to go flying.

The glider's wings are finally levelled and we are allowed to proceed. With the rope tight, the throttle is eased open. Experience enables one to become desensitized to the ensuing noise and vibration. I can now sit quite calmly amid the surrounding clatter. Slowly we start rolling. It always feels nice to ease an aircraft into the air a bit above the stall and accelerate in ground effect, but today the feeling is abetted by an urgent desire to be well and truly free of the ground before I reach the end of the runway.

Now that we are underway, a good lookout is in order for two reasons. Obviously, I want to avoid conflicting traffic, I also like to watch for any gliders thermalling. Today I will be quite happy to use any help I can get. The immense power available in a thermal dwarfs anything I can hope to produce with four cylinders and eighty octane avgas. Meanwhile, my friends in back seem determined to make me work by pulling the tail gently back and forth. Flying with one rudder pedal halfway to the stop is good exercise for the leg muscles anyway. The real frustration is brought on by the vertical speed indicator. We are slowly progressing downwards under full power. In this situation, all of my finely-tuned flying skills tell me to maintain the proper attitude and fly straight to get out of the sink as soon as possible, but it sure would feel good one day to haul back on the stick and try to climb out of it. Gradually we clear the sink, but still find little in the way of lift, just bits of turbulence. As the minutes pass, I do get a small practical lesson in physics. I am presented with two needles creeping towards their limits — the oil temperature is slowly rising and the oil pressure is slowly dropping. There could be a little contest developing here to see if we can climb to release altitude before the oil temperature reaches redline ....

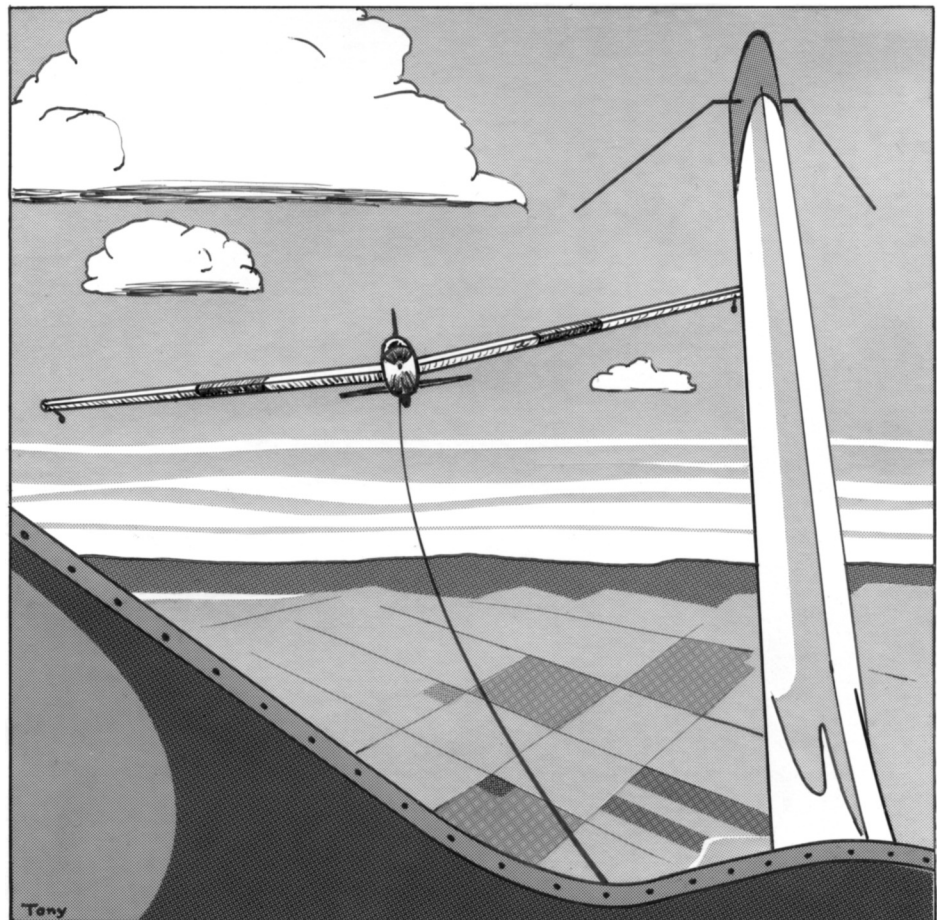
This is usually about the time I start to ask myself why I keep doing this. It can be incredibly hot and boring sitting here for an afternoon and I certainly don't need the hours after a couple thousand tows. I rationalize by telling myself that the only way to really develop a skill is to practice until you are sick of it, and then continue on. This may appear to be the antithesis of what a weekend sport is all about, but it helps get me through the day! By tomorrow, the sweat will be forgotten and it will feel good to climb back into this familiar cabin.

My daydreaming is then interrupted by a slight change in the tone of the engine noise. The gauge confirms that the oil temperature is just over 230 degrees. Since we are less than 1,500 feet above ground, a turn back towards the airfield is in order in case of a waveoff. It is a pleasant surprise to find we have blundered into some lift. With a little steeper turn we can try some formation thermalling. The vertical speed indicator easily climbs through the thousand mark when a slight bump signals that my friend in back want to go it alone.

With a good lookout the descent is started. The engine is in for more hard use. After nursing a couple of towplanes through overhauls and major repairs, I always feel a tinge of sympathy for the powerplant at this stage. During a series of climbs and descents, the engine is subjected to much harder usage than normal.

A nice tight circuit is now in order. I find it still takes concentration to do a good circuit and landing. With the repetitiveness of towing, it is quite easy to become complacent and let the landing take care of itself. One method of staying on top of the situation is to practice different landing techniques — a smooth wheel landing should do the job this time.

Pulling up to the flight line I notice a small flurry of activity starting behind me. The outside air temperature gauge is now slightly above 95 degrees. The oil temperature is still dropping slowly. The mirror shows the Bergfalke being positioned behind me accompanied by a small crowd of onlookers. It looks like I'm going to earn my flying today. □



# BASIC INSTRUMENT CARE

Practical advice on the installation and maintenance of variometers and other aircraft instruments.

Rudolf Brozel  
from "AVIASPORT"  
translated by Serge Krieger

## Installation

The following points must be considered when choosing a panel location for an instrument:

- The most used instruments should be located most nearly in your line of sight. The vario, being most often read, should be high on the panel.
- If possible, locate instruments in the same relative position as in other sailplanes you may fly often.
- When installing a compass, all non-magnetic instruments should be grouped around it (altimeter, ASI, pneumatic vario); all electric instruments must be kept at least 10 to 15 cm away from the compass if possible — on top of the panel is best.

The glider can be shaken pretty strongly during transport, takeoff, and landing; all instruments must be protected against such shocks. Contrary to widespread opinion, the best set-up is that which most rigidly attaches the instruments to the fuselage structure. The panel must therefore be as stiff as possible and be rigidly fixed to the fuselage. Nothing is worse for instruments than the bumping felt when a too softly suspended panel hits the fuselage structure.

## Electric connections

- The Master Switch in the panel circuitry can be a source of serious trouble. When turning such a switch off with the radio still "ON", very strong negative current impulses can be sent on the positive line of the circuit while the switch contacts rebound. These impulses, even if they only last a few milliseconds, are perfectly capable of killing instruments. If they do not do it at once, they can do it in the long run. We have measured impulses up to ten amperes! All the instruments should be turned on **after** it, and turned off **before** it (the Master Switch must be activated only when it has no current).
- Use a minimum of switches, connectors, plugs, fuses, etc... in the circuit, in order to avoid contact problems.

- Each connector should have protection against being opened by tension on the cable.
- Avoid at all costs the possibility of voltage reversal by using coded conductors, or better, by using plugs protected against the inversion.
- Use only professional quality components and not cheap materials such as car or radio components, etc., which are not very reliable.
- Cables must never have to support tension, especially not at the critical spots, nor be bent with a small radius of curvature.
- All direct connection to the battery must be protected by a fuse, located as close as possible to the battery, to avoid the possibility of a cable fire.
- Use wiring with nonflammable insulation if possible: formation of smoke (even non-toxic) can be dangerous.
- Provide a fuse for every instrument, to avoid multiple instrument failure if there is only one short circuit.

In order to reduce electromagnetic disturbances of the instruments to a minimum, especially by the radio:

- The cables connecting the different instruments must be kept as short as possible.
- Keep the antenna coax cable as far as possible from all other cables.
- All the grounding cables must be connected to one central point. The instrument casings should also be connected to it. The main electrical ground should be reliably connected to the metallic ground of the sailplane (with the controls, for instance) by a pretty strong and short braid. This is not only for the reason previously mentioned, but also, and especially, to protect the pilot against the possible consequences of a lightning strike.
- A very good electrical grounding "point" is a metal instrument panel, which should therefore be preferred to sandwich panels.

## Pneumatic connections

Every pneumatic instrument can be put out of order through contamination by dust or water. A water trap must, therefore, be inserted in any tube leading outside. Very often, flexible tube becomes dirty through debris produced by cutting or attaching the tube. Therefore, it is recommended to install small automobile fuel filters in front of the instrument, and never to remove them again, even when the instrument is removed. Under no circumstances must the filters be reversed, since the accumulated dust would then be sent directly into the instrument.

The type of tubing best adapted is a flexible type and made of rubber with a braided sleeve (used for gasoline lines), since its elasticity is preserved at low temperatures and because it remains waterproof even after years and many temperature cycles of service, it may always be taken out, and finally, it absorbs the water which could have come in under the guise of a film on the inside surface, thus avoiding the formation of water droplets, which could block it. Transparent tubes of PVC are acceptable, but they present the inconvenience of hardening when cold.

## Maintenance

A bit of advice to assure the good working order of instruments:

- Too much heat hurts all instruments. To avoid this, the sailplane should not be left to roast in the sun for hours. In such a case, it is better to use a canopy cover. The temperature in an uncovered cockpit fully exposed under the sun can easily reach 70°C. Such heat causes at least temporary reading errors. When no cover is available, the canopy should at least be opened so that fresh air can enter.
- Check out the flexible tubing from time to time — and in any case before the flying season. Check the waterproofness, the firm attachment of all connections. Is tubing kinked or jammed? Replace hardened and brittle tubing.
- Most instrument failures are due to pneumatic leaks (followed by problems of electrical contacts).
- Protect instruments and flexible tubing from dust incursion.
- During maintenance or repair work on the sailplane, instruments should be removed and all tubes hermetically sealed.
- From time to time, check cables, connections, switches, and fuse sets.
- A battery weakened by age, or in doubtful conditions, must be replaced by a new one without delay (indication of its residual charge helps to verify its condition).
- Recharge the battery regularly (preferably after each flying day). □

# 1987 ANNUAL GENERAL MEETINGS & 1986 REPORTS

*Note: Similar to the format of the minutes, budget, and annual reports last year, the following information is SAC'S official report on the past year's activities of the association for the membership. In addition, complete bound copies will be mailed to each club, Committee chairman, and director. Additional copies will be available to members upon request. At the time of printing, the following minutes were not yet officially approved, so minor differences may appear between these and copies delivered later. Editor*

## MINUTES OF THE 42ND SAC AGM 14 MARCH 1987 MONTREAL, PQ

The business meeting was called to order at 1335 hours by the President, Bob Carlson, who established that a quorum was present. In his opening remarks he asked that a moment's silence be given in memory of Bogdan Wolski, Wolf Leers, and Julien Audette.

The President reviewed changes to the National Office. Jean Matheson and Rosanne Paquin had resigned, and an Executive Director was no longer being sought, the position being replaced by an Executive Secretary.

The President called for a motion to adopt the minutes of the 1986 Annual General Meeting.

**Motion #1** Moved by: Jeff Tinkler  
Seconded by: Denis Gauvin  
That: "The minutes of the 1986 AGM be accepted as published." Carried by show of hands (Note: all voting by show of hands unless otherwise indicated).

**1986 Annual reports.** The annual reports of the Directors and Committee Chairmen were presented to the membership. Jim McCollum, SAC Treasurer, reviewed the audited Financial Report for 1986. After discussion and clarification of some points, the following motion was presented:

**Motion #2** Moved by: Terry Southwood  
Seconded by: John Firth  
That: "The Director and Committee reports be accepted as presented." Carried.

The meeting proceeded to motions of the Board. The President requested that the membership review the

1987 budget at this time, prior to voting on the motion related to membership fee increases. Following discussion, the Notice of Motion on 1987 fee increases was presented.

**Motion #3** Moved by: Tony Burton  
Seconded by: Gary Paradis  
That: "Whereas the Flight Training and Safety Committee requires an annual fall meeting to remain effective, be it resolved that the proposed budget and fee structure be adopted by the membership."

	from	to
a. club affiliated members	\$ 63	\$ 68
b. junior members	42	45
c. married couple members	116	125
d. air cadet affiliated members	26	28
e. new sustaining members	51	55
f. individual members	63	68
g. associate members	29	31
h. corporate members	54	54

Vote by ballot: Aye -1,232, Nay — 139. Abstain 79. Carried.

**New business.** Bob Carlson presented the proposed structure for the new Aero Club of Canada and its benefits to aerospots and SAC. He reported that a meeting was planned for 28 March in Toronto to further its inception.

**Motion #4** Moved by: Len Douglas  
Seconded by: Glenn Lockhard  
That: Ron Quesnel, chartered accountant, be appointed for 1987. Aye — 1335, Nay — 38, Abstain — 78. Carried.

**Motion #5** Moved by: Ian Grant  
Seconded by: Jeff Tinkler  
That: "All acts, contracts, bylaws, proceedings, appointments, and payments made, enacted, done, and taken by the Board of Directors of the corporation since the last annual general meeting as set out or referred to in the minutes of the Board of Directors meetings or in the financial statement submitted to this meeting be and the same are hereby approved, ratified and confirmed." Carried.

**Election of Directors.** All Zone Director positions which were open for election at this AGM were filled by the incumbents by acclamation. The President announced that a nomination for Director-at-Large had been received for Gordon Bruce by MSC, and that further nominations were now being considered from the floor. As no further nominations were received, Gordon Bruce was declared Director-at-Large by acclamation.

**Motion #6** Moved by: Ian Oldaker  
Seconded by: Len Douglas  
That: "The ballots of prior motions be destroyed." Carried.

On behalf of the membership, Ian Oldaker thanked Bob Carlson for his efforts and hard work in implementing the Aero Club of Canada.

There being no further business, the meeting was adjourned at 1625 hours.

## REUNION ANNUELLE A MONTREAL

Rapport sur l'Assemblée Générale Annuelle de l'Association Canadienne de Vol à Voile, par Serge Krieger, du CVVQ.

La SAC, comme on l'appelle (l'ACVV), tient une réunion générale à chaque année. D'un an à l'autre, l'endroit de la réunions alterne de l'est à l'ouest du pays, pour donner une chance à tous d'y assister. Malgré cela, les distances demeurent encore très grandes et relativement peu de gens trouvent le temps et l'argent pour s'y rendre. De plus, tout se passe en anglais, ce qui est moins attirant pour nos pilotes du Québec. Cette année pourtant, la réunion a eu lieu à Montréal, qui est considérablement plus près de nous. J'ai donc pris l'occasion pour m'y rendre et voir ce qui s'y passe.

C'était ma cinquième présence à la réunion annuelle. La première fois que j'y suis allé, c'était en 1979 à Ottawa. Je n'y connaissais, pour ainsi dire, personne, mais j'ai rapidement fait connaissance, d'abord avec d'autres pilotes francophones (on se détecte assez rapidement), puis ensuite avec tous les autres. A tel ou tel nom, je me souvenais d'articles écrits par eux dans le **vol libre (free flight)**, et cette base commune a servi très vite à rendre nos rapports familier. C'est comme ça que ça commence avec tout le monde.

La curiosité est pareille chez les véliovoles. On veut tous connaître les mêmes détails. D'ou venons-nous? A quel club est-ce qu'on appartient? De quelle flotte disposons-nous? Quelles sortes de conditions de vol avons-nous? Combien de vols faisons-nous par an?, etc... C'est intéressant de se rendre compte qu'on est les mêmes partout, qu'on a tous les mêmes problèmes d'argent ou de recrutement ou de participation des membres. Cela contribue beaucoup à nous rapprocher, de quelque coin du pays que l'on vienne.

Maintenant, qu'est-ce qui se passe à la réunion annuelle et qu'est-ce qu'on y fait? En fait, c'est surtout une occasion pour les membres de se rencontrer et de se mettre au courant de ce qui se passe au niveau entraînement, sécurité, compétition, règlement et plans pour l'avenir. Le tout se passe en trois jours, d'habitude durant une fin de semaine.

Vendredi: réunion séparées et simultanées des directeurs et de différents comités, tel celui de l'entraînement et de la sécurité. Au soir: réception et rencontre des membres visiteurs avec tout le monde.

Samedi: réunion informelle le matin, avec rapports des responsables des différents comités; assemblée d'affaires en après midi et banquet le soir, avec remise de trophées.

Dimanche: forums d'information avec différents conférenciers sur des sujets variés. Les directeurs tiennent une autre réunion et élisent le président parmi eux. Puis finalement, le départ.

On ne se rend pas compte de tout le travail qu'accomplit l'ACVV avant d'assister à une assemblée générale. Les bénéfices qu'on en retire sont invisibles, car ils viennent surtout de difficultés que ses comités nous évitent en gardant un bon contact et une bonne réputation avec les différents ministères.

Cette année, le comité pour l'entraînement et la sécurité s'est vu allouer un budget, afin de lui permettre de se rencontrer en automne, après la saison de vol. Lors de cette réunion, il peut réviser les incidents ou accidents qui se sont produits et déterminer les procédures à adopter pour les éviter à l'avenir. Cela lui permet également de garder un contact plus étroit avec le Ministère des Transports, connaître leurs exigences et faire connaître le point de vue et les intérêts des pilotes véliovoles concernant la réglementation.

D'autre part, il s'est formé au Canada un groupe de pilotes qui ont pour but exclusif la promotion de vols de performance et de compétitions: le Canadian Advanced Soaring Group (CASG), ou le groupe canadien pour le vol à voile avance. Tout pilote peut devenir membre de ce groupe. La cotisation de \$20 qu'on lui envoie sert à publier des nouvelles concernant le vol en distance et la compétition, organiser des séminaires d'information et envoyer plus de fonds à la prochaine équipe nationale aux championnats du monde.

Les personnes et les directeurs interrogés à leur sujet, se sont prononcés de façon très favorable à leur effort. Pour se joindre à eux, il n'y a qu'à écrire à l'adresse mentionnée dans le vol libre, inclure de l'information pertinente à son sujet (adresse, club, expérience, etc...), inclure le chèque de \$20 et voilà.

En ce qui concerne les assurances, on ne peut jamais trop bien faire. Le président, Bob Carlson, nous a indiqué que le Canada possède une des pires fiches de statistiques au monde, en ce qui concerne le nombre de fatalités par pilote et par vols accomplis. A son avis, le fait d'avoir obtenu une moyenne d'une mort accidentelle par an durant les cinq dernières



années est absolument inacceptable. D'autant plus que les membres protestent vigoureusement la moindre augmentation nécessaire de la cotisation annuelle, mais acceptent sans broncher une augmentation moyenne de plus de \$70 des primes d'assurance à chaque années. Il est indispensable qu'on se ressaisisse et qu'on mette un effort concerté vers la réduction des accidents et l'amélioration de la sécurité en vol.

Tout cela prend surtout le temps de bien mettre au point de bonnes procédures d'opérations et d'entraînement. C'est à cela que sert notre organisation. Pour être pris au sérieux, il faut agir de façon sérieuse, et les associations nationales des autres pays auront l'oeil sur nous à l'avenir. Soyons donc prudents avant, durant et après le vol. Pensons toujours à ce qu'on fait durant chaque phase du vol. Et surtout, volons le plus souvent possible. L'expérience est le meilleur enseignement qui soit.

## INFORMAL NOTES ON PROCEEDINGS

Al Sunley, Alberta Zone Director

Chairman and President, Bob Carlson, opened the meeting at 0915 hours.

**Opening Address.** The Chairman gave a brief report of the problems arising in the past year, including office changes and insurance issues. He emphasized the necessity to improve safety and training, which can only be done through member input to the clubs and the national body. He reported on the federal government's requirement for sports, particularly Fitness and Amateur Sport's recent requirement of a minimum 3000 members before associations will get their grants. He suggested that each club "adopt" an Air Cadet squadron as a means towards increasing membership. There were requests for information and observations on Air Cadet operations from the floor.

**Financial Report.** Presented by Treasurer, Jim McCollum. He reported on the changes to the format of the financial statement in order to coincide with the budget presentation, chiefly, restricted funds (trust funds) were separated from the General Fund statement.

Due to the vote at the '86 AGM and the loss of some government grants, the income was less than forecast in the '86 budget. Office changes during the year also affected the budget figures. Membership was down slightly from forecast, government funding was down \$6000; earned interest, advertising revenue, office expenses and salaries, and "free flight" expenses were all down, and Flight Training and Safety Committee expenses were minimal. Revenue from the trust funds increased. There were questions from the floor and discussions regarding merchandise sales, costs, and what we should be selling.

**1987 Budget.** Revenues are not expected to change much from last year. Sport Canada income was fixed at a conservative level due to the present unknowns on government funding. Expenses should be close to last year except for a major increase in FT&S Committee meeting expenses and a major decrease in salaries. Professional fees should be down, and postage will be up. The Chairman requested that members study the budget prior to formal discussion in the afternoon session.

**Flight Training & Safety Committee.** Chairman Ian Oldaker gave a review of the year's committee activities. Three instructors' courses were held, one being the first in French. The first instructors' refresher course was held at RVSS, and it's hoped that availability of this course will increase. MoT licensing standards are in ongoing negotiations with SAC. The proposed rule changes are now with the MoT legal people, and the changes are unlikely to become law this year. However, the SAC minimum standards are now above those recommended by MoT.

Ian reported on his and Alex Krieger's attendance at the International Training and Safety Panel meeting in Europe (a summary is being prepared for "free flight"). The body is now an official part of OSTIV. The FT&S Committee wish to introduce a currency requirement for instructors renewing their endorsement which relates to a minimum number of instructional flights and hours in the previous year.

A question had been raised about competition safety, and recommendations will be given to the Sporting Committee. The Committee hopes to increase the availability of SAC-approved courses to clubs that find it necessary to train their own instructors. The Instructor's Manual is very close to the printing stage, and funds will be required to cover printing costs. Questions from the floor included the licensing of motorglider pilots (Ian reported that MoT is now handling these on a Regional basis), spin accidents, high-versus-low tow, and minimum safe length of tow ropes (in Europe it is 40 metres). There was discussion on CFI seminars, costs and benefits, and the length of time club CFIs were in office (the average is two years — too short).

**Sporting Committee.** The report was given by Chairman Jim Oke, who thanked Art Schubert and his crew for their work at the '86 Nationals. He mentioned that certain rule changes will be incorporated as a result of the events occurring at the '86 Nationals. The '87 Nationals will be at Chipman in June, and the '88 Nationals will be hosted in Hawkesbury by the Montreal Soaring Council. Jim also outlined the international contest schedule and emphasized the necessity for pilots on the Canadian team to have pre-contest practice at the sites involved.

He stated that he was going to be attending the CIVV meeting in Europe shortly and reviewed the "hot" agenda items there. There is much discussion on possible class changes. The 15m class going to 17.5 or 18m is being argued (again). A new two-seat class is being proposed, as is a one-design class for Olympic qualification. There was active discussion from the floor, with Jim being given a mandate to vote on SAC'S behalf against the 18m class idea and for a one-design class. FAI badge rules, particularly the recent ones easing the Gold and Diamond distance requirements, will be under scrutiny. There was discussion regarding the previous year's selection procedure for the World team, which was modified somewhat due to the pressure of time leading to the January contest in Australia.

**Insurance Committee.** President Bob Carlson gave a report on the past year's 14 accidents. There were 11 in Ontario, and one each in Manitoba, Saskatchewan, and Alberta. The clubs involved were Arthur (three), Air Sailing (two), others one each. Three accidents were write-offs: two glass, one towplane. The aircraft involved were: six glass, two metal (one twice!), five fabric/metal. There are still two liability claims outstanding and in the courts: a 1980 claim for \$400,000 and a 1986 claim for \$100,000. Since the SAC insurance scheme began, our hull insurance premiums have increased \$74/year/aircraft (ten percent compounded) in current dollars. The average total hull loss for each of the eight years is \$187,000. The accident rate must be improved.

Tony Wooller apologized for the non-delivery of the policy last year. There will be an Insurance ID card issued this year, and a new multi-part glider insurance application form for clubs which it is hoped will reduce errors and give them feedback on insurance data for their club. It was reaffirmed that the insurance premium is considered paid when one's cheque is deposited in the bank by the club. There was discussion on towplane coverage under various conditions of towplane use. In essence, all types of use are sanctioned IF it is part of the club operation; such as ferry flights, tow pilot training, and tow pilot currency flights.

At 1215 the meeting adjourned for lunch and reconvened at 1335 for the business portion of the day. The business progressed fairly smoothly through the motions which are recorded in the AGM Minutes.

## PRESIDENT AND DIRECTORS ANNUAL REPORTS

### PRESIDENT AND DIRECTOR-AT-LARGE

This year, 1986 was a year of conflict and change. Your Association has changed substantially. Your Ottawa office staff has changed significantly, you no longer have an Executive Director, nor the same secretary. Joanne and Rosanne have come and gone. Jean Matheson, after trying valiantly to introduce effective change, and to a degree succeeding, left for more profitable and rewarding activities. To her credit, she has helped extensively to smooth the transition to the Executive Secretary structure. Your first Executive Secretary is Nancy Nault. Nancy comes to us from the Canadian Figure Skating Association and is settling in nicely. I look forward to a long and profitable relationship for your Association.

Your Association, for two years, has shared office quarters with the Royal Canadian Flying Clubs Association (RCFCA). The RCFCA has also seen conflict and change. The conflict was over the best way to serve the member clubs. The resolution of the conflict was a major transformation. The member associations left the RCFCA for the Air Transport Association of Canada (ATAC), and the residual shell of the RCFCA is being transformed into the Aero Club of Canada. In contrast to ATAC and the old RCFCA, the ACC will be a pure sporting association, the national aero club of Canada in the eyes of the FAI, and the representative of aerosport to the Canadian Olympic Association, Government, and the public. Your Association has played, with the support and direction of your board, a leading role in the formation of the Aero Club. There is still much to be done. However, all is going well, the ACC will be operational by the end of the second quarter. The "pro forma" founding general meeting of the ACC will be in Toronto on 28 March 1987. I will be there as a member of the Steering Committee and, perhaps, as your representative.

When I look back at what has been done this year, I am struck by the number of letters that have been written on your behalf, to Transport Canada, on issues as diverse as Airspace, Navigation facilities, Airworthiness, and First Aid Kits for gliders. On this last issue, we were able to obtain an exemption for gliders. Don't forget though, that your towplanes must now have an approved first aid kit. If there has ever been justification for SAC, it has been in the last two years, when there has been so much to do and comment upon on your behalf to government and other agencies. It's not that the issues are always critical to our existence, it's that:

- we are recognized and,
- we have an opportunity to demonstrate that we have rational, worthwhile opinions. I take particular pleasure in the acknowledged contributions that your Association has made to the philosophy and administration of Airport Licensing (now known as Certification).

Your Association, through the activities of your Insurance Committee was, again, able to negotiate a reasonable contract with our insurance underwriters. Unfortunately, the underwriter was less than capable of sending out policies and acknowledgements of insurance. Since it is very likely that we will have a new/old underwriter (we are likely to be back with British Aviation), your committee will have to start all over again on this subject of policy issue and acknowledgement. It is also regrettable that our accident activity was as vigorous as it has been over the past five years. The greatest pity, and regret was, again, a fatality. This year it was Wolf Leers, your (past) Medical Committee Chairman, and one of the hardest working instructors and towpilots of your Association has seen in many a year. Wolf will be sorely missed, not only by his family, but his colleagues at SOSA, and all of the sporting associations to which he devoted energy.

Your Association and sport also lost one of its earliest champions, the holder of Canadian Diamond Badge No. 1, a recipient of the FAI Tissandier diploma, a steadfast supporter of Saskatchewan gliding, and an all-round supporter of aerospport. I refer, of course, to Julian Audette. He too will be sorely missed by his family and all who knew him. While your Association had a successful year, we suffered a small financial loss. Aside from the disruption from the unplanned staff changes, the principal financial shock was the reduction, by 33%, of the Sport Canada grant. Additionally, there was no Federal Assistance for your World Contest Team, despite a plea for help to the Finance Minister. There seems little doubt that Federal Government assistance will soon be history.

The conflict I see within your organization lies with funding. Aside from the objectives that reside within our letters patent, your Association must supply leadership to soaring and, when necessary, to the Aerospport community at large. To the extent that it has been able, SAC has provided that leadership. SAC has also developed, in comparison with most of the aerospports, into a sophisticated organization. The degree of discipline that we exhibit in our safety activities goes a long way to keeping insurance available and our rates reasonable. The pity is, in my view, that we still have more to do. Before you scoff, look at other sports and their problems and compare our rates with the power people, at comparable experience levels. The tragedy is that, in my view, we do a lousy job of using and encouraging the talent available to us. Some of this costs money. An organization costs money. I acknowledge that the organization has not been as efficient as it could have been. However, in many respects, we have not had adequate resources to do the job expected. The solution, I fervently hope, lies in the Aero Club. I firmly believe, as your President, that if this sport is to grow and have control of its destiny, it must have a strong central organization that, above all, provides leadership in all aspects of the sport. Even volunteers have expenses. A vital element of that leadership lies in the promotion of safety and the assistance and skill that a strong, consistent, current, and knowledgeable instructor cadre can provide. If you as a membership, by being cheap, stifle safety activity and leadership as well as the basic service that the National Office provides, then you will only reap the bitter harvest of failure, broken aircraft and bodies.

Membership has, for all practical purposes, stayed steady this year. The West has suffered, in contrast to the relative prosperity of Central and Eastern Canada. If we are to retain government funding, we must grow to the 3000 member level by October, 1988. We need your ideas and innovation to achieve this level. I have one suggestion for you. Why not adopt an Air Cadet Squadron? How about being "Big Eagles" to these youngsters? I feel we could benefit in many ways, not the least of which is members, enthusiasm, increased activity and spirit. How about it? It has worked fine for power climbs. Look at the Brampton Aero Club.

A thought on world competition. Five pilots were selected to go to Australia this year to represent Canada. They all tried hard and flew with distinction. There was terrific support from a number of companies and several clubs. Bob Gairns distinguished himself with his donation-generating abilities. What bothers me is the continuing disaffection of you, the general member. All of the folks involved in the team are trying very hard to show you, the general member, the fun and benefits of cross-country flying and competition. I think it is time that you, the general member, acknowledged their contributions and back wholeheartedly their contributions. Join the CASG. Why not promote donations every year to the Contest Fund? They are tax deductible. It promotes good feelings when you know that your guys (gals some day?) are striving, with your help, to win. How about it?

During the past year, many volunteers have worked very hard on your behalf, in a variety of tasks. Often the only recognition is their name in a column in free flight. Thank them for their dedication when you see

them. They do a lot for you. Similarly, your staff and your board labour hard on your behalf, often in not so obvious ways. Thank them too for their labour and, sometimes, tears. Regardless of our squabbles about money and other aspects of our sport, if we really want it to grow and succeed, it will. We just need, as frequently as we can, to rise above our regional concerns and strive for National success and safe flight.

WE MUST NEVER FORGET THAT THE PURPOSE OF THIS SPORT IS FOR YOU TO FLY SAILPLANES SAFER, BETTER, FASTER, FARTHER — FOR FUN. ENJOY THE JOURNEY.

I hope to see you in Alberta at the Nationals.

#### MARITIME ZONE

Looking back at my report for 1985, I see that I began by bemoaning the poor soaring weather that plagued the Maritimes that year. Well, with hindsight, I could have said, "You ain't seen nuthin' yet!" It's certainly not news that the weather throughout the country was hardly conducive to good soaring, new records, multiple badge flights, etc. in 1986.

The Bluenose Club was down to 1500 flights compared with the usual 2000 plus (2500 in 1983!) and New Brunswick managed to run off only 250. Mind you, the latter is not too bad when you consider they are operating with one glider and six club members. Unfortunately, they will be operating in the coming year without one of their two instructors, Jean-Paul Vaillancourt left MoT in Moncton at the end of '86 and is now living in Quebec.

Once again, Dick Vine, the CFI at Bluenose, ran a successful Spring training operation at Stanley. The New Brunswick and Nova Scotia clubs combined gliders, students, and instructors in a concentrated nine-day session in late May and early June that launched half a dozen new pilots on a soaring career.

The highlight of the year was the winning of the first Gold badge in Bluenose Soaring Club history. Tom Foote took his open Cirrus to Vermont and rode the wave for his 3000 metre height gain. You'll recall that about three years ago, Tom was given a Significant Flight award for the first 300 kilometre flight in the Maritime provinces. Now just in case some of you hot-shot glider-guiders in other parts of the country start to look down your noses and say, "Ha! — ten years in operation and Bluenose has only one Gold badge," let me remind you that this is, without a doubt, the most difficult part of the country for long distance and high altitude flights. Climate and terrain combine to make even the Silver badge a worthwhile achievement.

If nothing else, the Law of Averages says that we are in for some good soaring weather in 1987, so with eternal optimism and renewed enthusiasm, we Maritimers are looking forward to a successful flying season.

Gordon Waugh,  
Maritime Zone Director

#### ONTARIO ZONE

There were major changes in the National Office in 1986 and there will be more in '87. Your Board of Directors is slowly recognizing that federal funding is drying up. Our Treasurer, Jim McCollum, advises that we should anticipate no support at all in 1988. At our AGM in Vancouver a year ago, the membership sent a clear message to the Board by turning down the proposed \$8 fee increase. Unfortunately, the message didn't get through and we are back with another request for a fee increase. Any classroom teacher will tell you that when a pupil hasn't learned a lesson, the only thing you can do is repeat the lesson. It's frustrating, it's tedious, and it's often un-pleasant, but it's the only thing you can do. You will notice that SAC did not operate at a loss in 1986. But you can be sure that if that fee increase had passed, the extra \$10,000 collected would have been spent.

Further belt tightening is called for. Present plans are to have one full time person in the National Office with help from Office Overload when required. But that means that the National Office will not be able to provide all of the services that it has been called upon to provide in the recent past. Directors and Committee Chairmen will be encouraged to get their typing done locally. This will be both faster and cheaper. Some activities should simply be discontinued. Surely, no one would be seriously inconvenienced if we stopped selling caps. If you need a hat, there are all sorts of stores that can sell you one. Similarly, we should get out of the business of selling calendars. Contrary to popular belief, this is not a moneymaker for SAC — quite the opposite. If we make no allowance for the time our office staff spent counting, bundling, addressing, weighing, then affixing the required postage, and carting the damn things to the Post Office, we managed to lose \$211 on the 1987 calendars. Let's get the SAC out of this business and turn it over to somebody who understands retailing.

Some other activities cannot be discontinued, but should be moved out of the National Office, the register of contest letters for example. Possibly someone in the Advanced Soaring Pilots Group would be willing to take on this task. At last year's AGM, I volunteered to look after the routine record keeping for the SAC insurance scheme. My offer was turned down by the Board. This was disappointing because I have invented a simplified method for recording and transmitting this data which substantially reduces the amount of work required. For some reason, the National Office won't use the method and I am not allowed to do so, it is frustrating. The beauty of the method is that it gets word back to the club immediately their inventory of insured aircraft reaches the agent. Tony Wooller of Johnson and Higgins was very enthusiastic about the system when I explained it to him because it pinpoints exactly where the paperwork gets stalled. Tony feels that he and his staff are getting a bad rap on this point.

During 1987, we should be striving to take as much of this "busy work" as possible out of the National Office. The long range plan calls for the new Aero Club to take over the space we now occupy at 485 Bank Street when our lease expires in 1988. We would then have no people employed by SAC. Instead, we would contract with the Aero Club to have their personnel look after those functions we choose to leave in the National Office. As this would be done on a "fee-for-service" basis, you can see why it behooves us to leave in the National Office only those functions that we absolutely must.

Dixon More,  
Ontario Zone Director

#### PRAIRIE ZONE

Greetings from the Prairie Zone. This is my first year as a Director and I have found it to be an interesting insight into the workings of SAC. The Directors' meetings in other parts of the country are especially interesting.

My own club is the Regina Gliding and Soaring Club. We had less than an average season weather-wise this year. There were no long distance cross-country flights. Our membership continues to run around 24 members. There was an unfortunate incident in which a home built Duster was extensively damaged early in the season. The first flight of 1986 from our field was on March 31, which is some kind of a record for this part of the country. Julien Audette, founder of our club and soaring pioneer, passed away in late October. Julien held most of the Canadian soaring records at one time as well as Canada's No. 1 Diamond badge.

It's good to hear that the Saskatoon Soaring Club is active and back with us in SAC again. Bob Schad club president reports that the club has been reactivated with 17 members. They have, however, lost the use of the field at Vanscoy due to a change of ownership. In June, 1987, Saskatoon Club members plan to travel to Regina for a flying meet.

Ray Maxwell of the Swan Valley Soaring Association says they had a successful season and now own all their own flying equipment. They moved their flying operation from the town strip to a private grass strip to take advantage of better soaring conditions there. They held a glider meet in July which was attended by the Winnipeg Gliding Club. Swan Valley is the smallest club in the Prairie Zone, with ten members.

Not too much news from the Winnipeg Gliding Club except that membership is up and flight numbers are also up, so good news from their club.

Good soaring in 1987.

Jerry Dixon, Prairie Zone Director

## ALBERTA ZONE

The smaller clubs are still feeling the effects of the turned-off economy. The Camrose Soaring Club has ceased its activities due to loss of membership and no new entries, and has its equipment listed for sale. The Southern Alberta Gliding Association has stopped operation due to high costs and most members have joined the Cu-Nim Club. The Grande Prairie Soaring Society decided to sell their towplane, and due to repairs being required on their Blanik, they started operation late in the season. Good news was that the Cold Lake Soaring Club became active again this year and were busy until late in the season.

Alberta was not able to achieve a "no accident" year in 1986. One glider was damaged during trawling and another suffered ground loop damage.

Our annual Innisfail May Meet on the long weekend was a "no-go" this year due to a large amount of white stuff piling up in drifts on the airfield and surrounding roads three days before activities were to start.

The second year of the Chipman Cross-Country Clinic was very successful and, as reported in "free flight", over 10,000 km of soaring completed and three records claimed. ALL digits are crossed in hopes for a repeat of this type of weather during the Nationals in '87 which are being held at the same time of the year. The Clinic will be held immediately after the Nationals in '87.

The Western Basic Instructor School was held at Chipman in July. Two days of heavy rain restricted the flying schedule to the bare minimum, but all applicants completed the course with good results.

Summer Cowley Camp was a successful event with both wave and thermal activity for cross-country flight. All four western provinces and the USA were represented. The final icing on the cake was a wedding ceremony on the Sunday evening. It took place on one of the runways under the canopy of four gliders soaring overhead.

The Fall Cowley Camp was accompanied by warm sunny weather, no wave, and the thermals were few and far between.

Members of the Edmonton Soaring Club are busy with preparations for the '87 Nationals. Dave Lacy, Contest Manager, has been acquiring personnel for various activities, scheduling project completion dates and attending to all the other details involved. It is expected to have an initial information packet out to competitors by the end of January.

Al Sunley, Alberta Zone Director

## TREASURER'S REPORT

This year's report begins with a brief discussion of some changes in the presentation of the financial statements, goes on to outline 1986 financial results, and concludes with budget projections for 1987.

**Presentation Changes** There have been some minor changes in the way the financial statements are presented with this year's report. Hopefully, these will serve to make the accounts easier to interpret and to compare to the budget projections.

The distinction between restricted and unrestricted funds within the general fund has been dropped in favour of a distinction between the financial activities of SAC proper and those of trust funds. This recognizes the reality of the increasing importance of the trust funds in SAC's overall financial affairs and the reduced role of government funding. Member's insurance, which appeared as a flow-through item (as both a revenue and expense), does not appear in the income statement, but rather appears as a note to the statements. Administration fees related to insurance appears as before as a source of revenue. The revenue and expense statement for SAC and its trust funds can be readily related to the balance sheet. Transfers between SAC and the trust funds aside, changes in member equity reflected in the balance sheet will equal the surpluses or deficits appearing in the statement of revenue and expenses.

A final aspect of the revised presentation is that in the future, actual financial results can be readily compared to budget projections. In effect, the budget is a projection for the first column in the statement of revenue and expenses.

**1986 Financial Results** You will recall that at last year's Annual General Meeting a proposed increase in membership fees was not approved. As a consequence, the budget of the Flight Training and Safety Committee had to be trimmed back and its fall meeting was cancelled. After the budget was prepared, the Association also learned that government funding was being cut back. These events, plus staff resignations and some unanticipated expenses, meant that the pattern of SAC's revenue and expenses were considerably different than that envisaged at the time the budget was prepared or presented.

The situation can be summarized as follows: last year the normal operations of SAC generated a deficit and there was a decrease in unrestricted members equity. The trust funds, particularly the Pioneer Trust Fund, continued to grow and there was an increase in restricted equity, primarily reflecting purchases of life memberships.

Revenue and expenditures were both well below what was called for in the budget presented at last year's AGM. For SAC proper, that is excluding the trust funds, revenues totalled some \$128,000, while expenses totalled almost \$131,000, leaving a deficit of \$2,742.

Revenue from membership fees at, \$78,241 was some \$6,000 below the budget forecast. This primarily reflected the rejection of last year's proposed increase in membership fees, although there was also a small decline in membership. Government funding was \$6,500 below the amount contained in the budget, while with the decline in interest rates, interest income was down. "free flight" subscriptions and advertising in "free flight" also generated less revenue than forecast.

On the expenditure side; salaries, training programs, and expenses associated with "free flight" were all well below, by over \$32,000 in total budgeted amounts. The lower salary expenses, of course, reflected staff resignations — although this was partly offset by higher expenses under professional fees. Expenses related to the activities of the Flight Training and Safety Committee were minimal. Affiliate membership expenses were also down as a result of the winding up of the RCFCA. On the other hand, various office related expenses: telephone, postage, printing, copying, etc. were some \$3,700 more in total than the budget called for. Cost of merchandise for resale was up significantly, reflecting in part the higher cost of gliding calendars. Travel and meetings, which are best grouped together, were also over budget — by some \$3,500 and up from 1985. Underlying this were higher than expected expenses

associated with the Vancouver AGM. To put those figures in perspective, however, they are six and fifteen percent below similar expenses in 1984 and 1983 respectively.

Overall members' equity in the Association increased by slightly over \$4,000 in 1986, with trust funds more than accounting for the change. The operations of SAC proper led to a decrease of \$2,742 to \$43,078 in members' unrestricted equity. Total assets of the trust funds amounted to \$23,580 up from \$16,819 at the end of 1985. The increase in members' equity was due to purchases of life memberships, and investment income on the assets of the funds. Details on the individual funds appear as a note to the statements.

**1987 Budget** The principal assumptions underlying the budget are: no significant change in the number of members, a modest amount of government funding, it appears that government funding could be cut back again this year, a small increase in membership fees — \$5 for most members — and that the office can function effectively with reduced staff. It is difficult to say what financial implications the newly-created Aero Club of Canada will have for SAC. At this point, it is assumed that the relationship between SAC and the Aero Club would be similar to that of SAC and the RCFCA.

## 1987 BUDGET

### REVENUE

1	Fees:	
	Membership	\$ 83,000
	Insurance Admin.	8,700
	FAI	1,300
	Other (certification, licences)	500
2	Flight Training & Safety	4,000
3	Meetings	2,500
4	Sales	12,500
5	"free flight" (ads, subscriptions)	3,000
6	Investment Income	3,000
7	Sport Canada	9,000
		<b>\$127,500</b>

### EXPENSES

1	Salaries	\$ 28,000
2	Professional Fees	1,500
3	Rent	8,400
4	Office Expenses	4,000
5	Telephone	4,000
6	Postage, Courier	4,500
7	Printing	4,000
8	Depreciation	3,000
9	Insurance	3,000
10	Merchandise	10,000
11	"free flight"	22,000
12	Affiliated Memberships	3,000
13	Flight Training & Safety	11,000
14	Meeting and Travel	20,000
15	Other	1,100
		<b>\$127,500</b>

The budget is balanced at \$127,500. On the revenue side, there is a projected increase in revenue from membership fees and a largely offsetting decline in government funding.

Compared to last year's actual results, the only area on the expenditure side showing significant growth is that of the Flight Training and Safety Committee. This, however, is an area which has been underfunded for years and which requires attention. The projected higher expenditures associated with "free flight" are to make allowance for the forthcoming increase in postal rates. Projected salary expenditures are well below last year's budgeted amount; allowance has been made for one full-time secretary and some temporary office help during busy periods. The budget is a tight one with very little room to maneuver.

Jim McCollum  
SAC Treasurer



# SAC FINANCIAL STATEMENT FOR 1986

## STATEMENT OF FINANCIAL ACTIVITIES—GENERAL FUND

For the year ended December 31, 1986

	General	1986 Trust	Total	1985 Total
<b>REVENUE</b>				
Membership fees	\$78,241	\$ -	\$78,241	\$78,981
Administrative fees (note 2)	8,725	-	8,725	8,600
F.A.I fees	1,280	-	1,280	2,589
Annual general meeting	1,708	-	1,708	3,804
Training programs	2,774	-	2,774	3,531
Advertising	1,904	-	1,904	4,059
Merchandise sales	15,319	-	15,319	12,285
Donations	200	6,010	6,210	7,408
Interest	2,505	751	3,256	5,727
Government grants	15,523	-	15,523	15,330
<b>Total</b>	<b>128,179</b>	<b>6,761</b>	<b>134,940</b>	<b>142,314</b>

## EXPENSE

Publicity	575	-	575	548
Glynn Fund Award	-	-	-	80
Bank charges	320	-	320	858
Salaries	28,444	-	28,444	45,798
Professional fees	5,476	-	5,476	3,250
Rent	8,395	-	8,395	5,985
Office	4,747	-	4,747	5,206
Telephone	5,366	-	5,366	4,425
Postage	4,237	-	4,237	3,596
Printing	4,890	-	4,890	3,055
Insurance	2,500	-	2,500	1,617
Depreciation	3,226	-	3,226	3,416
Merchandise	15,905	-	15,905	6,053
Free Flight	20,200	-	20,200	20,715
Affiliated memberships	770	-	770	1,639
Training programs	1,663	-	1,633	3,198
Meetings and travel	24,207	-	24,207	20,726
<b>Total</b>	<b>130,921</b>	<b>-</b>	<b>130,921</b>	<b>130,165</b>

## EXCESS OF REVENUE

<b>OVER EXPENSE</b>	\$ (2,742)	\$ 6,761	\$ 4,019	\$ 4,019
Members' equity, 1 Jan 86	43,820	16,819	62,639	50,490
Members' equity, 31 Dec 86	<b>\$ 43,078</b>	<b>\$ 23,580</b>	<b>\$ 66,658</b>	<b>\$ 62,639</b>

## BALANCE SHEET — GENERAL FUND

As at December 31, 1986

ASSETS	1986	1985
<b>CURRENT ASSETS</b>		
Cash	\$ 64,281	\$ 47,611
Accounts receivable	2,528	5,558
Inventory	7,986	15,709
Sub-total	74,795	68,878
<b>FIXED ASSETS, at cost less</b>		
accumulated depreciation (note 3)	10,629	13,662
Sub-total	85,424	82,540
<b>TRUST FUNDS (note 4)</b>		
Cash	8,580	7,908
Term deposits	15,000	3,000
Due from general fund	-	5,911
Sub-total	23,580	16,819
	<b>\$109,004</b>	<b>\$ 99,359</b>

## LIABILITIES

<b>CURRENT LIABILITIES</b>		
Accounts payable	\$ 16,646	13,533
Deferred government grants	11,902	13,965
Due to World Contest Fund	13,798	3,311
Due to Pioneer trust Fund	-	5,911
Sub-total	42,346	36,720

## MEMBERS' EQUITY

Unrestricted	43,078	45,820
Trust Funds	23,580	16,819
Sub-total	66,658	62,639
	<b>\$109,004</b>	<b>\$ 99,359</b>

## WORLD CONTEST FUND

### REVENUE

Donations	\$ 78,086	\$ 13,200
Interest	152	129
	78,238	13,329

### EXPENSE

Austraglide, 1986	-	11,960
World Contest	67,249	-

### EXCESS OF REVENUE OVER EXPENSE

	10,989	1,369
MEMBERS' EQUITY — beginning of year	4,706	3,337
MEMBERS' EQUITY — end of year	<b>\$ 15,695</b>	<b>\$ 4,706</b>

## AUDITOR'S REPORT

To the Members of the Soaring Association of Canada:

I have examined the statements of financial activities of the General and World Contest Funds of the Soaring Association of Canada for the year ending December 31, 1986 and the balance sheets as at that date. My examination was made in accordance with generally accepted auditing standards and included such tests and other procedures as I considered necessary in the circumstances, except as explained in the following paragraph.

As is common in organizations of this type, donations revenue, by its nature, is not susceptible to a complete verification by audit procedures. Accordingly, my examination of such revenue was confined to tests of deposits of recorded receipts in authorized depositories.

In my opinion, except for the effect of adjustments, if any, which I might have determined to be necessary had I been able to verify all revenues as described in the preceding paragraph, these financial statements

present fairly the results of the Association for the year ended December 31, 1986 and its financial position as at that date in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Ron Quesnel, Chartered Accountant

## NOTES TO FINANCIAL STATEMENT

- Note 1 Depreciation** Depreciation of fixed assets is calculated at the following rates: Office equipment — 20% of reduced balance; Computer equipment — 20% straight line.
- Note 2 Administrative Fees** Administrative fees consist of a \$25 per aircraft charge to members on insurance premiums of \$319,370 collected in 1986 (1985 — \$278,002).
- Note 3 Fixed Assets** Fixed assets are office and computer equipment. There was an addition of \$193 in office equipment to bring year end balance to \$11,585; the

year end balance for computer equipment was unchanged from 1985 at \$11,363. Accumulated depreciation at year end was \$12,319, bringing the total value of fixed assets to \$10,629.

**Note 4 Trust Funds** At year end, the value of the various funds were: Balint fund — \$2,121; Development fund — \$523; Glynn fund — \$2,582; and Pioneer fund — \$18,354. Total is \$31,405.

**Note 5 Comparative figures** Certain of the comparative figures have been reclassified to conform with the current classification.

**Note 6 Contingent Liability** The association is one of several co-defendants in an outstanding litigation for \$400,000 resulting from an accident of a member. The association is disclaiming any liability.

**Note 7** Certain details of the complete financial report have been omitted here for the sake of brevity, but this report is substantively complete. Members may have a complete copy by contacting the National Office.

## COMMITTEE CHAIRMAN REPORTS

### FREE FLIGHT

It's time to speak of the progress **free flight** has enjoyed in 1986. Again, the best way for you to judge last year is to spend a rainy Sunday afternoon spreading all six issues out, and re-reading some of the great articles that you have forgotten about already. I think then that you will agree that the contributors to the magazine have offered you much fine browsing. Five issues were 24 pages and one, which contained a six page SAC AGM report insert, was 32 pages. The content was divided roughly as follows:

	items	pages
Training/instruction	9	16
Sporting/competition	6	13
Flying stories	8	11
Technical articles	5	8
SAC affairs	6	6
Safety articles	6	5
Humor	3	5
Personality	2	2
Historical	1	1

Opinion/editorial	15
Hangar flying	7
Ctub/prov assn. news	6
FAI/records reports	4

The training/instruction content was bolstered by the excellent "Low Loss Instructing" series which ended with the 3/86 issue, and every instructor should re-view this work again early this season. Flying stories dropped from 1st place and 19 pages in 1985 to 3rd and 11 pages in 1986, and that's regrettable. As I mentioned in a "fine print" filler in 6/86, many of you out there were a little lax in writing about your adventures in soaring. In going over last year's stories, I'm once more going to award some informal medals for good writing stuff in several categories:

**Technical** — "Using the angle of attack gauge", 3/86, by Ray St. Laurent  
An interesting idea on using the control stick as a flight instrument.

**Flight story** — "The dream is real", 5/86, Ursula Wiese  
I get inspired to go dragon-slaying each time I re-read it.

**Safety** — "Mnemonics", 3/86, and "Calculated risk-taking", 4/86, by Peter Savage  
Two excellent and original thoughts on the subject.

**Editorial** — "A friend of Jack", 2/86, Seth Schtifer  
Saying, "For God's sake, be careful out there", about as strong as one can.

I intend to continue an emphasis in the magazine on safety and training, club survival, and lively editorials when I can find them. I would like to see more news coming in from clubs about how they are managing their operations, what their philosophy is, and where their priorities lie. I'm enjoying the work, and look forward to giving you the best that comes to me.

Tony Burton, editor

### MEDICAL

It is with regret that we note the passing of Dr. Wolf Leers in the current soaring year. Wolf lost his life in a tragic accident while towing at SOSA Gliding Club late in the season of 1986. He will be sadly missed at the local level and certainly at the National level of gliding. Gliding is a sport Wolf had dedicated himself to and he demonstrated leadership and hard work and great soaring ability. We can all emulate the example he set and we will miss him greatly. Our condolences go to his widow, Margaret. I contacted

Mrs. Leers for any information which needed to be included in the Annual General Meeting's report for this year, but she has searched the files and has assured me that in fact there is no appropriate material that should be included in this report.

I have assumed the role of medical director and have been acting in this capacity for the last three months. During that time, two cases have come to my attention, both relating to non-issuance of licences for medical reasons and, in particular, both related to eye problems. Both were correctable and one is certain to be re-instated and with the second there may be some delay because the pilot has not got back to me for further guidance in these matters.

It is my intention to act in my role as medical director to advise people of the correct way to go about having licences re-instated or issued in cases where there is a doubtful medical history. I have done so in these two cases and intend to carry on in this role. I will also keep the SAC informed of any National and International matters of gliding significance as they occur.

Respectfully submitted,  
Peter Perry, M.B., Ch.B.  
Chairman Medical Committee

### TROPHIES AND AWARDS

The winners of the SAC trophies for the year 1986 are as follows:

**BAIC Trophy** (best flight) — John Firth and Danny Webber, 510 km, a new multiplace triangle record flight from Chipman, Alberta, for 983 points. A close runner-up was a 607 km record flight by Ursula Wiese in a Ka6CR, also from Chipman. Since this was a straight line flight, it received only 867 points.

**Canadair Trophy** (best five flights) — Kevin Bennett of the Cu-Nim Gliding Club, 2897 points for five flights totalling over 2000 points, from the field at Black Diamond, Alberta. The runner-up was Mike Apps, with 2193 points.

**"200" Trophy** (best five flights for a pilot with less than 200 hours flying time) — "Buzz" Burwash of the Edmonton Soaring Club with 932 points (in only three flights).

**Stachow Trophy** (greatest altitude) — no pilot met the minimum requirement for this trophy in 1986.

During the 1986 National Championship, the following trophies were awarded:

<b>Mix Memorial Trophy</b> (Standard class champion)	Jim Carpenter
<b>MSC Trophy</b> (15m class champion)	Ulli Werneburg
<b>Dow Trophy</b> (fastest triangle, Std)	Jim Carpenter
<b>Dow Trophy</b> (fastest triangle, 15m)	Tom Knauff
<b>SOSA Trophy</b> (best novice pilot)	Walter Weir
<b>Bacardi Trophy</b> (best overall pilot)	Stan Janicek

**Significant Flight Certificate** One certificate was awarded this year, to Kevin Bennett, Cu-Nim, for his out and return crossing of the Rocky Mountains from Black Diamond, AB to Canal Flats, BC and return.

Trophies awarded by the Flight Training and Safety Committee Chairman and by the President were:

**Roden Trophy** (best use of club equipment) — Cu-Nim Gliding Club.  
**Instructor of the Year** — Dave Fowlow, Cu-Nim Gliding Club.  
**Ball and Chain Trophy** (outstanding accomplishments by a married pilot) — Karl Doetsch, Gatineau



Bob Maxwell

The prestigious FAI "Diplome Paul Tissandier" was awarded to Dave Marsden by Honorary President of the FAI, Andre Dumas, for longstanding service to SAC and technical contributions to the sport

George Dunbar  
Chairman

### FLIGHT TRAINING AND SAFETY

Again the committee was prevented from holding a meeting in the fall due to shortage of funds, however, a shortened meeting had been held in conjunction with the Association Annual General Meeting in Vancouver. This was held on Friday (March 7) immediately before the Vancouver meeting.

Highlights of the year included:

- Copies of the slide set "Collision Avoidance in Gliders" were produced and are now available for clubs to purchase from the National Office.
- The first French language course to be given by the Association was held at the C.V.V. Quebec, and was directed by Denis Gauvin. It was very well received. The two other courses were run as before by Al Sunley and Ian Oldaker, and both were well attended. Again it was found that pilots would sign up too close to the course: early registration is essential to derive maximum benefit and to allow time to prepare ahead of time for the exams.
- John Firth again ran a competition cross-country course at the Edmonton club at the invitation of the Alberta Soaring Council. The course went well and was well attended.
- In the fall, an instructor refresher course was held over one weekend at the Gatineau club. This consisted of lectures and discussions in the club house and a good deal of flying on both days. Those attending were enthusiastic about the concept. Several pilots wrote the instructor exam as part of an upgrading. It was encouraging to have some pilots from as far away as Quebec City. The weekend was busy, but the workload was shared by three Association course directors (Ian Oldaker, Denis Gauvin, and John Firth assisted, by Alex Krieger.
- The Soaring Instructor's Guide has been completely revised and is now being reviewed by the Committee prior to formal printing. The various comments from Transport Canada and other instructors have been incorporated and it is now planned to print the manual as soon as possible. Again the National Office computer has been invaluable in producing the current draft.

- Discussions were held with Transport Canada again to present the Association views and concerns in various areas of pilot licensing and instructor rating administration. In general, the MoT are working to a slower schedule than previously planned, and it will be some time before any new regulations will be issued for comment and/or will be implemented. The different areas of pilot licensing will continue to be administered with the current regulations. The Association recommendation for an increase to the flight time for the glider pilot licence has been used in the new draft of the basic licence requirement. The previous concerns and recommendations of the Association also have been successful in generally keeping the draft regulations as we have requested, that is to allow the Association to maintain its own administration of instructor classifications, to publish its own manuals and to run its own instructor courses. The committee will continue to work towards maintaining a simple pilot licensing system.

- In the fall, the chairman, Ian Oldaker and committee member, Alex Krieger attended the International Safety and Training Panel meeting in Belgium. This panel is now an official panel of the OSTIV. There is to be some liaison with the OSTIV Sailplane Development Panel, and to this end, the Safety and Training Panel would have a representative at their meetings, and vice versa. The possibility of a joint meeting was also discussed.

Subjects that were discussed included a review of accident trends in the member countries, spin training, and licence standards as proposed by the ICAO. The panel chairman is following up with OSTIV to clarify the situation and to present the view of this panel.

Safety programs were also reviewed. In this area, removable ballast, seat cushions and spinal injuries, developments in aerotowing, competition finishes and pilot judgement training, and a proposal for an audio ASI "speed bug" warning device were discussed.

The spinability of the modern training sailplanes was again addressed, and representations to the manufacturers were proposed. The chairman is following up.

A report for "free flight" is in preparation.

Respectfully submitted,  
Ian Oldaker, Chairman

## SPORTING

The 1986 competition season was an active and successful one with a well attended National Championships and numerous regional and provincial contests being held.

The 1986 Nationals were hosted by the York Soaring Association at their field near Arthur, Ontario and the efforts of Art Schubert and his group in running this event are gratefully acknowledged. Forty pilots were entered in the contest, a gratifying improvement over the declining participation of the past few years. The weather was reasonably cooperative after a wet start and a safe, hard fought contest resulted. Regrettably, a mass landout on the last day combined with some ambiguities in the scoring rules resulted in a lengthy delay before the competition results could be finalized. Rule changes to avoid a recurrence of this situation are under consideration by the Sporting Committee. A soaring contest of this size puts a lot of strain on airfield and domestic facilities and this area will require attention in the future if participation remains at this level or increases. A full account of the contest has appeared in free flight.

Following the contest, a seeding list was prepared and balloting conducted to derive the team selection list from which a Canadian team was chosen for the January 1987 World Championships in Australia. In view of the urgency of selecting a team to allow adequate preparation time, balloting was conducted by telephone with the concurrence of the pilots involved. Wilf Krueger, Ed Hollestelle, Dave Webb,

Ulli Werneburg, and Mike Apps were eventually awarded positions on the team. Hal Werneburg subsequently volunteered his services as team manager. Although detailed results are not available at this writing, the return of Canadian pilots to international competition after a four year absence is a welcome development.

Provincial contests were held in Alberta, Ontario, and Quebec and a successful regional contest was held at Kars, Ontario. The growth of more grassroots competition activity is another healthy indicator for the sport. Hopefully, this will lead to a high standard of flying at the National level and, equally important, the growth of more expertise in the organizational aspects of soaring competitions. At least one Canadian pilot travelled south to fly in an American national championships which is also a useful exposure to how others do things.

I was able to attend the annual CIVV Meeting at FAI Headquarters in Paris and provided a written report to the SAC Directors which also appeared in free flight. Although the CIVV is concerned primarily with the competition aspects of our sport, these meetings provide much useful discussion on other aspects of soaring such as motorglider developments, FAI Sporting Code changes, and a look at other countries' air-space problems. An important development in 1986 was the recognition of soaring as an Olympic Sport under the auspices of the FAI. Although it remains to be seen if soaring will soon appear in the Olympic games, this should be a positive step in increasing the visibility of the sport both nationally and internationally. Updates on planning for future world contests (1987, Benalla, Australia; 1989, Wiener Neustadt, Austria; and 1989, Minden, USA) were given and four countries expressed an interest in hosting in 1993 and subsequent years (Finland, Sweden, New Zealand, India). Reports were also given on various European competitions at which, it should be noted, North American competitors are quite welcome. Several changes to the FAI badge rules were announced which I subsequently passed onto the FAI Awards Chairman. On the whole, the CIVV meetings are well worth attending when this can be arranged.

The 1987 Canadian Nationals will be held at the Edmonton Soaring Club field near Chipman, Alberta. An early June contest has been chosen at the recommendation of the organizers to improve the probability of favorable weather. This timeframe is a departure from the practice of other years being within the school year so the success of this experiment will be carefully watched. Another change will be the use of data back cameras to time starts photographically to conform to general international competition practice and reduce manpower needs on the ground.

A bid from the Montreal Soaring Council to host the 1988 Nationals has been accepted by the SAC Directors. This will be an important contest leading to the selection of the 1989 World Championships team. Contest dates and other arrangements have not yet been decided. A bid is on hand from SOSA for a Standard Class contest in 1989. Other bids would be most welcome and perhaps SOSA may consider amending their offer to include a full combined contest. Thus, contest planning is in reasonable shape for the future although firmer and longer range planning would be desirable.

A very welcome addition to the competition scene is the Canadian Advanced Soaring Group formed this past summer under the leadership of Ulli Werneburg. This organization hopes to promote cross-country flying and competition flying at all levels and is deserving of full support from SAC and SAC members at large. To avoid confusion of goals, the Sporting Committee and CASG have decided to retain an arm's length relationship for the time being although Committee members figure heavily in CASG (and vice versa) and the two groups will obviously co-operate closely in their activities.

I have enjoyed my position as Chairman of the Sporting Committee during 1986 and look forward to continuing during the 1987 season. I will, however, request that my replacement be appointed by the time of the 1988 AGM. I would like to thank the other members of the committee, Robert Di Pietro, Wilf Krueger, Al Sunley, Hal Werneburg, and Ulli Werneburg for their advice and help over the past year.

Jim Oke, Chairman

## FAI AWARDS

This is the end of my fifth year as your FAI Awards Chairman, which I enjoyed very much in the past and look forward to continuing in 1987, maybe for the last year...

This past 1986 soaring season was not by far, what one could say, a spectacular year. Once more the season saw a general decline in almost all activities except in the higher badge hunting categories. This trend is alarming and somehow we must stop it and reverse it. Let us hope that the weather throughout Canada will be more cooperative in 1987.

With the introduction of the new FAI Rules regarding remote start and remote finish points in addition to the three turnpoints (a rule that is not only debatable but in some cases refused by Official Observers particularly for Gold distance) a remarkable surge in Diamond badges was well noticed as well as in Gold badges. The overall results are shown on the following table. As can be seen, there was a 400 percent increase in Diamond badges and 80 percent in Gold badges. Seven of these Diamond badges were earned in two days at the Ridge Soaring site. My sincere congratulations are extended to all these pilots. Silver and C badges were down by 15 and 14 percent, respectively.

Once again the main problem encountered during processing of claims was the LACK OF SUPERVISION BY SOME OFFICIAL OBSERVERS. Sorry fellows, you DO NOT KNOW THE RULES AND REGULATIONS of the FAI Sporting Code and you DO NOT PROPERLY READ the Application Form and the back page of free flight for SAC Supplies and costs. I urge, once again, all Official Observers to ensure that all claims are COMPLETE in every aspect.

My sincere thanks to all the pilots for their constructive criticism, to the directors and the National Office in Ottawa for the help they have given.

To all glider pilots my best wishes for a safe and successful 1987 soaring season.

Boris S. Karpoff, Chairman

## SAC BADGES AND BADGE LEG STATISTICS, 1979 -1987

	1979	1980	1981	1982	1983	1984	1985	7 yr avg.	1986	+/- % fm.avg.
Diamond	6	1	5	9	3	2	3	4	12	+ 400
Gold	13	9	14	8	11	12	5	10	9	+ 80
Silver	44	18	42	28	29	34	20	31	17	- 15
C Badges	98	39	83	78	65	67	51	69	44	- 14
Badge Legs	191	106	216	180	172	166	126	165	115	- 9



## FAI RECORDS

1986 produced the lowest number of records since 1980, when none were set. Since then, the average annual crop has been about eight. In 1986, however, only three records were approved, all originating at the Cross Country Soaring School held in Chipman. Alberta (home of the Edmonton Soaring Club), and all on the same day, June 12th. A flight two days later by Mike Apps from the same place for a 100 km Triangle Speed record could not be claimed as a record, unfortunately, due to technical difficulties.

The records approved in 1986 are as follows, the figures in the parentheses being the previous record.

- 1 Straight Distance **607 km (305)**  
Feminine (4.3.2.1)  
Ursula Wiese, 12 June 86  
Ka6CR, CF-URK (a.k.a. Cloverleaf)  
Lamont, AB to Dilke, SK
- 2 Straight Distance **495 km (406)**  
Multi-Seat (4.3.2.1)  
Chester Zwarych (Reg Adam), 12 June 86  
Blanik, C-FTVT  
Chipman, AB to Loreburn, SK
- 3 Speed Over Triangular Course **88.8 km/h (none)**  
500 km, Multi-Seat (4.3.2.5c)  
John Firth (Danny Webber), 12 June 86  
Gemini, C-FTKC  
Chipman, AB to Marshaff, to Alliance, and return

Russ Ftint Records Chairman

## INSURANCE COMMITTEE

In 1986, more gliders were insured despite an approximate 10% increase in premium rates over 1985 (modest, in light of 1986 claims record and increases in the industry generally). Thirteen hull claims totalled \$129 K vs. \$161 K the year before, and nil on PL, although a \$100 K reservation is outstanding. A complete summary is presented in the table below.

Last year, the concept of minimum glider values was introduced, of necessity. This is a difficult exercise due to the limited number of sales in Canada and sometimes wide variances in price obtained for similar models in the same year. Nonetheless, it worked well judging from overall participation. There were very few instances where values were questioned, which in all but one case, were resolved promptly.

No doubt the Safety Committee will have more to say on the subject, but be assured, we have no cause for complacency. While hull claims are down, we are a relatively small group so that even one sizeable PL claim, or even modest increases in hull claims, could have dire consequences. When reading accident reports, one can sympathize in some instances, but in too many cases imprudence, failure to anticipate, or lack of concentration are contributing factors.

Some questions which might be put with our answers follow:

- Q** Why do you leave it so late to get your report out?
- A** We attempted to obtain quotes in November, reasoning that further claims are unlikely, but after many meetings and discussions, firm quotes have now been received. Will try again next year to get the process started sooner.
- Q** Do you test the market?
- A** Yes. Four underwriters expressed interest with two providing firm quotes. All viable alternatives, including the London market, have been checked.
- Q** What about Agent Services?
- A** Knowledgeable about our activity and excellent on claims. Absence of renewal policies and proof of insurance has been discussed and we look to better performance this year.
- Q** Why don't we self-insure?
- A** We can't get public liability by itself at anything like reasonable rates, if at all, and coverage to pay for claims above the hull premiums collected is very costly. Unless clubs are prepared to accept enormous risks the present plan is vastly superior. If anyone feels they have a viable alternative, please submit details and it will be assessed.

- Q** Why are rates up if claims are down?
- A** While we maintain a reasonable split between hull and PL, the insurer is interested in total premium dollar. In this regard, mounting PL rates in general affect us. Even a reservation is a factor, however remote the possibility of a claim.

- Q** If I think you're way out on a minimum hull value, will you reconsider?
- A** Only if it's readily evident and significant. Remember, instruments and other equipment in the glider are generally allowable.

- Q** When are premiums due?
- A** March 31st. Recognizing this is early for some clubs, it is essential that a deposit is in Ottawa by March 31st and the remainder no later than May 31st. Any outstanding amounts beyond that date may well result in a rejected claim.

- Q** Is this scheme really the best we can do?
- A** Compared to general aviation rates, our past performance and the limited market, we think we have an excellent plan. Fly carefully and support the scheme so we can make it even better.

The assistance of Mr. Al Shreiter, freely and capably extended, is much appreciated.

Bryce Stout  
Chairman

## SAC HULL INSURANCE HISTORY, 1973 -1987

	73/78	1979	1980	1981	1982	1983	1984	1985	1986	avg
Insured Clubs (#)	29	40	39	42	40	41	40	38	41	40
Club Aircraft (#)	132	174	175	162	160	152	146	141	152	158
Private Aircraft (#)	132	167	178	210	209	164	161	153	198	180
Insured Value (\$M)	2.42	4.17	4.57	5.20	4.80	5.53	5.37	4.80	5.96	5.05
Hull Premium (\$K)	58	122	143	185	217	212	210	185	221	187
Hull Losses (\$K)	62	134	136	91	206	81	66	161	129	129
Loss Ratio (%)	107	110	94	49	95	38	31	87	59	74
Premium/Hull Value (%)	2.38	2.92	3.14	3.55	4.53	3.83	3.92	3.85	3.70	3.54
Loss/Hull Value (%)	2.55	3.21	2.97	1.74	4.28	1.46	1.22	3.35	2.17	2.55
Average Claim (\$K)	5.68	11.14	4.84	6.04	9.79	8.99	6.57	9.10	9.93	8.00
Average Hull Value (\$K)	9.17	12.23	12.94	13.98	13.01	17.50	17.48	17.52	19.48	14.84
Average Premium (\$)	218	357	406	497	557	670	685	628	717	570

## SAC DIRECTORS & OFFICERS

### PRESIDENT & DIRECTOR-AT-LARGE

Gordon Bruce (1987)  
154 Shannon Pk, Beaconsfield, PQ H9W 2B8  
(514) 697-1442 (H)

**ONTARIO ZONE**  
Dixon More (1987)  
27 Roslin Ave South  
Waterloo, ON N2L 2G7  
(519) 886-2424 (H)

### VICE-PRESIDENT & PACIFIC ZONE

Harald Tilgner (1986)  
90 Warrick Street  
Coquitlam, BC V3K 5L4  
(604) 521-4321 (H)  
(604) 263-3630 (VSA)

**QUEBEC ZONE**  
Alex Krieger (1987)  
1450 Oak Avenue  
Sillery, PQ G1T 1Z9  
(418) 681-3638 (H)  
(418) 656-2207 (B)

### ALBERTA ZONE

Al Sunley (1986)  
1003 Keith Road  
Sherwood Pk, AB T8A 1G2  
(403) 464-7948 (H)  
(403) 453-8330 (B)

**MARITIME ZONE**  
Gordon Waugh (1987)  
5546 Sentinel Square  
Halifax, NS B3K 4A9  
(902) 455-4045 (B)

### PRAIRIE ZONE

Jerry Dixon (1986)  
Box 124  
Sintaluta, SK S0G 4N0  
(306) 727-4917 (H)

### DIRECTOR-AT-LARGE

Bob Carlson (1986)  
57 Anglesbury Boulevard  
Islington, ON M9A 3B8  
(416) 239-4735 (H)  
(416) 365-3558 (B)

### EXEC SECRETARY

Nancy Nault  
485 Bank Street  
Ottawa, ON K2P 1Z2  
(613) 232-1243 (B)

### TREASURER

Jim McCollum  
Box 259, R.R. 3  
Manotick, ON K0A 2N0  
(613) 692-2227

## COMMITTEES

### AIRSPACE

Dave Tustin  
581 Lodge Avenue  
Winnipeg, MB R3J 0S7

### METEOROLOGY

Larry Hill  
Box 234  
Kars, ON K0A 2E0

### FLIGHT TRAINING & SAFETY

Ian Oldaker  
135 Mountainview Road N  
Georgetown, ON L7G 3P8

### PUBLICITY

Grant Graham  
966 Glenbanner Road  
London, ON N6E 1N2

Mbrs: G. Eckschmied  
John Firth  
Denis Gauvin  
Alex Krieger  
Chris Purcell  
Manfred Radius  
Al Sunley  
Jeff Tinkler

### SPORTING

Jim Oke  
551 Bruce Avenue  
Winnipeg, MB R3J 0W3  
Mbrs: Robert DiPietro  
Wilf Krueger  
Al Sunley  
Hal Werneburg  
Ulli Werneburg

### FREE FLIGHT

Tony Burton  
Box 1916  
Claresholm, AB T0L 0T0

### • FAI AWARDS

Larry Springford  
45 Goderich Street  
Kincardine, ON N2Z 2L2

COURIER ADDRESS  
Claresholm Local Press

### • CONTEST LETTERS

Robert Binette  
3819 Berri  
Montreal, PQ H2L 4H2

### FINANCIAL

Gordon Bruce  
Bob Carlson  
Jim McCollum

### • FAI RECORDS

Russ Flint  
96 Harvard Avenue  
Winnipeg, MB R3M 0K4

### HISTORICAL

Christine Firth  
542 Coronation Avenue  
Ottawa, ON K1G 0M4

### STATISTICIAN

Dennis Miller  
108 Midcrest Cres. SE  
Calgary, AB T2X 1B5

### INSURANCE

Bryce Stout  
2244 Belfast Crescent  
Mississauga, ON L5K 1N9  
Mbr: Al Schreiter

### TECHNICAL

George Adams  
12 Hiawatha Parkway  
Mississauga, ON L5G 3R8

### MEDICAL

Dr. Peter Perry  
64 Blair Road  
Cambridge, ON N1S 2J1

### TROPHIES & CLAIMS

George Dunbar  
1419 Chardie Place SW  
Calgary, AB T2V 2T7

### WORLD CONTEST

Al Schreiter  
3298 Lonefeather Cres.  
Mississauga ON L4Y3G5

# SAFETY

## MEDIUM-RARE OR WELL-DONE?

Dr. Harry Rance  
from Aviation Safety Digest

*Doctor Rance is a specialist in Aviation Medicine in the Department's Central Office. Here he reminds us of the possibly serious implications of sunburn.*

Most of us like to expose our bodies to the sun, to change our skin colour to light brown — to tan our skin. Much advertising and peer-group pressure encourages the practice of 'sunbathing' to achieve a suntan. However, there is a very real risk of overcooking our skin — actually burning it. Sunburn is not only an aesthetic disaster, but may destroy skin cells and produce scarring such as one might see in a person burnt by fire or scalded by hot fluid. Even before the destruction stage is reached, considerable damage can be caused. Sunburn causes a reaction in the skin not unlike severe allergic reaction with swelling and blistering of the skin. This process is accompanied by pain, and if near a joint, there can be a substantial degree of immobility. The pain and the distraction caused by that discomfort can be sufficient to interfere with your performance as a pilot.

We are all aware of these dangers, and if we set out to 'sunbathe' we usually take precautions by not exposing our skin for too long, and by protecting the skin with some suitable sunscreen. But where problems do occur is when we are not deliberately sunbathing. We bare our skin for what we think will be a short period of time, and not notice until it's too late the effect of the sun beating down on bare skin through a side window, or particularly through the glass bubble of a cockpit canopy. It is in these situations, when we are trapped without additional clothing or sunscreen agents, that we run into trouble and give ourselves yet another stress factor with which we have to cope — on top of our possible dehydration, heat stress, and all the difficulties of flying.

Flying in the summer months can be fraught with danger unless we plan around these potential hazards. Try these simple precautions:

- attempt to provide shade for at least the cockpit of the aircraft
- on the ground have as much cockpit ventilation as possible — doors, windows, and 'bubble' open
- wear sensible clothing to reflect heat and protect against solar radiation
- use a sun screening agent with a high blocking factor.

## A FEW MORE SAFETY THOUGHTS

John Firth  
Safety Commentator

- Cbs or frontal systems around? Tie the gliders down securely. Sudden winds shifts can occur!
- Faced with an off-airport landing? (Some refer to it as a field landing; anyway, it is not where you planned to land.) Having assessed the surface and slope, check the wind direction before planning the circuit by checking the drift during a couple of circles, if other indicators are absent.
- Same situation, but think you can climb away? Leave enough height for a circuit, however tight, and do your downwind checks in good time.
- Cross-wind takeoff? Take care in positioning the glider and have your tip runner on the downwind side.
- Just a routine landing at home field? Even so, do not throw away height in the circuit before you have to, especially in a strong wind.
- Doing the towplane DI? Check the seat integrity as well as all the usual things.
- Checked out to tow at last, though you have little experience on tail draggers? Get that tail on the ground before you brake, or even before taxiing in strong winds.

## THAT WAS CLOSE!

Jeff Tinkler  
member, Flight Training  
and Safety Committee

The Flight Training and Safety Committee is Trying to and out what is causing our poor safety record so that we can make recommendations for improvement. The trouble is that we don't really know what is going wrong. We are only getting a few reports of major incidents, and none of the minor ones. Usually, major events are preceded by similar minor ones — and the minor ones were only considered "minor" because they were near misses with no damage or injury.

For example, the Committee was discussing the problem of getting pilots to submit incident reports, and in the discussion it came out that several committee members were each aware of different incidents involving adjustable glider seats. (These

sailplanes included the Lark, Pilatus, Jantar, and even the trusty 1-26.) Only the 1-26 incident was reported to the Committee, and that was because it developed into something more serious. What happens when a seat back fails? The pilot slides or rotates backwards pulling the stick with him ... you can imagine the rest!

Even the members of our own Committee did not report on the incidents they related, so we have been setting a poor example. We will try to improve and we want you to do the same. Send us your reports of incidents (preferably through the club Safety Officer, or CFI if you have no Safety Officer), even if they are minor. We will acknowledge receipt. As well as trying to build up a picture of what is happening across Canada, we will pass on cautionary advice in a free flight safety column using your examples. Anonymity will be preserved if you wish, but bear in mind that a name associated with an event make it seem more real to the reader — more, "That could happen to me".

By the way, the common element in the seat incidents was the adjustment mechanism. Either it was not properly engaged in the notches or was disturbed when the pilot got in. Sometimes the problem was aggravated by the mechanism being hard to see, as in the two-seat Lark. "... as the launch started, I found myself suddenly grasping for something firm. With a big effort, I just managed to reach the release handle and the glider rolled to a stop. No harm was done, but now I check the seat back more carefully". Will you?

*I would suggest that perhaps the lack of incident reporting is in part a structural one — club members are just not in the habit of making reports because it is not a "normal" part of the club operation (I would be willing to bet that 90% of club members do not know where the forms are kept or even if the club has any); and in part simple human nature — the forms are not right at hand and the incident was no big deal and the next launch is underway, and the details are quickly forgotten.*

*An improvement in the reporting rate could occur if:*

- a stack of incident/accident reporting forms are always kept within immediate reach right at the flight line table,
- the lowliest timekeeper or field manager can hand a report form to a witness and/or an actor involved in even the smallest incident and require that it be completed the same day. An expression of club discussion, will, and the back-up of the CFI and Safety Officer is needed here (it is probably important that no implied blame is attached to the requirement to complete an incident report form.

*A bonus which could fall out of the common and normal use of the reporting form is that the club itself may be able to highlight operational problems on its own flightline as well as help SAC find nationally occurring trends.*  
Editor

# THE ALL-IMPORTANT DIFFERENCE

The element of risk in flight cannot be eliminated — but it can be greatly reduced with judgement, knowledge and skill ...

Douglas Murray  
Beaver Valley Soaring  
from “Canadian Flight”

To be perfectly safe in the sky, you must make it a tenet of faith that you will not fly higher than you are willing to fall. That is obvious. Flying is the only mode of transporting the human body in which the medium is unable to support the vehicle used while it is in a state of rest.

To never fly higher than you are willing to fall places a restriction of such proportions on the whole exercise that the total endeavour becomes futile.

So the choice is simple: do not fly at all; or fly so well that the odds against falling are reduced to an acceptable minimum.

Enduring the unacceptable was brought home to me with incredible clarity when I had checked out my wife, a low-time pilot, to fly her new Ercoupe. I had flown with her until I was sure that the only reason to continue the dual was my own fear. So I turned her loose with words of confidence, plus a clear agreement on the limits of her first flight.

She beamed her pleasure at being set free; at having achieved the right to fly her own aircraft by herself. I watched with pride, and a sinking heart, as she taxied to the end of the runway. The trepidation grew as she did her run-up with extreme care, moved at a snail's pace into takeoff position, and hesitated as she made her final checks.

I wanted to run out to the runway and demand we do one more circuit. Too late! The engine opened up and the little monoplane gathered speed, bounced once slightly, and lifted off.

She was beyond any help but her own now; committed to a project that must be carried through, alone. Neither radio, nor signals, nor prayer, nor worry would replace what she knew, and how she would use it.

And suddenly I was calm. She had made the commitment that every pilot makes every time the wheels leave the ground. And as she lifted higher than was survivable. In any fall, I shared her joy in challenging this exhilarating, frightening, and endlessly variable medium. Not even when she turned to

land, holding off to clear the wires at the end of the threshold, nor even as the wheels reached tentatively for the runway and safety, did my preflight fears reassert themselves. Nor was there relief when she slowed to a stop. Just joy at the look on her face, and pride in shared accomplishment in the mighty challenge she had survived, alone.

Too big a reaction to a flight in a mere Ercoupe? Ah, but it was alone! And the more complex life becomes, the more crowded, the fewer the opportunities to take responsibility for oneself, alone. So every opportunity is unique, and should not be accepted lightly, not forgotten quickly.

Alone.

Is that the magic which casts its spell on those who fly? There is a law of physics which makes flight practical. The laws are immutable for any given set of circumstances — as they are in land and sea travel. But the circumstances vary in confusing profusion. Thus, the right response also changes endlessly — sometimes in hardly finite ways; and at other times so dramatically as to make the response an experiment.

When things get ahead of the motorist, he often can slow them down, or stop them altogether by coming to rest. When elements tend to overwhelm a sailor, he can perhaps heave-to, take in all his canvas, batten down his craft, and wait, perhaps even in terror.

No such escape awaits the flyer. He usually has made all his mistakes before he begins his journey. When things go wrong there is no roadside stop along his airway at which to rest; nor can he furl his sails without sinking forcibly to the bottom of the sky. Due to the speed needed for flight, things that go wrong seem to multiply by the “square”. Fix the first one immediately or it becomes two, fix both or it becomes four; then sixteen — until the only way out is an emergency landing with broken wings or worse.

How often we have cried, “Dear Lord, please get me out of this, and I’ll never climb this high again.” And how often, believing in God’s indulgence, have we again ascended into the air, the very thin air, but less innocent, more preplanned, less ready to risk falling, more aware that God has other things to do than cradle brave flyers. Brave flyers get into trouble. Some, over and over again until, still brave, they run out of luck.

To the uninitiated, those flyers who fly through mountains are brave — as are those who skirt tumultuous storms — and those who loop and roll.

But most often, those flyers, because they know they are deliberately increasing the risk, endlessly reduce the odds by practice — infinite, endless practice, and you’ll find them as listeners in many hangar flying sessions.

Learning, not talking. Separating the bravado from the fact. Making internal judgments on what should have been done, what they will do if faced with similar circumstances. Speaking rarely, the responsibility of passing along advice that may lead a fellow flyer to safety or destruction one day, heavy upon them.

There was one such pilot who was extremely irritated to be called a cautious pilot. Affronted, in fact. He was skilled in weather flying, aerobatic flying, twin-engine, glider and helicopter flying. He flew extremely low air shows, and in formation, with a chosen few, would put his wingtip within hand’s reach from the other cockpit. He did a hundred things most pilots would not dream of.

Yet he was never known to take off without the most meticulous preflight of his aircraft. Without checking the weather in detail. Without previewing his route. Without knowing where every line of retreat began, and stopped.

He was careful to fly within the limitations of his own exceptional skill, knowing that these change from day to day through human frailty. He was careful to fly within the capabilities of each aircraft, knowing these to be firmly set by physical law.

He understood fully the axiom of never flying higher than you are willing to fall — unless you accept the necessity of doing everything in your power to prevent that from happening. And of never being seduced by hubris, the pride of vanity. Thus, despite the exceptional flying maneuvers he performed, he was a prudent pilot.

And if, despite everything, chance should one day overcome the strength of his mount, or surmount the depth of his skill, he will have fallen intelligently, accepting the challenges imposed by the environment he chose to face alone, armed with judgement, knowledge, and skill.

That’s the all-important difference. 



# CLUB NEWS

## AIR SAILING'S PLAN FOR 1987 OPERATIONS

Air Sailing's goal is to have good flying by structuring its operations a little better — by reintroducing and creating programs to match its equipment and by improving the flying skills of ab-initio, intermediate, and senior pilots.

These pilots were then given their own goals:

**For the ab-initio pilot:** Participate in formal training in the morning. Pick the brains of the intermediate pilots on their recent flying experiences. In the afternoon assist the senior and private pilots rig and launch. Help in retrieves when required. Team up with an instructor or licenced pilot for informal exposure to soaring. In the late afternoon, return to formal training and lesson plans. Be involved — there's more to this sport than just your flight.

**For the intermediate pilot:** Often you're the "Orphan Annie" of most clubs, cast aside for the next batch of beginners this year the focus is on you. Come early in the day. Use the K-13, Ka6, and Grob to develop the precision skills required for advanced flying. Increase your access to instructors and equipment by helping to run and teach the ground operation. In the afternoon, test your skills in local soaring, solo and dual. Begin some small cross-country flights with an instructor in the Grob. Develop a team approach with your other intermediate pilots as you are all limited by your individual experience. Organize yourselves — compare and evaluate. You can develop faster and easier if you learn and fly as one of the group rather than as an individual. No, this part of the day's operation won't be raided for late ab-initios, or intros. For late afternoon, it's back to practice, practice, precision, precision, spot landings, and type transitions blended with basic training.

For the senior pilot: Forget the adage, "Those that can, do; those that can't, teach." Success of the 1987 operation rests with the senior pilot's ability to teach and to lead, even if only by example! If soaring and cross-country flying is part of the sport, then less experienced pilots need to learn the process and be a part of it. Senior pilots have to upgrade their preparation skills and navigation, demonstrate these skills, and blend the club members together. Our task is to create the challenge, to sharpen your abilities. Your task is to assist the instructors, and be involved with the operation, arriving early to plan. There's more to your cross-country than just a tow.

Steven Newfield  
CFI, Air Sailing

## ANY HAMS OUT THERE?

One of the members of the Flight Training & Safety Committee, George Eckschmiedt of the Vancouver Soaring Association, is also a fairly active ham radio operator, with the call sign VE7CEH. George would like to get in touch with other soaring pilot hams in Canada and elsewhere for exchanging soaring news, ideas, events. In particular, he would like to find a Ham in Georgetown, Ontario with a phone patch so that he could be easily in touch with Ian Oldaker. Even if only one soaring ham could be found in each province, a useful net could be formed to discuss flight training and safety related items, to keep each other and SAC informed.

As the propagation trend is improving, the technical demand on the ham is minimal. Ontario can be worked from BC with a 100 watt class SSB transceiver into a dipole or vertical antenna, on 14MHz during the daytime. The only problem is that when we could establish a net on 14MHz (on week-ends) a soaring pilot would rather fly than talk on the radio. On 3.5 MHz, Manitoba can be worked in the evenings, so not all is lost. It is only a matter of organization.

George is usually monitoring the local two metre calling repeater in Vancouver during commuting times and his soaring activities are known by some of the more established local Hams. So if anyone would like to get in touch with him on HF, ask the VE7 contact to call him there and state a frequency and time. Alternately, ask him to call George on the "land line", if 261-0733 does not cost long distance charges. On rainy weekends when he does not go to Hope to fly, George sometimes monitors the 14.140MHz Trans-Canada net.

One final thought: you do not have to be a ham to talk on ham radio, but you have to have a friend who is. Under his or her control it is perfectly legal for third parties to talk on it, discussing non-commercial subjects such as soaring, other sports, etc. It is also perfectly legal for a ham to connect his equipment to the telephone line. So, sailplane pilots, if you know a ham well enough, ask — you will be surprised how accommodating they can be (maybe you will pick up another hobby, as if there were room for any when you soar!).

Give George a call if you think this is a good idea (not after 9 pm local time) or send him a note. The number is 261-0733. His address is:

George Eckschmiedt VE7CEH  
2067 West 45 Avenue  
Vancouver, BC  
V6M 2H8

## NEWS FROM QUEBEC SOARING

1986 was not as great as we had hoped, but we still managed to accomplish 1950 flights in all. Good weather in the fall helped us catch up a little, but we are still far from our record years. In fact, we are wondering here whether this will not eventually stabilize and become the average, since pilots tend to fly less as they get more experience, fly longer and require less training. Membership stayed pretty constant at season's end, since we acquired as many new members as we lost, that is, twelve.

About 150 of those 1950 flights were made with our newly acquired winch. So far, only a few interested experienced pilots got checked out, but it will probably catch on as soon as we get more experience and a proper training process. Still, it is viewed as an impressive form of launch, and at potentially attractive costs.

The club also acquired a new Grob G-102 Club IIIb, which will eventually serve as the first solo glider, once basic training is passed on to our Blaniks. So far, about 160 flights were made on it. It handles quite easily and should prove very compatible to students "graduating" from the Blaniks.

Club pilots accumulated about 4,500 kilometres in distance flying altogether, most of it being accomplished by Walter Pille, for the training to and during the Nationals at Arthur. This is still an aspect to be more developed at CVVQ, but the weather did not exactly cooperate with us last year. The completion of our G-103 trailer this year should help promote our cross-country flying among many of our able but-not-daring.

Finally, we attempted to try out a new site for our wave camp this fall, but it did not work out. Observations led us to think better wave could be obtained from Mont Sainte-Anne, located about 25 miles (40 km) east of Quebec City and which holds our most popular ski resort in the Quebec region in winter, but we ran into problems renting a suitable field nearby. The field is located too close to the Canadian White Geese migrating reserve, and hunters would not allow us to operate for fear of disturbing the birds.

Several key participants to that camp were also not available, which would have made it difficult to maintain the operations during the usual six weeks, and made expenses difficult to justify. However, plans are underway to definitely return to Baie St-Paul, 30 more miles further east, next fall. Our experience there is considerably greater, the town folks like us, and we can rely on relatively regular wave conditions. As usual, you have to be there when the wave is.

We will be in touch with any club wishing to organize a visit, since it is easier to manage with a larger group. Best wishes to all for a great season of successful and safe flights.

Serge Krieger

## WORLD CONTEST FUND DONATIONS

Many people and organizations, besides the pilots and crew themselves, contributed towards the effort to get our five pilots down to Benalla, Australia for the World Contest. Special mention was made at the AGM of the hard work done by Bob Gairns of the Montreal Soaring Council to collect a very substantial sum towards the total fund.

The following persons and organizations are thanked for their contributions:

Anderson, Bruce	Mandia, Joe
Apps, Mike	Martel, Jean-Jacques
Bennett, Kevin	Marziali, Eisa
Binette, Robert	Mathieu, George
Bisscheroux, John	Matthews, F. R.
Brett, Tony	McCollum, Jim
Bruce, Gordon	Milner, Brian
Camirand, Claude	Nicklaus, Roland
Carlson, Bob	Nye, Gerry
Conlin, Kevin	Okany, Tom
Couser, George	Palfreeman, Bernard
Dermott, Ron	Pepin, André
DiPietro, Robert	Perrault, Daniel
Doda, Stan	Platts, Cameron
Doering, Otto	Roth, Hanspeter
Dunbar, George	Seguin, Gilles-André
Ekiert, Walter	Spence, Ian
Estebany-Okany, Kate	Stalker, Merrill
Ferguson, Bruce	Steimer, Roly
Findley, Bruce	Suchoversky, Ihor
Gairns, Bob	Tony Brett
Gauch, Walter	Trent, Peter
Gormley, Bryce	Valenta, F.
Graham, Neill	Webb, Dave
Halliday, Ron	Werneburg, Hal
Harte, Robert	Werneburg, Ulli
Henniger, Dave	Wiater, Jerzy
Henry, Jim	Wockner, Fred
Heussi, Konrad	Zabrodski, Rick
Hollestelle, Ed	
Keith, Charles	Alberta Soaring Council
Krieger, Alex	Cercast, Inc.
Krueger, Wilf	ConceptESP
Kurlents, Hillar	Fairway Car Corp.
Lach, Herbert	Ferndale Machinery
Lewtas, Dave	Texaco Canada
Lohmann, Michael	Vankleek Sailplanes

## THE VANCOUVER START

The VSA season opened on March 21 and 22 with check flights and great soaring. The check rides followed the SAC Glider Pilot Licence Examination Checksheet and includes full and incipient spin proficiency checks. Our President, Dave Baker, did a lot of the flights, and reports that the pilots are doing very well. The completed check sheets are kept on file for reference. Good soaring was available on both days, Sunday being cooler. The slope was working to 5,000 feet. It was quite cool in the Blanik, but I don't think it compares with the experience of the hang glider pilots we met at the same elevation! The next weekend was more stable, with some soaring only. The new Grob Twin, C- GVSA, the flagship of our fleet, was test flown on April 1 and should be on the flight line as I write this on the April 4/5 weekend. I wish I were there.

George Eckschmidt

# HANGAR FLYING

## JOHN CARDIFF WAS ROBBED!

The pilots at the 1986 British Standard Class Nationals at Dunstable suffered from their "day devaluation" formula in almost a repeat of the farcical situation which occurred on 1 June 81 at the world contest in Paderborn (read free flight 4/81) when the Open class finishers got zero points.

The task on 19 August at Dunstable was a 290 km triangle on a day which started with low cloud and mist following two days of rain. At day's end, 33 of 39 pilots did not exceed 100 km, and those who got more than 50 km gained a 5th place and one point. The three 2nd place pilots flew 154, 158, and 172 km to earn two points. The winner, John Cardiff, flying almost seven hours, completed 266 km and earned four points!

John spoke diffidently of his struggle, saying, "For four points you want the whole story?" He deserved and got an enormous round of applause! (Canadian competition rules set a minimum of 200 points on a day devaluation, thank God.)

## K-13 LIVES ON

Many visitors to Germany will be familiar with the enormously busy gliding site at Oerlinghausen at the foot of the Teutoburger Wald not far from Bielefeld. The history of this site is well known and the gliding school world famous.

Fourteen clubs fly from here and on thermic weekends the sight of the sky full of

circling gliders is both magnificent and frightening. Tucked away behind a small hangar is a small, inconspicuous set of buildings which has housed Jubi Sportflugzeugbau GMBH since 1968. At first known as Brockmeyer, the firm had its present name since 1980 and from 1979 has been building the K-13 under licence from Alexander Schleicher.

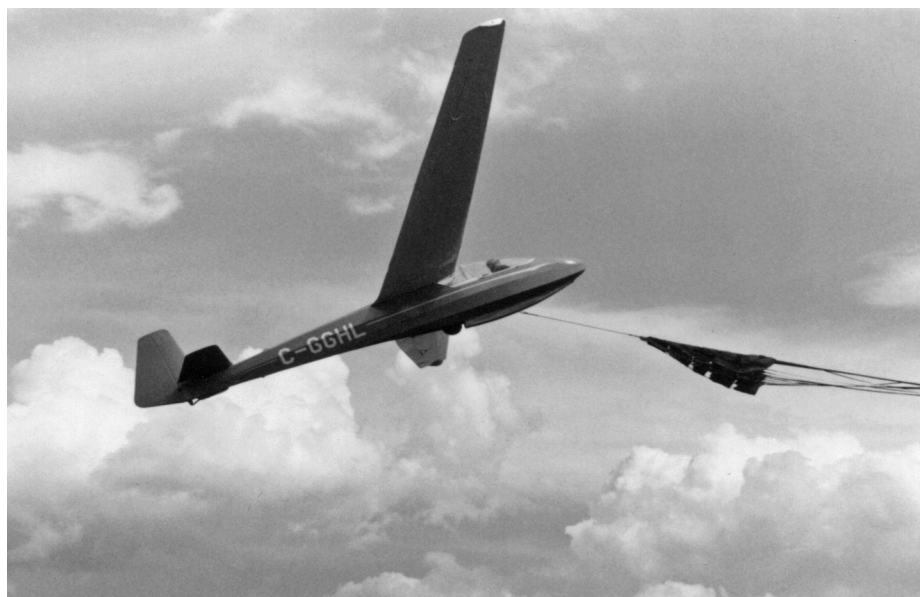
Members of the Pegasus GC at Gutersloh, some 20 miles away, are frequent visitors and have two of their K-13s, the first one having notched up its 5,000th launch two weeks before the second was delivered last July.

The firm have now had 50 orders for the K-13 and several have gone to the UK. Herr Krane, the business manager, says they intend building K-13s for as long as people want to buy them.

Apart from the K-13's well-known flying qualities, it is valued for its relative lightness, its ease of maintenance and repair, and the combination of comfort and good visibility for the instructor.

Schleicher supply the steel tube fuselage and the mechanical parts with the rest made and assembled at Oerlinghausen. Apart from modified wingtips and the option of a tail wheel, the new K-13s have hardly changed from the early models.

But this might change; Jubi have recently taken the third K-13 to be built and refurbished it to a customer's specification that Herr Krahe hopes might become standard



The Windsor Gliding Club K-7 gets a launch at their field near Rutherford, Ontario.

Bob Cooke



as a production type or a rebuild, or both, although at the time of writing, nothing has been settled. It has standard wings, but the fuselage is covered in glass-fibre and tail and nose wheels have been fitted as on the K-21. Since use of the front skid as an emergency aid for extra braking is now impossible it was necessary to fit a main wheel with a disc brake.

Alan Jones  
from Sailplane & Gliding

## 5-NATION SOUTHERN CONTEST

Plans have been announced by John Roake, the editor of the New Zealand Gliding Kiwi, for a new soaring competition to be introduced in November of this year, and it is hoped to make it an annual event. The contest will involve pilots from Argentina, Australia, Brazil, Chile, and New Zealand. It may be possible for each team to invite one of two northern hemisphere pilots to join them.

The contest is to be sponsored by the Argentine Air Force. It is planned that each nation will be represented by six pilots selected by the national gliding association, and all expenses are to be met by the entrants.

The site of the contest will always be in Argentina, as they are able to provide 30 one-class sailplanes (Standard Jantars) for the event. Argentina may also provide crews and vehicles for each competitor, Roake says. The contest is planned to be held over a maximum of eleven days to co-incide with a bi-weekly plane service between New Zealand and Argentina.

Aircraft rental will be \$US1,000, and the contest entry fee of \$US600 will include aerotows and film. Accommodation will be available in trailers on the site. Further information about the contest can be obtained from: Dave Sharpies, Box 209, Everton Park, Queensland, Australia, 4053. Telephone (07) 354-1006.

Allan Ash  
editor, Australian Gliding

## FIRST CLASS X-COUNTRY SEMINAR • RECORD FLIGHT PLANNED •

This was the first clinic to be run by the new Canadian Advanced Soaring Group, and it was quite successful. More than 50 people attended, including 13 RVSS members. Outlandings, navigation, and flight planning for a 300 km task were covered in depth by speakers Ulli Werneburg (GGC), Robert DiPietro (MSC), and John Bisscheroux (MSC). Ulli also spoke of the World Championships in Australia, and gave an exciting account of one day's flying to give us an idea of the conditions and competition encountered there.

Robert DiPietro ended the session with a slide presentation on a proposed Canadian record flight that Ulli, Bryce Gormley, and



he have been planning to team fly for over a year. The task is a 1600 km "out-only" flight that originates from Pendleton or Hawkesbury and finishes in Knoxville, Tennessee. One turnpoint is used at Oneonta, NY in order to stay away from any marine air coming off Lake Ontario. The turnpoint also increases the distance due to the resulting "dog-leg" course. The flight will be accomplished by using thermals for the first 350 km until Williamsport, Pennsylvania, the start of the famous Appalachian glider highway.

Last spring the trio joined up with Phil Smith of GGC to fly over the course in Phil's power plane. They charted the course for landable terrain and photographed the area extensively. It was a treat to see these slides — sections of the ridge are perfectly formed for many miles. But then there are the gaps to cross — some are quite intimidating. (Famous ridge-polisher Karl Striedieck crosses some of these by a technique that he refers to as: "putting on a head of steam" by red-lining the ridge, then crossing the gap "in ballistic mode".)

A record flight like this demands that one be all ready to go, and then keep an eagle eye on the weather. Last spring, Ulli made daily visits to the weather office at Uplands. One day came that looked very promising, but there was a strong possibility of snow showers developing and stopping the flight due to poor visibility. Considering the lengthy retrieve for even a half completed flight, the group elected not to go. Later they found out that on that day a 1-34 launched from Elmira, NY had made a 1000 km goal — apparently the snow showers had not developed (there must be a soaring moral in this somewhere).

Everyone found the course quite informative, and caught the enthusiasm to go out and set a few personal records. Thanks to the CASG for a great day!

from Rideau Valley Soaring newsletter

## DG-500 TWO-PLACE MOTORGLIDER FLIES

The DG-500 two-place super-motorglider had its maiden flight in March, flown by Wilhelm Dirks. The flight characteristics are reported to be generally equivalent to a 17 m DG-400. Stick forces are also similar to a DG-400, and the roll reversal time is about four to five seconds, very low for a 22m ship. The engine is a watercooled Rotax 535 engine with a 3:1 reduction gear for the propeller.

The main reason for the delay in the anticipated Oct. '86 maiden flight was a complete redesign of the cockpit to achieve the same high standard as the single-seater layout. From the published polar, the max L/D is about 47:1 at 105 kph at a wing loading of 40 kg/m<sup>2</sup> (8.1 lb/ft<sup>2</sup>).

## GOOD JUDGEMENT

Remember to use an antidote when you catch yourself thinking bad thoughts:

Hazardous thought	Antidote
<b>Cable breaks</b> "I'm a bit low but can get most way back to the launch point."	A long walk is much better than a broken glider — or body!
<b>Aerotows</b> "I don't seem able to keep low enough — but no worry, he's a good tow pilot."	No tow pilot is good enough to deal with a glider that gets too high on tow — his life is in your hands.
<b>The crowded thermal</b> "Blast! he's vanished in a blind spot, but I can rely on Joe — he keeps a good lookout."	Don't rely on anyone's lookout — you may be in his blind spot too.

from Sailplane and Gliding



# FAI BADGES

Larry Springford  
45 Goderich Street  
Kincardine, ON N2Z 2L2 (519) 396-8059

The following Badges and Badge legs were recorded in the Canadian Soaring register during the period February 1, 1987 to March 31, 1987.

## DIAMOND GOAL

David J. Frank	Rideau	302.4 km	ASW-20	Kars, ON
----------------	--------	----------	--------	----------

## SILVER ALTITUDE

Robert Schad	Saskatoon	1402m	Ka6	Vanscoy, SK
--------------	-----------	-------	-----	-------------

## SILVER DURATION

Wayne Bagnell	Erin	5:15	1-26	Grand Valley, ON
Michael Deguglielmo	Lahr	5:12	Astir	Sisteron, France

## C BADGES

Gail Behrend	York	1:03	1-26	Arthur, ON
Wayne Bagnell	Erin	5:15	1-26	Grand Valley, ON
Robert Schad	Saskatoon	4:06	Ka6	Vanscoy, SK
Michael Deguglielmo	Lahr	1:30	K8	Lahr, Germany
Pierre Frechette	Champlain	1:57	1-26	St. Antoine, PQ

After five years of hard work, Boris has now passed the torch over to Larry Springford, whose address and telephone is given above. Many thanks to Boris for a fine job in the Committee that arguably has the most personal contact with individual members, and which requires the most continual attention to the mail that crosses the desk. Welcome Larry, to an interesting job. Tony

# Campbell

Printer ad  
Ottawa

## ONTARIO SOARING CHAMPIONSHIPS

SOSA 28 June - 5 July  
Practise day 27 June

All classes  
Photo start

Handicapped  
Data-back camera required (Konica camera available from: MZ Supplies, 1450 Goth Avenue, Gloucester, Ontario, K1T 1E4, (613) 523-2581)

Contest rules  
Entry fee  
Tows

Same as for Nationals  
\$60  
\$12 (approx.)

Register as soon as possible. Registration forms are available from Wilfried Krueger, 273-Canning Court, Oakville, Ontario, L6J 5Y4, (416) 845-7825

## 1987 INSTRUCTOR COURSES

**French CVVQ**, St. Raymond, PQ 13-20 June  
**Eastern SOSA**, Rockton, ON 20-27 June  
**Western COWLEY, AB** 25 July - 1 August

Register with National Office ASAP — see your CFI for minimum requirements and entry forms.

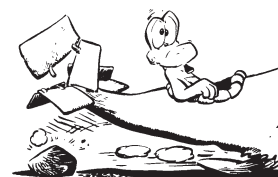
For other courses (instructor upgrading, cross-country), contact a member of the Flight Training and Safety Committee or the National Office.

## ACCIDENTS

**BLANIK**, C-GISK, 8 April, Medicine Hat, Right wing outboard of tiedown damaged in wind storm.

**2-22**, C-FXUB, 8 April, Medicine Hat. vertical stabilizer bent in windstorm.

**TINBUS**, C-FFEZ, 17 April, South Carolina. Fuselage damage due to a groundloop on an off-field landing in contest.



## CHANGE OF free flight PUBLICATION DATES

For several reasons, chief of which are typesetting problems around Christmas time and a serious lack of editorial time in February due to other commitments on my time, "free flight" will have its delivery time adjusted by one month beginning with the next issue.

The 4/87 issue will, therefore, cover three months, July - September, and henceforth, the normal deadline for major contributions will become the fifth day of every **odd** month, making the 4/87 deadline **5 July**. I expect this issue will go in the mail in the first week of August.

## THE PATH FORWARD — STEP 4

Bob Carlson  
SOSA

On 28 March, representatives of sport aviation, the FAI affiliates, met in Toronto to conduct the founding meeting of the Aero Club of Canada. Every sport was represented, save the Ultralight group. The basic purpose of the meeting was to review the work of the Steering Committee, a "pro-forma" budget, elect a President and Vice President, appoint a Vice President for Canada to the FAI, a delegate to CASI (the "boss" FAI technical committee) and the delegate for aerospport to the Canadian Olympic Association. As well, honorary appointments were to be considered, as well as appointments to the role of Secretary and Treasurer.

The meeting was ably chaired by Don Steeves of the RCFCFA and the Moncton Flying Club. A major point that developed was that the RCFCFA had, in the past, through its own members who were also members of the FAI, paid a significant portion of the cost of participating in the FAI. Unless those pilots rejoin the FAI through the Sport Aeroplane Association, the cost of the FAI assessment will be borne by 5000 fewer pilots. As well, there is the effect of the depreciation of our dollar with respect to the Swiss franc. It's expensive. The good news is that there will be a Trust Fund that will help for two years, and a

grant from Transport Canada looks probable. Bob Dobson of the RCFCFA has been a great help with financial matters.

The results of the elections are as follows:

President	Bob Carlson, SAC
Vice President	Jack Humphries, Model Aeronautics Ass'n. of Canada
Secretary	to be filled
Treasurer	to be filled
Vice President to FAI for Canada	Robert Purves, Canadian Sport Aeroplane Association (CSAA)
Delegate to CASI and COA	Robert Clipsham, CSAA
Honorary Pres.	Andre Dumas, President d'Honneur, FAI
Honorary V-Pres.	Don Fisher, CSAA

We spent time discussing how the ACC would operate. Initially, the work that is required will be done on a part time fee for service basis. More importantly, the member associations have to decide what services they want. Our next meeting is set for 27 June. There we will agree on a budget and what we will do. It should be an interesting affair. I'll keep you and your board posted. □

## COMING EVENTS

June 2 - 11, **Canadian National Gliding Championships**, all classes, Chipman, Alberta. Hosted by Edmonton Soaring Club, sponsored by the Alberta Soaring Council with a grant from Alberta Recreation and Parks. Details available. Dave Lacy, (403) 471-3722 (H) 471-0586 (B).

Jun 29 - Jul 3, **Beginners XC Soaring Course**, Rideau Valley Soaring, Kars, ON. This course is for the 1-26 pilot looking for Silver C and beyond. Bring your 1-26 and have a fun soaring week. Fee discount for registration before 1 June. Glenn Lockhard, R.R. 1, Box 511, Manotick, ON.

Jun 13 - 20, **Cours d'instructeur**, Aeroport de St. Raymond, Cte. Portneuf, Inscription: \$125. S'adresser au Bureau de l'ACVV. Pour renseignements supplémentaires, contacter Denis Gauvin (418) 842-6456.

Jun. 14-20, **Alberta Soaring Council XC Clinic**, Chipman, AB. Week following Nationals, aimed towards early cross-country pilot, but all welcome. Coaches will be Mike Apps (403) 436-9003 and Tony Burton (403) 625-4563. Fee includes tows.

### THE FINE PRINT

Recently I received "Trading Post" ads, a good story, and other magazine material which was addressed to the National Office. This causes a second mailing delay which could cause you to miss an issue, so please mail **free flight** stuff directly to the editor.

Jul. 25 - Aug. 3, **Cowley Summer Camp**, Cowley airfield, AB, Canada's biggest soaring event. If you've never been, you don't know what you're missing. Campsite on field, great soaring weather guaranteed, 25% chance of wave. For information, call Kevin Bennett, event Safety Officer (403) 256-3665 (H), 260-2935 (B).

Oct. 7-12, **Cowley Wave Camp**, camping at airfield or motels at Pincher Creek. Check rides available, visitors welcome. For information, contact Kevin Bennett (403) 256-3665 or Tony Burton (403) 625-4563.

1988 **Combined Nationals**, MSC bid accepted. Details to follow later in the year. George Couser, Box 1082, St. Laurent, Quebec H4L 4W6.

### ADVERTISING POLICY

The following policy for PERSONAL classifieds has been adopted for use of this service to SAC members:

- Send your ad to the editor, NOT to National Office.
- Your ad will run twice. If you wish it to continue, resubmit ad in writing to the editor for each additional two issues.
- Size limit: 6 lines (about 300 characters). If longer, might be subject to editing if space is limited.
- NON-SAC member charge \$10 per issue.

## NEW SAC COMMITTEE APPOINTMENTS

Gordon Bruce  
President, SAC

In this new season two vacant committees, Meteorology and Publicity, have been filled; and a Contest Letters subcommittee has been resurrected after having been in the hands of the National Office in the recent past.

**Meteorology** **Larry Hill** has offered to chair the Meteorology Committee. He is a professional meteorologist and an active glider pilot with the Rideau Valley Soaring School. This has been a long vacant position and SAC needs Larry's leadership to raise the awareness of this science (or art) and give assistance to those requiring guidance. Zone Directors are requested to find a suitable person in their zone to assist Larry and to determine how best to serve SAC as a whole. I hope this latter request will be fulfilled by late spring and Larry contacted by these representatives.

His address is:  
Box 234  
Kars, Ontario  
K0A 2E0 Tel: (613) 489-2686

**Publicity** **Grant Graham** of the London Soaring Club has volunteered to take over the chairmanship of the Publicity Committee. He has professional experience in this field and is also active in the London club doing their PR. His address is:

966 Glenbanner Road  
London, Ontario  
N6E 1N2 Tel: (519) 681-1378

This job is a difficult and frustrating one which needs Grant's experience and imagination to gain the results we need. I ask the clubs and Directors to give him your full support.

**Contest Letters** **Robert Binette**, a member of the Association de Vol à Voile Champlain and the Montreal Soaring Council, and a Libelte owner, has offered to look after the registry of sailplane Contest Letters. He will take over this subcommittee effective 1 May 1987. His address is:

3819 Berri  
Montreal, Quebec  
H2L 4H2 Res. (514) 849-5910  
Bus. (514) 284-0101