

# free flight • vol libre

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3/89  
Jun - Jul



# POTPOURRI

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This is a busy time of year in the SAC office with the flow of insurance paper and membership returns at its peak. The government decided this year to delay the submission of requests for funds from Sports Canada to the middle of April which is a task requiring a full week to prepare. This delayed other things including filling supply requests. However all is normal with approximately \$150,000 of insurance premiums reconciled and all orders processed.

About two thirds of insurance submissions from clubs require correction before forwarding to our broker. Does this mean that the instructions or forms are not clear? Our Zone Directors have been asked to determine if these administrative methods require modification. Some returns are being sent to our old address which delays the flow of paper. While thinking of basic administration, please inform the National Office as soon as you change your address. Last year \$400 was spent redirecting *free flight* to members whose copies required a new address.

Our World soaring championship team will have completed their competition in Austria by the time this issue of *free flight* is out.

Competition pilots are a special breed with that built-in desire to be very good at their sport. In the case of soaring they must also be willing to spend an incredible amount of money and time to reach the level of international competition. The Worlds will cost the competitors from Canada about \$20,000 each by the time they return to their homes. They of course enter these events well aware of the costs and remain enthusiastic about it all and eager to improve and compete again. What do other countries do about their competitors? The British Gliding Association supports its team with a \$11,000 allocation of funds from money collected by a levy of \$2 per year per member plus a generous contribution by the government. The French gliding team which attended the Worlds in Australia two years ago had expenses of \$160,000 paid for by their government. Ourselves and the Americans are the only countries whose governments don't financially support glider pilots at international soaring events. Should we then recognize our World team and support them ourselves? In the past we have organized some team funding which met with reasonable success, a plan we hope to repeat.

It is doubtful if we will receive any substantial funding for administrative purposes from the government this year which will leave us with a \$10,000 debit at the end of the year unless we cut back on some of our programs. This planning has already started and we are looking at every item with a view to ending up with a zero balance. If you have any suggestions please write or phone your Zone Director.

By increasing our membership by 300 we could probably do without government funding. Sounds easy, but increasing membership is a world-wide problem. As an example, last year the New Zealanders, who have a population of 3.5 million, had 1100 glider pilots down from 1500 the year previous. Last year our membership was 1324 down slightly from 1348 in 1987. However there were a few bright spots, eg. the Association de Vol à Voile Champlain went up 40% from 37 to 49 and with one towplane had 1161 flights. Looking into their operation, they had a very active recruiting program which lasted all year. Turning from the positive to the negative, there is a policy in a few clubs whereby their students join SAC only after they have soloed even though from the start they use SAC text books, SAC insured aircraft, SAC trained instructors, supported by the SAC's fifteen committees, directors, office staff, office overhead of numerous textbooks, supplies, communications, rent, etc. Such an attitude breeds free loaders and cost you and I money.

No doubt we should get used to operating without government grants which to many is a good idea as well as a better way to live. We can do this by building up our Pioneer trust fund as quickly as possible so we can replace government funds with the interest from the trust. Why not make a contribution – it's tax exempt as a charitable donation – why not give to your own organization – it will last forever and the proceeds from the interest earned go to support SAC. The Pioneer trust fund is designed just for this use and your donations are tax exempt.

Fly safely so you can enjoy the whole summer. No accidents is the aim for all our sakes, especially yours.



Gordon Bruce

*Note: This issue is a reconstruction of the original magazine file and differs slightly in layout.*

# free flight • vol libre

Trademark pending    Marque de commerce en instance

3/89    Jun – Jul

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

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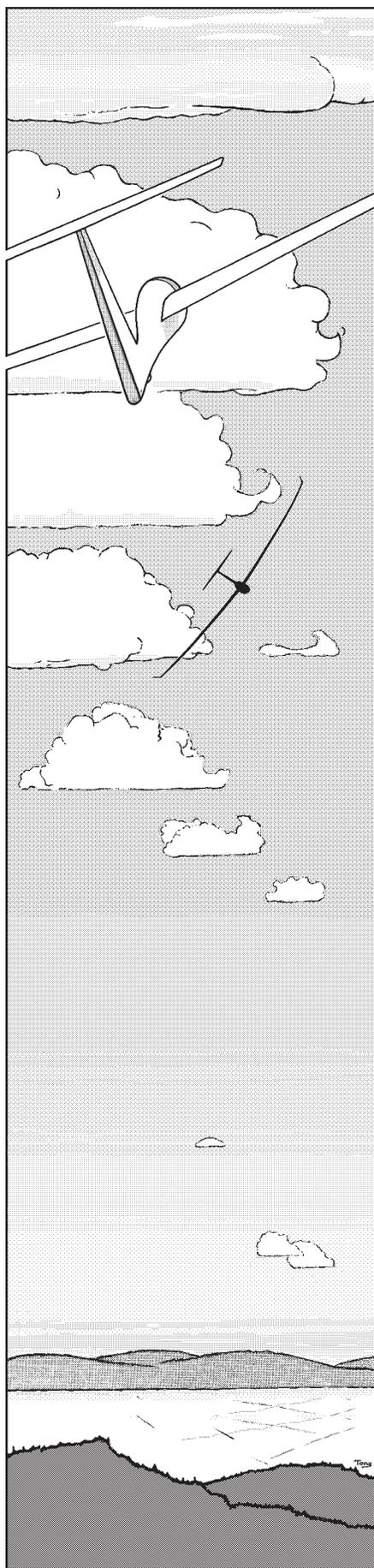
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## Cover

Hurry up and wait! The old story now that good competitions and so-so launch weather is upon us. John Bisscheroux sits it out at the contest at Hawkesbury last year.

Photo by Boris Karpoff



# FLIGHT TRAINING & SAFETY NOTES

## Paul Moggach

SAC FT&S Committee

By the time you read this the soaring season will have begun for most of us. While safety is important all of the time we should be particularly careful at this time as many of our flying and judgement skills are bound to have deteriorated over the winter. Spend a little extra time now to think about this and perhaps take a ride or two with an instructor, over and above your normal checkride. How about a little slow flight, spins, etc. to get the cobwebs out. It will do both you and the instructor a lot of good.

Speaking about instruction, let's do some simple arithmetic. If the average student requires some 40 instructional flights, then one instructor can only handle about three such students on a continuing basis. This would then represent 120 instructional flights over a season and perhaps some 30 hours of time on the club trainer. Realistically, can your club support its student population with your current roster of active instructors? We constantly discuss how to attract new members to the sport, but are we as actively concerned about what to do when we get them? I would argue that if we do not send the new member solo in his first season at the club we have a high risk of losing him. With this in mind please encourage members with suitable experience at your club to attend an instructors course. While those holding private pilot and higher licences can expect some reduction in the requirements, the instructor candidate should be over 18 years old, have 20 hours flight time and 125 flights, and not less than 10 flights in two-seat aircraft. A further requirement for the instructors course is a back-seat checkout in a trainer, preferably of the class of a Blanik. The Eastern instructors course will be held at the York Soaring Association, starting on Sunday, June 18 through to the following Saturday.

Well, now on to a few current safety issues. During the past year there has been some concern about the safety of certain parachutes manufactured by GQ Parachutes, United Kingdom. The final outcome of this is an Airworthiness Directive that requires that all such assemblies using the 4.8M SAC canopy should be inspected. It seems that the material may have an excess acid content which may cause degradation in its strength. The news is not all bad however, since the bulletin implies that this acid can be neutralized with a suitable treatment, and providing the material has not deteriorated, the canopy may be put back into service. So don't give up on that chute! Contact GQ Parachutes Ltd, Portugal Road, Woking, Surrey, GU21 5JE, United Kingdom, referencing Service Bulletin 25-01.

From a safety point of view the new proposed TCA airspace restrictions certainly will have some effect on training for those clubs situated in this airspace. While most instruction could proceed normally under 2200 feet agl, sailplanes would have to be equipped with transponders for spin training, which should be completed above 2000 feet agl.

Finally, at most gliding sites, the use of 123.3 MHz as the glider traffic frequency is important to safety. Let alone our own use of this channel, aircraft over-flying known areas of glider activity depend upon monitoring this frequency and announcing their intentions. Already this has become a safety concern in British Columbia and may become an issue as well in Ontario, where this frequency has been allocated to other services. We should oppose the assignment of this frequency to other services. Please lobby for a permanent assignment of this frequency for soaring use when the occasion arises.



## 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 official journal of SAC.

Material published in **free flight** is contributed by individuals or clubs for the enjoyment of Canadian soaring enthusiasts. The accuracy of the material is the responsibility of the contributor. No payment is offered for submitted material. All individuals and clubs are invited to contribute articles, reports, club activities, and photos of soaring interest. 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 Director whose name and address is given 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.

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Deadline for contributions  
5th day of each ODD month

# YOUR CLUB CAN USE TELEVISION — HERE'S HOW —

## L'ASSOCIATION CANADIENNE DE VOL À VOILE

est une organisation à but non lucratif formée de personnes enthousiastes cherchant à développer 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 aériens 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'ACVV.

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 de l'ACVV dont le nom apparaît dans la 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 par an, \$EU 18 dans les Etats Unis, \$EU24 outre-mer) veuillez contacter le bureau national.

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# 5

### Terry McElligott

SAC Publicity Chairman  
(thanks to Gordon Bruce for suggesting  
this article be written)

Just about every household in Canada has cable television. Every cable company, by law, must offer community programming on cable Channel Ten. Since the beginning of this requirement, cable companies have improved the quality of programming to a remarkable degree. Today, many of us catch the proceedings of local government on this channel, to cite one example.

Your local cable Channel Ten can give some major help to your club and it won't cost you a penny. Simply write a good proposal and then follow it up with a supply of club members to help with a video crew's visit to your airfield.

Before any of this is arranged, you must be sure there will be an enthusiastic response from within your club. It's a good idea to try to arrange the video crew's visit so as not to interfere with the club's regular operation. Also, bear in mind that as broadcasters, these people are covering a story. This is their line of work.

What should your proposal say?

Well, that depends upon how the cable channel likes to work. The very first thing you should do is call your local cable company. Ask them who runs the local cable Channel Ten and then call that person. Explain that you represent a local gliding club and that many of the members live in the cable Channel Ten viewing area and that you would like to increase the club's profile in the locale by inviting a crew out to catch the place in action. We all know that sailplanes have tremendous visual appeal, so that angle should NOT go unmentioned.

You might also wish to explain that some of your members fly cross-country on a fairly regular basis and that there are badges for the many levels of proficiency in soaring, and that you will have people on hand to illustrate this for the cameras.

You may be asked to write an actual proposal. The cable Ten station may have detailed printed applications which they will send you. Read them carefully and fill them out, explaining that you wish your club's story to be done on one of their existing programs. Otherwise, you might find you're applying to do a whole series of shows on your own! You might want to include details of your club and what local conditions are like, and perhaps a short bit on some of the best flights done from the field.

You will find broadcasters are in the dark about our sport just as much as the public they are paid to inform. So, if you encounter resistance, it might be a good idea to invite representatives out to the field for an introductory flight, which should be of extended length as opposed to a simple up-and-down trip. Perhaps a small cross-country could be arranged. That way, seeds of the possibilities of soaring are planted.

The 1989 soaring season is now well and truly upon us. Any cable TV project you contemplate will take some time to actually arrange. You'll find the project will require a little tact and a lot of footwork. It will also be great fun. This sort of publicity works, and the club that goes to the trouble, will see the results.

Remember —

If you don't promote,  
a horrible thing happens,  
**NOTHING!**

# Gliding in KENYA

## Karen Rispin

freelance writer, Dalmeny, SK

THERE AREN'T VERY MANY gliding clubs in the world that regularly have warthogs crossing the runway, but the occasional warthog only adds spice to the great experience of soaring at the Gliding Club of Kenya near the town of Nyeri. The very high cloud bases, and strong thermals, make Kenya an exceptional place to soar.

Richard Pollard, the young Englishman who runs the club, lives near the airstrip, in the middle of a coffee plantation. Over tea on his veranda, above a green yard full of tropical flowers with Mount Kenya in the distance, he explained some of the characteristics of soaring in Kenya.

"One thing that's different here is that you're flying at high altitude most of the time," said Pollard. "In the dry season the cloudbase is often above Mt. Kenya, that's 17,000 feet, the highest I've seen is 19,000 foot."

Jack, the British pilot who was currently working for Pollard, said, "I've found the thermals narrower here than in southern Europe."

"I don't think they actually are smaller," said Pollard. "It's the altitude. You're going 15% faster, and the difference in the turning radius between 40 and 45 knots is 100 feet. You have to bank 15% steeper or you'll be going round the outside of the thermal."

The strip itself is far from sea level, and can have a density altitude of 8000 feet. As any internal combustion engine is short of breath, Pollard uses a home made turbo-charged winch to get his gliders into the air.

The winch launch itself can be a real rush to the uninitiated. Pollard spends some of his time taking tourists up in the gliders. You could hear one middle aged New Yorker bellow "Whoa!" from half way down the runway, as the winch hurled Pollard's open cockpit T-21 into the air. He checks out pilots new to his club in his two place K-13.

"Up slack," is called by the pilot, echoed by the man at the wingtip. The wing man swings his paddle, and the movement is echoed again by a man far down field by the winch. The cable snakes through the grass and tightens. Then a second after the "all clear" call, the K-13 whips forward and into the air. It shudders and roars as it's dragged a thousand feet upwards, Pollard with the stick in his stomach to get as much height as possible. Then the cable is released with a clunk, and it's time to find a thermal fast. "Operating off a winch launch, you're going up 1100 feet maybe," said Pollard. "You've got to find a thermal in a small area around the airfield. With a high cloudbase it's difficult. You've got thermals very far apart." That's why the strip is just inside an area that usually has a lower cloudbase.

"The wind hits the hills by Karotina (a nearby town) and goes up and produces rain here," said Pollard, "but 10 miles out there is ranching country, the Mwaiga plain. That plain carries on for 160 kilometres, maybe 15 to 20 inches of rain in a year. Out there the cloudbase can be 5000 feet higher. You get up in the area where the cloud is low, and then step off, and go up to the big ones."

Lately, Pollard has been focusing on taking tourists up. Not only are they more profitable than pilots, but they're easier on his equipment, and his nerves.

"Like the one I always think about, a Japanese pilot," said Pollard, "his English wasn't very good. I checked him out in the K-13. He'd done 200 launches. He should have been quite good and he was. I put him in the Swallow after I'd satisfied myself he was safe."

He said, "Thank you very much," with a bow, took off, did two good circuits and couldn't find the lift. I knew it was there because the K-13 was going up no problem. The third flight he found a bit of lift and hung on to it, but he wasn't properly in the middle of it. He concentrated on this, and didn't notice that he was coming down slowly and drifting away from the airfield. I was watching him on the ground, and getting a bit worried. He got lower and lower and lower, I started standing up on my toes to see what was happening. At 300 feet he carried on turning. I couldn't believe it. In the end he just got in. His wingtip must have been about that high above the fence. He'd looked at the altimeter, and seen 300 and thought "300 metres, we're okay," but he had 300 feet, and he didn't look out."

Experiences like that could prejudice anyone. Pollard says he's still happy to have glider pilots, but he's stopped advertising the club in European gliding magazines.

Kenya is famous for its wildlife, and that doesn't stop at ground level. It has one of the largest populations of soaring birds in the world. The marabou stork, a bare necked scavenger with a head like a pickaxe, contends with the wandering albatross for the world record avian wingspan.

"Three weeks ago I saw thirty or forty European storks stacked up in a thermal," said Pollard. "They were going south." He joined them only to have them peel off in all directions. Kenya's dozen or so species of large eagles aren't so timid. On more than one occasion an eagle has deliberately struck at Pollard's glider. Pelicans apparently have the best air traffic discipline, and all turn the same way in a thermal.

Gliding in Kenya is so exceptional that Pollard simply provides room and board, and experienced glider pilots, like Jack, come out to Kenya, usually from England, with a visitor's visa to work with him for up to three months. Because most of the manual work at the airstrip is done by Pollard's African employees, a visitor's work consists largely of passenger carrying, and lots of free soaring time. The club is right next door to Abredere National Park, so there is opportunity to see some of Kenya's world famous wildlife. Although Jack had been there almost two weeks, he hadn't made time yet for anything but soaring.

Though he's never had a Canadian work for him, Pollard said he'd be happy to consider any experienced pilot. He does insist on extensive experience with winch launches.

K13 photo in Kenya

# A beginner at ESTRELLA

## Ray Richards

Regina Gliding and Soaring Club

THE FLAG OF CANADA was flying at the Estrella sailport when I climbed from the Grob 103 Acro on February 12, 1989, a memorable date for me. On a high! Hooked! Addicted after my first lesson in glider aerobatics – it was truly a great feeling to experience the kindness the staff at Arizona Soaring, Inc. extended to a 60 year old Canadian snowbird. And it continued all during the week of the most fun I've experienced in a long, long time.

As a relatively new glider pilot with 70 hours of total time mostly in a 1-26 and having no more than soloed in a 103, the opportunity to acquire a sparkling mint condition Jantar Standard was irresistible. But to fly it safely? "An aerobatics course will move your flying competence up a level", I was told, with the implied, "and you need it!" Not without some trepidation to my ability to keep oriented and to enjoy aerobatics, the decision was made to take such a course and to buy the Jantar. Or was it the other way around? No matter, 'tis done.

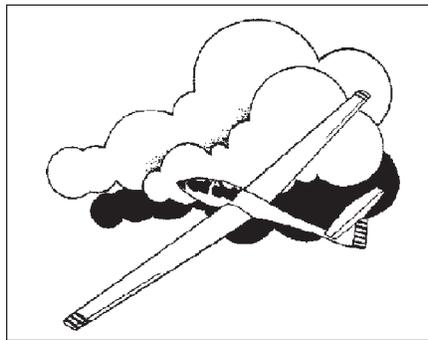
Recommendations from other members of the Regina Gliding and Soaring Club were such that Estrella and Les Horvath were booked. My evenings all winter consisted of pedalling a stationary bike and lifting weights at the YMCA to improve my conditioning in hopes it would help me handle the G's and inverted flying. I didn't want to come back and tell all the young fellows that I had washed out, so I worked hard to get whatever advantage fitness might provide.

The winter in Saskatchewan had been cold. A temperature of -30°C with strong winds was not uncommon. So my wife and I were looking forward to a week in Phoenix – a lovely, clean, spacious city where the people we met were friendly and helpful. Temperatures of 70 to 74°F in February made it very pleasant.

The fun of aerobatic flying can't be described. The thrill of feeling that, "by golly, I can do this and truly enjoy it," that you get after the first flight is simply grand. Aerobatic flying is not something you teach yourself as competent instruction in the right sailplane is a must.

With each lesson it gets better and better, particularly when you have instructors such as Les Horvath and Ken Woosley who praise the few good moves you make and patiently practise the not-so-good. When Les says that now he is going to do two consecutive rolls and you are going to take over and continue two more rolls it is quite a feeling. But then when four consecutive rolls are completed and the sailplane is on track with the fields below, well, all right, fabulous, what a tremendous feeling Les has contributed to a novice glider pilot.

Will this course make me a better glider pilot? That was the reason for taking it and I believe it will, for it certainly gave me an appreciation of what the controls are all for. Precision flying has a whole new meaning, for you learn that when Les says "100 knots and 4 G's are required," it won't do if only 95 knots and 3.6 G's are produced, And a roll isn't a roll even if the glider goes from right side up to upside down to right side up again. Oh no! The nose must describe a round circle and that tattletale string must stay in its proper place.



I can hardly wait for spring to come to the prairies, for the strip to dry and become useable, for the sun to shine warmly and the clouds to fluff up and up and up. The CFI will have check flights done and a new season will begin.

For those of you who, like me, didn't know a thing about aerobatics and what is required using a Grob 103 Acro, it is this:

**LOOP** from straight and level flight – look at your wingtip to judge the angle and dive at 45 degrees, at 100 knots pressure back on the stick to 4 G's on the meter, look up, away up, and as you sight the horizon relax the back pressure and check that the wings are level then, as the nose comes down, full back pressure on the stick again to 4 G's and climb to get back as much altitude as you can.

It is really quite a pleasant maneuver. I must admit that I had visions of hanging in the straps, not knowing where anything was, becoming queasy or even sick, of not being able to speak and so on. Reassuringly, Les told me at dinner one evening that in all his years of teaching aerobatics only two people had ever become sick, and then only after they landed. At any rate I felt great.

**INVERTED FLIGHT** The instructor will put you there or have you do it from a half loop which means that at the point where the back pressure on the stick is relaxed and your head is tilted away back to look up and you see the horizon instead of re-instating back pressure on the stick you put forward pressure on it – quite a lot of forward pressure – as now air-speed must be controlled at 80 knots. Keep the wings level as there may be a tendency to push the stick off centre. All this requires is a slight movement of the stick toward the "low" wing.

It is really quite fun and a whole new sensation to fly inverted. Now, how do I get right side up again? The simplest way is by doing a partial ...

**SPLIT S** inverted, straight and level at 80 knots, you then increase the forward pressure so that the speed decreases to the point where it starts to mush and as the nose comes down to 45 degrees the stick is brought back to full back pressure as in completing a loop at 4 G's and then regain as much altitude as you can.

All the aerobatic maneuvers are well described in Les Horvath's book, "*Sailplane Aerobatics*". Les emphasizes two points:

- 1 Never, ever, try to teach yourself aerobatics. Just don't do it on your own.
- 2 Unstable air can put a glider in very odd positions and aerobatic training can help you recover from those positions safely with a minimum of panic.

Reason enough for me to take some basic aerobatic training. Loop, half loop, inverted flight, inverted turn, split S, roll, half Cuban eight, half roll to inverted, half loop and half roll, Cuban eight, roll and 90 degree turn, hammerhead. A few days ago they were mysterious names and now they describe a feeling that will live with me especially each February. And when my secretary sees me gazing out the window at some fluffy cumulus (when I'm at work is when the weather is good), she'll back out of the office and leaves my reverie uninterrupted for 20 minutes of dreamy aerobatics. •

# FIXING IMPOSSIBLE LEAKS

## Andrew Jackson

Regina Gliding and Soaring Club

SO, THERE I WAS with a leak in my rear static line. Painful. I argued with myself, Ventus static lines, especially the back ones, don't leak! Only the ones at the front — the ones you can get at — are allowed to leak. How could this have happened? If Holighaus had built it right, this wouldn't have happened. I should write to him and get him to fire his rear static line installer or demote him to the position of front static line installer.

Nervously, I scanned "SOARING" and back issues of the "Scottish Bishop's Gazette" to see if anyone was parting with one of those small trained mice (that run up Scotsmen's kilts) you always find scurrying up the back of sailplane fuselages fixing rear leaking static lines and leaving mouse droppings everywhere. I guess the run on them must have been heavy as there weren't any for sale. This really was too bad. Maybe I could trade the sailplane for something without rear static leaks. No offers. I was just going to have to fix it. Thoughts of AMEs at \$100 an hour and non-matching paintwork did little to pacify me.

The whole issue was Wil Schuemann's fault anyway (as he told me that his vario in my glider was behaving the way it was because of a leak, which I checked and found to be correct). I decided to call him once more. Being impressed with his intelligence and precise and logical thought process, I thought he might have some ideas. "No problem", he said — which was easy for him to say, he flies a Discus. Must get one of them — Schempp's rear static line installer must have improved!

First, I had to determine where the leak was — oh, before that, for all you guys wondering how you know if you have a leak — the chances are you all have leaks. The easy check is to tape up the static ports, disconnect the static line on your instrument and suck. The static line that is, not the instrument! If there is no leak, you will eventually fall over. If it leaks, you can breathe a bit so it takes longer for you to fall over. To determine where the leak is, wriggle down the fuselage as far as you can and clamp the line and repeat the sucking.

If the leak is between the instrument and the clamp, it is easy to get at and fix. So I won't dwell on that here. If it is not, you're right where I was.

Generally speaking, if the static leak is aft of the trailing edge position in the fuselage, it is inaccessible. But, and this is the important part, it is unlikely to be a leaking line — it is more likely to be where the static fitting is bonded to the inside of the fuselage wall. I was not convinced, but Wil reassured me that that made it easier.

A quick fax to Schempp-Hirth got me a cross-sectional drawing of the inside of the fuselage at the static port position and showed that there was an inverted cone covering the ports on the inside which then connected to the main line (see diagram) and a quick calculation told me the volume of that cone was 2.5 cm<sup>3</sup> (more of this later).

Wil told me all I had to do now was to turn the sailplane on its side, tape up the top set of ports and squirt epoxy glue into the set of ports that were on the underside. Pardon! Squirt glue into

my static ports. Ha, ha. Why didn't I just wrap a sheet of resin soaked fibreglass around the outside — that would bung everything up just as well.

Wil Schuemann is a very smooth talker. Next Saturday, my ship was on its side, ports taped up and a piece of tape with a small hole in it taped over the lower port and a large syringe stolen from the local hospital (everyone has a friendly doctor)... God knows what they use that size for.

Anyway, I then sucked the epoxy into the syringe. (NOT, NOT, NOT under any circumstances 5 minute epoxy or you really will be using your front static ports).

Hold the syringe against the hole (without the needle) and inject 2-3 cm<sup>3</sup> of glue into the hole. Actually I put 6 in, on the basis that if a little is good, more is better — so much for the technical calculation.

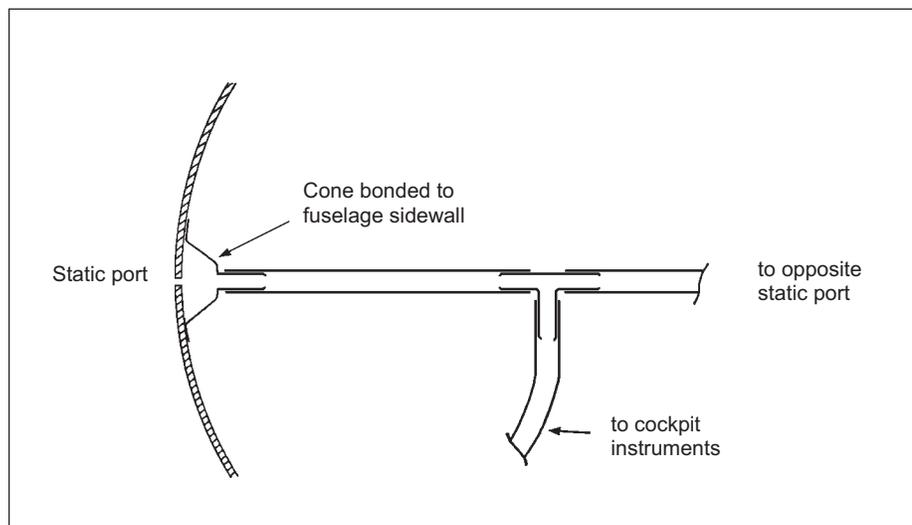
Quickly tape up the hole you have just injected the epoxy into and go to the front of the sailplane. Pick up the other end of the static line, and wait for it — blow down it; don't suck. This pressurizes the line and forces the glue into the hole where it is leaking. At this point, you have a feeling of impending doom, especially if you haven't listened properly and have used 5 minute epoxy!

Connect a "T" to the end of the line you have just blown down and put an ASI onto it, blow down the other end of the "T" until 100 knots registers on the instrument and clamp the line. If any epoxy at all has made its way into the leak, the reading should read steady. (This test should, of course, have been carried out at the beginning to determine the rate of leak, ie. speed at which the ASI needle drops to zero.) If it doesn't you are what is known as a casino's best customer! So, you had better turn the sailplane over and repeat the exercise on the other static port — which you should have chosen first!

You may be wondering what is happening to the epoxy about now. Well, it is very close to starting to set. If you used 5 minute epoxy, it has already set and you now have a different problem.

Untape the lower hole and gently blow down the line. Low and behold, out comes the excess epoxy. When no more comes out, clean up the hole with a pipe cleaner dampened with lacquer thinner — job done. Check the system with the altimeter once more and smile. The whole process took me about 20 minutes and about nine thousand dollars of phone calls to the wonderful Wil Schuemann.

If you want more information or would like to consult the Regina Branch of Schempp-Hirth, give me a call at (306) 584-0302 evenings or (306) 525-7487 days.



# FAA ESTABLISHES UNIT TO STUDY HUMAN ERROR

## Tina Adler

American Psychological Assn.  
"Monitor", March 1989

THE PSYCHOLOGIST heading a new \$25 million effort by the FAA to reduce human error in airline accidents said he will be particularly interested in looking at how small-group dynamics contribute to human error, and what the appropriate roles are for humans and machines in aviation.

Clay Foushee, formerly an aviation psychology researcher at the National Aeronautics and Space Administration at Ames Research Center in Mountain View, California, was in January named FAA's chief scientific and technical adviser for human factors.

In a bill passed in September, Congress ordered the FAA to expand its human factors research, including long-term studies, and to establish a human factors committee. The bill provides \$25 million "solely for human factors research projects and activities." The 35 year old Foushee will head the committee and coordinate the FAA's activities with the aviation industry, other government agencies, the military and foreign civil aviation officials, the agency announced in January.

The majority of airline accidents are still due to pilot error and the number of such accidents has changed little in recent years, according to government statistics.

The FAA has been studying human factors for at least 10 years, Foushee said. Plans for organizing the human factors research already underway in various FAA departments had been in the works prior to the legislation. However, the legislation, and what Foushee called the "healthy" research budget it provides, will give human factors research a needed boost.

"We feel we now have a much increased mandate to complete this research," he said.

Foushee believes some of the most exciting research on human factors will be in the area of determining which activities should be delegated to a human and which to a machine. The idea that machines can be used to monitor people's performance "holds a great deal of promise," and the role of the pilot is changing from active controller to systems manager, said Foushee, in an interview at the FM. However, psychological research has found that people don't perform as well when they are not actively involved in a task. They are also sometimes hesitant to overrule computers, even if the computer appears to be malfunctioning, said Foushee, who has a private pilot's licence.

Ideas on how to determine the appropriate role for machines vary, he said. Engineers recommend automating humans out of the picture, "which can correct some nagging problems that are perpetually around. But, reducing humans' role brings up new problems. For example, sometimes pilots aren't aware of the plane's location in the air."

As a psychologist, Foushee said he has always been interested in group dynamics. In his role as the human factors chief, he is interested in learning, for example, how airlines can select and train people to perform well in a group the size of an airplane crew, or why two groups with the same technical training perform differently. While small-group dynamics has not always been included in the definition of human factors, the committee wants to expand the definition, he said.

One of the committee's first projects will be to complete in the next six months the first national human factors plan, with input

from industry, academics and NASA. The plan will address all the FAA's major activities, including air traffic, regulation and certification, research and development, and administration.

The plan will also describe who will do the human factors research – the FM itself, NASA or universities, said Foushee. In the future, the committee will be responsible for making recommendations for guidelines and regulations concerning human factors based on the research.

Pilot error was a factor in about 63 percent of all accidents involving large carriers and commercial flights in 1985, the latest year for which the National Transportation Safety Board has compiled statistics. Errors by all other cockpit and ground crew members were a factor in 36.4 percent of all accidents. The number of accidents for all scheduled airline service has varied since 1978, from a low of 13 accidents in 1984 to a high of 29 in 1988, according to preliminary safety board figures.

In explaining why human error is still responsible for so many accidents despite the many years of research addressing the problem, Foushee said scientists "never had the opportunity to attack these problems – researchers haven't been able to make their case." As a result, aviation training has continued to focus on developing technical expertise. But the research is gaining new respect as the field matures and the findings are "beginning to come on line," he said. This is due to a large degree to the increasing sophistication of the human factors research and training tools, such as simulated cockpits.

Conducting research and getting information on human error is not always easy, as pilots and airline representatives have a natural reluctance to be investigated or report on their mistakes, according to some researchers. However, Foushee said this has not been a problem when research programs are designed with appropriate consultation of management and labour, even when addressing such sensitive issues as pilots falling asleep on the job. In addition, the FM has a confidential reporting system through which airline crew can report problems without being identified.

In the bill, Congress calls on the FAA to "supervise research to develop a better understanding of the relationship between aviation accidents and between human factors and air safety, to enhance air traffic controller and mechanic and flight crew performance, and to develop a human factor analysis of the hazards associated with new technologies to be used by air traffic controllers."

The bill also requires the FAA's medical research facility, the Civil Aeromedical Institute in Oklahoma City, to conduct human factors research on the effects of drugs, disease and disability, automation, stress and aircraft design and other factors on human performance. Foushee said his office will work closely with the institute.

# RISK MANAGEMENT

## Getting a handle on the hazards

### Ian Oldaker

Chairman Flight Training & Safety Committee

WHAT IS RISK MANAGEMENT? I guess one of the examples that comes to mind is the seat harness provided in one's aircraft. There is a chance that we could leave the seat due to turbulence, and the risk is loss of control. So the risk is reduced as much as possible by strapping ourselves in.

Very recently the Flight Training and Safety Committee went through the risks that are inherent in soaring – actually we went through as thorough a review as we could of the risks to all the types of person subject to risk, starting with the “innocent” bystander and trying to cover all types of glider and tug pilots. We came up with some very interesting concerns, and these in turn led to answers. In a series of articles, I shall try to cover all areas.

But just a bit about the method first. It is possible for a group of people to think of a multitude of risks, risk situations, and people subject to risk in a given activity. So we started by identifying the people at risk in soaring – who are they? Well, before I give you our list, try now to identify the categories of persons in soaring, because the risks differ for each category. I have given you enough clues in the previous paragraph to get at least ten – yes ten! We listed thirteen. At the end of this article, Table 1 shows our list.

Taking each category in turn we identified risks associated with a flight itself and risks associated with the pre-flight and the post flight activities. The flight was further subdivided into the takeoff (defined as the flight up to about 300 feet height), the flight itself, and the landing (defined as the circuit, landing and ground roll).

Risks include, for example, a de-briefing on the runway – yes, I kid you not – it does happen, tow rope catching on the approach, getting downwind during flight, perhaps a ground loop following a landing, and improper rigging.

Although the frequency of de-briefing on the runway may be medium, the consequences

are not too severe – a sailplane pilot in the circuit may have to plan to land to one side of the runway. However, the consequences of the very low frequency risk of improper rigging are very severe, and it would be appropriate to take some immediate action to warn pilots if such a situation appears to be on the increase.

In our evaluations therefore, we rated all risks according to the categories in Table 2. This shows that a category 1 risk (low severity and low frequency) rates a minimum effort to be spent on risk control, whereas a category 3 rates implementation of some form of control or ameliorating action in say 6 to 18 months. A category 4 risk requires immediate action.

In subsequent articles I shall address the worst category risks, and what you and I can do about them. Before we get to these, I would like you to try listing the situations that lead to risks in your personal soaring. Take some paper when you have a few moments and follow the example in Table 3 for the category of pilot you are. Then repeat this for another category, for example you might be a winch operator too. Keep your list, and when the article on your risks appears, compare. If you are an experienced pilot, it would be interesting to see what risks you assign to the less experienced pilots, particularly the early solo pilot, and to the tug pilot perhaps.

Arising out of this exercise we found several concerns with our facilities (our clubs, for example) and our equipment. In the balance of this article, therefore, I will discuss our runways and facilities as they affect safety, with particulars relevant to recent accidents and incidents. We'll start on the ground.

### Tiedowns, ground facilities

Clearly if we never left the ground, we would have no accidents, or would we?

At the club we should have an area designated for rigging and derigging, where vehicles are controlled so as to prevent running or backing onto a wing or canopy – yes it has happened. If a visitor drives onto the property they should not be able to drive anywhere near a sailplane, particularly one in pieces on the ground! I know you will argue that we can't prevent this sort of thing, but I will argue that we must minimize the chances of it happening by controlling access and by designating areas, as suggested above.

Then there are the inadequately tied down sailplanes that pull out their anchors. There really is no excuse as we know that the wing of say a 2-33 (tail down) will develop enough lift

with a mild wind to lift it. The increased forces in a squall will test the anchor. Okay, a 90 mph wind is rare, but we know it occurs occasionally – is there an excuse now? The expense of an adequate tiedown is small compared to the alternative after the blow over.

### Runways

Well, it would be great to have lots of space and all sorts of clearance at either end and to the sides of the runways. Even if we have this space, accidents seem to happen. Let's examine one or two and suggest some actions.

Landing short is fairly common so we should examine the approaches to ensure there are no barbed wire fences hidden in long grass. Trees and bushes tend to keep pilots higher on the approach so a fence here is less of a hazard – however, our pilots have wrapped sailplanes around trees and have cart-wheeled towplanes trying to avoid powerlines close to the runway. In the first case we ask, should not the tree have been removed and in the second, was the runway location chosen wisely? Before choosing a site it should be examined critically to evaluate all types of situations (eg. downwind landing in direction X) to allow the club CFI and Flying committee (if it exists) to implement special operating procedures to avoid the potential accident situation. For example, it might be an operational rule that allows operations on runway 260 with the wind (coming over the clubhouse) at 280 degrees or more, only when the wind is less than 10 knots.

When the runway was new the approach areas probably were cleared of bushes, etc. in case of an overrun, emergency landing or undershoot. Are these bushes now somewhat taller? Will they damage a sailplane if it lands amongst them? A K-13 was badly damaged last year after a low level release, and a landing in what its pilot chose as his emergency landing area amongst bushes/small trees.

Have you recently examined these areas around your club – has your Flying committee and Safety Officer done so – do you know where you can put down safely, if you should undershoot or have to release say at 50 to 100 feet? Some answers are not too happy, I suspect! What are you going to do about it, because it might be you next?

Grass – cut it! Catch a wingtip in it and wham, a few kilobucks later you have your sailplane repaired. We must recognize that pilots will drop a wing on the rollout or not go straight due to the crosswind, so let's control the risk of damage due to a ground loop, or due to running off the runway by removing long grass and rocks; yes, rocks damaged a sailplane on rollout last year. And while working on the runway, fill in those holes that cause bumps and damaged backs. I'm referring to the rear seat jockeys in 2-33s in which the seating position cries out for

Table 2

**Risk assessment guide**

		Severity	
		Low	High
Frequency	Low	1 minimum time and effort spent on risk control	3 implement risk control measures over 6 to 18 months
	High	2 implement risk control measures over 2 to 5 years	4 immediate action needed to control risk

Table 3

**Assessment of risks for licensed pilots**

PRE-EVENT	EVENT			POST-EVENT
	Take-off	Flight	Landing	
1. Minor physical risk when lifting and moving glider. 2. .... etc.	1. Dive brakes open on take-off 2. .... etc.	1. Dehydration during long flight. 2. .... etc.	1. Cross-wind landing 2. .... etc.	1. Being hit while on the runway. 2. .... etc.
Prepare your own list as above, categorize per Table 2, then reorder as below:				
CATEGORY	RISK			
1.	Being hit while on runway ..... .....			
2.	Minor physical risk when lifting and moving glider. ..... .....			
3.	Dehydration during long flight. Cross-wind landing. ..... .....			
4.	Divebrakes open on take-off. ..... .....			

better lumbar support to maintain a proper arch in the small of the back. Rough runways also damage sailplanes and tugs, IS28B2 and Blanik undercarriages, and Citabria tail springs, not to mention the instruments in our long-suffering, skid-equipped machines. We may not be able to fill the cracks in a dry prairie runway I know, but I sometimes wonder whether we care enough for our aircraft, when a smoother runway would be nice, and a lot less expensive in time and money to work on.

**Wires**

Do you have power lines nearby? These have caught sailplanes in the past. Recognizing the chance of an undershoot, do you have wires on the approach which could be rerouted or buried? If the answer is yes, you should consider reducing the risk, which might be to bury the wires, or to mark the runway threshold further up the runway – and strictly discourage short landings even by experienced pilots. You know what they say. “If he can do it, so can I (even if I am only just solo!)”

I haven’t made up the above stories, they have all come from incident/accident reporting to the Association, and we should all note that many of the incidents mentioned are generic, they could happen to anyone in any type of machine. The more we share this type of information the more we can learn and so avoid duplicating the mistake, and your committee is working to get this information out to you faster and more effectively in future. Now we need your help in sending in your reports – however short.

Okay, so you have just read this late one evening at home, or after a day’s flying – now is not the time to do the thinking and making up your lists of risks I suggested earlier. Make a mental note or put it on the fridge door perhaps, to go back later and review this article and look at the lists in Table 3 and make your own. Merely having thought of your own risks will make you a safer pilot.

Table 1

**Category of person subject to risk in soaring**

- 1 Visitor
- 2 Official (contest director, flight line crew, etc)
- 3 Ground crew (pilots)
- 4 Ab-initio pilot or student pilot
- 5 Early solo pilot (first few solos)
- 6 Experienced solo pilot (nearly licensed)
- 7 Licensed pilot (newly licensed, old hand, fair weather type, etc)
- 8 Power conversion pilot
- 9 Contest pilot
- 10 Instructor
- 11 Tug pilot (seasonal, trainee, first tows, etc)
- 12 Visiting power pilot
- 13 Winch operator

# FLIGHT TESTING THE TOYOTA

**Tony Burton**  
Cu Nim

THIS WHOLE BUSINESS STARTED when I got a phone call in mid-March from Chuckanut Soaring in Bayview, Washington.

It turned out that a German factory team from Grob was down in Fremont, California doing a three-day "production line" fix on the Grob 103 AD replacing the wing spar spigots that cracks had been found in, and if the Alberta Soaring Council and Vancouver Grobs could get down to Bayview (who had two), then with four to fix, perhaps the team would move north to do ours – were we interested?? A call to Germany established that their team would come to the Pacific Northwest for a slight increase in cost, as normally they wanted the team to work on at least seven in any given spot. After a lot of phoning around (I also tried to interest the Regina club to join in as the unit cost of the AD would drop a little), things began to come together.

Perhaps I should back up a little here. There had been some controversy about this AD as there was a suggestion that it was not as critical as advertised – the crack in the spar end pin weld was found after Slingsby in England life-tested a Grob 103 wing to some thing like 14,000 simulated winch launches. What's more, on discussing the problem with Herb Lach, the SAC Technical Committee Chairman, who was talking to MoT, there were no kits in North America yet anyway, so perhaps it could be put off until next winter and maybe aerotowed and non-aerobatic ships could be excused, etc. etc.

Suddenly, here were these Germans in the States doing these mass replacements, and our Grob was snowed in at the Black Diamond hangar, and do we do it or not? The ASC executive said yes, especially since it seemed to be a critical structural fix (the FAA was only allowing three repair shops in the US to sign off the work).

On Saturday morning March 18, a few bodies showed up at Cu Nim along with a rented snowplow, and an hour's work cleared the hangar doors and a path to the road. In short order, three gliders were in convoy down to Claresholm for spring work. With the Grob in my back yard, Ursula and I finally got the chance to fit and sew a nylon rudder sock, and attach some mud guards to the trailer (the wheels threw a lot of crud up onto the wings if the road was dirty). The Saturday tow was also the very first trip in our brand new white Toyota pickup which had been delivered to us a couple of days before – it immediately got called "Whitey" and our old reliable yellow '80 pickup got called "Rusty" (on account of its skin cancer), but that was soon felt a little mean-spirited because it had been good to us, so the name changed to "Trusty". It'll now be our junker.

Sunday and Monday mornings were spent in a rush to get the 2/89 *free flight* finished and off to the printers, and the pickup loaded. Three parachutes were going to be dropped off for repack in Abbotsford, and two big boxes of Lloyd Bungey's *Trying their Wings* BC history book were going to be delivered to the Timms for the BC Soaring Society, and FAML had to be at Chuckanut first thing Wednesday morning.

Also, hauling a big trailer is not quite recommended while breaking in a new engine, so I would have to be as gentle on the car as possible, with easy speeds and low gears on the hills. We got on the road Monday afternoon (so that we could be far enough into BC to make it an easy daylight trip to Surrey the next day), and got to Golden. Not without incident though, as a test lift on the hitch on a walk-around at Canmore showed the whole bumper moving! Both bolts holding the left side of the bumper to the frame had worked loose and the nut on one of them had almost backed off completely – it looked like the mechanic had got distracted when he was bolting on the bumper at the dealership.

The drive on Tuesday was uneventful except the weather became soggy and it was pretty slushy over the Coquihalla Pass – the mud guards were doing their job though.

Arriving at Christine and Peter Timm's place at five, we had a short time to relax and a quick supper because it was the evening of Vancouver Soaring Association's club meeting, and George Lee had been talked into attending. He was in town during one of his regular runs from Hong Kong (he drives for Cathay Pacific Airlines, I think). For new members to our sport, George Lee is a recent three time World Champion in the Open class for Britain. Now VSA has, as do most clubs, some members with very positive opinions about the current subject of importance; but I must say that I detected a great deal of understated restraint and willingness to get the controversial stuff out of the way as quietly and quickly as possible in deference to all the honoured guests present.

Following business, George gave a very interesting, off-the-cuff talk on a 1000 km FAI triangle flight he completed in January out of Waikerie, Australia in an ASW-20B, (he doesn't think much of zig-zag type tasks). The conditions were not classic, but good enough to do the job and claim a British record. George is a quiet gentleman, a good speaker, and everyone knew they were privileged to be in the same room listening to him. Ursula presented him with a copy of *Stalking the Mountain Wave*, but he declined to take one of my "DAMN, I'M GOOD!" T-shirts. Don't know why. A slide show was also given by one of the members, showing some really spectacular air shots of the soaring over the mountains at Pemberton, BC, where VSA has a summer camp.

The next morning we made it down to the hangar of Keith Allan and Nancy LaRiviere in Bayview where the three man Grob crew arrived 20 minutes later and proceeded to attack the gliders. It was an awful sight to behold. First they put a dab of putty on the spar pin and assembled the wings, the amount the putty was squeezed was carefully measured to determine wing spacing. Then all eight wings were lined up and the pins and their supporting structure between the solid fibreglass spar caps removed with the aid of an abrasive disk and a big hammer – like I said, awful, but they had done this so many times before I reckoned they knew what they were doing. The new pins were jigged into place, all the spaces well buttered with a thick epoxy mixture and the whole spar end placed in a cardboard box with hot air blown in to harden the work.

At that point we flogged a bunch of books and T-shirts to Chuckanut and then left to visit Bob Lamson (the Alcor builder) in Seattle and then relatives in Vancouver for two more days. The spar end was fibreglassed over the next day, cured for one more day, then the gliders were rigged again (a necessary precaution) and then signed off by the Grob dealer from Ohio. The repair team drove off to Florida in their van to do the next batch. Keith and Nancy were very obliging in offering their facilities at no cost to have this work done; but as Keith said, he is in the business of providing good service to glider pilots. Pilots evidently agree, as I saw several BC licensed glider trailers parked alongside the hangar.

Of the many power planes parked on the ramp, one really stuck out – one of those few heavily-modified powered Schweizer 2-32s which were used in Vietnam as quiet flyers to spy on enemy movements. The aircraft has a six-bladed prop geared to run at 600 rpm and the exhaust is heat-shrouded along the entire right side of the aircraft. I'd have loved to have seen (or heard) it fly.

Sunday the 26th we returned to pay the bill and collect FAML. It had been wet most of the time, and I heard water sloshing in the wings when I lifted the tongue of the trailer. Even with everything taped up, water finds a way! So we unloaded the wings again and sat them flat and tip high to get them drained properly through the weep holes. That day's drive got us just past Kamloops. We saw a lot of hang glider rigs on the road in the Ashcroft area – it turned out that an Easter meet had been rained out.

Monday was showery again and the Rogers Pass highway was cleaner than expected but fearfully frost-heaved (hove?) in some spots which caused the trailer to rock heavily on the hitch. When the rocking got bad even when we drove over some bumps quite

continued on page 14

# Hangar Flying

## PERFORMANCE ENHANCEMENT OF MODERN GLIDERS

This excellent thirty page presentation was made at the Convention of the Soaring Society of America in Los Angeles, February 25-26, 1989. The article is a compilation of techniques to make gliders perform better and is of special interest to people who have modern sailplanes or have an academic interest in the subject. Topics described are:

### Quick performance gainers —

- sealing
- tail skids
- sanding
- cockpit ventilation
- Mylar seals
- vortex generators
- turbulators

### Labour intensive modifications —

- wing profile
- wing root/tip mods
- winglets
- tip and tail tanks
- riblets
- automating flaps
- bug wipers
- new airfoil sections
- elevator mods

and includes photographs of a modified sailplane.

Copies can be obtained at a cost of \$15 from the Canadian Advanced Soaring Group through Vicky Stamison, RR 2, Hammond, Ontario KOA 2A0.

phone (613) 957-0290  
fax (613) 487-2855

Proceeds from sales will support the Canadian National Team expenses at the 1989 world contest!

### Peter Masak

(Member Canadian National Soaring Team)



The highly modified Schweizer 2-32 quiet flyer, privately owned and rebuilt from surplus parts.

## CHARLES' EXCELLENT ADVENTURE

Kris and I enjoyed our '87 trip so much (*read ff 2/88*) that we went back and visited the Waikerie club and friends in Adelaide this winter. We arrived on a magnificent day in the middle of the Oz Nationals. In fact January 15th, Day 6, was when they made history by setting a 1005 km task for the Open class!

Launching started at 10:30 and Kurstjens made it back at 20:38, ten minutes before official dark. He reported a final glide of over one hour, from a climb to 12,500 feet. Two pilots, Buchanan and Bourgard, landed at 975.7 and 974.5 km as light ran out, rather than face the risk of not reaching the lighted runways.

Meanwhile back at base, six non-competing pilots completed Gold C climbs right over the airfield! Locals remarked that it had been a spectacular day even by their standards — like once in two or three years. The 15 Meter and Standard class winners completed 500 km triangles with speeds of 135.77 and 131.33 km/h respectively. Awesome!

Kris and I had booked a Twin Astir and had 44 hours of enjoyable flying, with a 510.2 km triangle and a 79.4 km/h 300 km triangle as our top days.

On the off days, we meandered through the nearby Bourassa Valley for wine tasting and, one quiet dawn, hot air ballooning. GREAT EXPERIENCE. "Professor" John and his partner courageously wafted six and three of us neophytes in two balloons out of a tree-surrounded cricket pitch and away. Altitude was varied between half tree height to 2500 feet.

Control of direction, using the stratified airs and hill effects was marvellous to us. We started together, went as far apart as a kilometre and got back to land side by side an hour later. To the amazement of the local gentry of the ex-mining town of Kapunda, our "courageous act" was duly and solemnly toasted at a champagne breakfast organized instantly after all had helped deflate and roll up the balloons and gear. Incidentally it took 20 minutes to remove all the hot air from the largest 187,000 cubic feet unit. Flying is still an adventure!!

### Charles Yeates

Bluenose Soaring

## THE 1987 SAC FLEET

The following aircraft types and numbers were in the SAC insurance plan last year.

### Gliders

Alcor	1	LS-4	5
Astir	2	L-Spatz	1
Astir CS	1	M-100	1
Astir Std	7	Mini-Nimbus	2
Astir Twin	5	Monerai	4
ASW-15	4	Mosquito	3
ASW-19	8	Nimbus 2	1
ASW-20	9	Nimbus 2B	1
ASW-20B	2	Nimbus 2C	1
ASW-20C	1	Phoebus	2
ASW-20FP	1	Phoebus B	1
Austria	1	Phoebus C	1
Austria SH1	2	PIK-20	3
Bergfalke	4	PIK-20B	7
BG-12	2	Pilatus B4	6
Blanik L13	25	Pioneer	1
Cherokee	2	Pirat	1
Cirrus, Open	4	Puchacz	2
Cirrus, Std	12	RS-15	4
Cobra	2	Salto	1
Dart 17	1	Schweizer 1-23	4
DG-100	1	Schweizer 1-26	22
DG-200	1	Schweizer 1-34	3
DG-202	1	Schweizer 1-35	2
DG-202/17	1	Schweizer 2-22	12
DG-300	1	Schweizer 2-33	23
DG-400	1	SF-26A	1
Discus B	1	Skylark 2B	1
Duster	3	Skylark 3	1
Grob 109B	1	Skylark 4	5
Grob Acro	1	Tern	4
Grunau Baby	1	Tinbus	1
Hornet	1	Ventus B	4
HP-11	3	Zugvogel	1
HP-14	3	Zugvogel III	1
HP-18	1		330
Jantar Std	20	<b>Towplanes</b>	
K-13	3	Bellanca Scout	7
Ka6CR, E	18	Cessna 150	4
K7	5	Cessna 172	1
K8	4	Cessna L-19	5
Kestrel 19	2	Challenger	1
Lark, 1 seat	4	Champion	1
Lark, 2 seat	7	Citabria	15
Libelle, Club	1	Pawnee	1
Libelle 201	9	Piper 180	1
Libelle 301	3	Super Cub	6
LS-1	2		43

Data supplied by Al Schreiter

## SSA CALENDAR PHOTOS

The Soaring Society of America encourages Canadian photographers to submit photos for their consideration. The SSA calendar regularly accepts submissions from photographers around the world. You may find, as we have, that publication of photos acts as a stimulus to submit more material. Feel free to submit photos at any time. SSA pays a \$100 honorarium for photos that are used.

SSA address: Box E, Hobbs, NM 88241

Larry Sanderson, SSA Executive Director

## GLIDING IN FRANCE

There are some 160 gliding clubs in France. SAC has a listing of French gliding clubs, with addresses and telephone numbers. It may come in handy if you are planning a European vacation. Please send \$3 to cover copying (it's 19 pages long), postage, and general fiddling about to:

Soaring Association of Canada, Suite 306,  
1355 Bank Street, Ottawa, Ontario K1H 8K7

We also have information on licensing requirements for flying solo in France.

Il existe quelque 160 clubs de vol à voile en France. Si vous songez à faire un voyage en Europe, vous voudrez peut-être vous procurer leurs adresses et leurs numéros de téléphone auprès de l'ACVV. Pour obtenir cette liste, vous devez écrire à l'adresse suivante et payer \$3 de frais de photocopie (la liste compte 19 pages), de manutention et de main-d'œuvre:

Association Canadienne de Vol à Voile  
pièce 306, 1355 rue Bank  
Ottawa, Ontario K1H 8K7

Vous pouvez également communiquer avec l'Association pour obtenir des renseignements sur l'obtention d'un permis de vol solo en France.

## THE SOARING PILOT'S STRESS MANAGEMENT DIET

Br'kfast: 1/2 grapefruit  
1 slice of whole wheat bread

Lunch: 4 oz. lean, broiled chicken breast  
1 cup steamed zucchini  
1 Oreo cookie  
herbal tea

## FLIGHT TESTING THE TOYOTA

continued from page 12

slowly, I smelled a rat and stopped. On lifting the trailer off the hitch, we found that the bumper was loose again, with all four bolts less than finger tight this time and working off! (The dealership mechanic was now somewhat off the hook, but the bolts were sure going to have to be changed so that the threads weren't bearing in the hole, and the

Mid-afternoon snack:

rest of the package of Oreos  
1 qt. of Rocky Road ice cream  
1 jar hot fudge, incl. nuts, whipped cream, and cherry

Dinner: 2 loaves of garlic bread  
1 lg. pepperoni & mushroom pizza  
1 lg. pitcher of beer  
3 Snickers candy bars  
1 frozen cheesecake eaten directly from the freezer.

How to count your calories:

- If no one sees you eat it, it has no calories.
- When eating with someone else, calories don't count if you both eat the same amount.
- If you drink a diet soda with a candy bar, they cancel each other out.
- Food used for medicinal purposes, such as hot chocolate, toast, brandy and Sara Lee cheesecake, never counts.
- If you fatten up everyone around you then you will look thinner.
- Movie related food such as hot dogs, popcorn with butter, mints or licorice, don't count because they are part of the entire entertainment package and not a part of one's personal fuel.
- Cookie pieces contain no calories. The process of breakage causes calorie leakage.

from Edmonton Soaring Club "Towline"

## EARLY WORLD CONTEST NEWS

A full report on the World Gliding Contest in Austria will appear in the next issue. As this one goes to the printers, the contest has just started. Some items of interest are:

- Canadian team pilots are Jörg Stieber, Harry Pölzl, Peter Masak and Dave Webb.
- 120 competitors are on site.
- Some turnpoints are over Hungary, and the practice day had a task over the border.
- Harry, Jörg, and Peter arrived early and flew elsewhere for 13 days and a total of 130 hrs. Dave joined the team at the contest site.
- Jörg and Peter competed hors concours at a Regional contest in Lienz, gaining valuable experience flying with the local pilots and checking out the Alps, various TPs, racing routes, and potential landout areas.
- Pre-contest training was marred by the death of the Austrian top pilot, Rudi Goebels, in a winch launch accident on 5 May, and by a midair between a British and Chinese competitor during the practice week. The Chinese glider had major damage and withdrew.
- Day 1, 14 May, it rained over contest area, and the next day, strong winds and marginal lift cancelled the task again.

nuts and washers given a bountiful smear of Loctite.)

So we arrived back in Claresholm with 3500 km on the odometer – the more comfortable seats, the stereo FM, and quieter ride of the well broken-in truck a treat on this trailering trip of a less than routine nature.

## SAC DIRECTORS & OFFICERS

**PRESIDENT & DIRECTOR-AT-LARGE**  
Gordon Bruce (1989)  
154 Shannon Pk,  
Beaconsfield, PQ H9W 2B8  
(514) 697-1442 (H)

**VICE-PRESIDENT & PACIFIC ZONE**  
Harald Tilgner (1988)  
90 Warrick Street  
Coquitlam, BC V3K 5L4  
(604) 521-4321 (H)  
(604) 521-5501 (VSA)

**ALBERTA ZONE**  
Al Sunley (1988)  
1003 Keith Road  
Sherwood Pk, AB T8A 1G2  
(403) 464-7948 (H)  
(403) 453-8330 (B)

**PRAIRIE ZONE**  
Paul Moffat (1988)  
1745 King Edward Street  
Winnipeg, MB R2R 0M3  
(204) 633-5221 (H)  
(204) 947-9400 (B)

**TREASURER**

vacant

**ONTARIO ZONE**  
Ulli Wernburg (1989)  
1450 Goth Ave  
Gloucester, ON K1T 2E4  
(613) 523-2581 (H)

**QUEBEC ZONE**  
Alex Krieger (1989)  
1450 Oak Avenue  
Sillery, PQ G1T 1Z9  
(418) 681-3638 (H)  
(418) 656-2207 (B)

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

**DIRECTOR-AT-LARGE**  
Chris Eaves (1988)  
185 Canterbury Drive  
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(519) 452-1240 (B)

**EXEC SECRETARY**  
Nancy Nault  
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Ottawa, ON K1H 8K7  
(613) 739-1063  
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## COMMITTEES

**AIR CADETS**  
Gordon Bruce  
154 Shannon Pk, Beaconsfield, PQ H9W 2B8

**AIRSPACE**  
Dave Baker  
12546 22 Avenue  
Surrey BC V4A 2B7

**FLIGHT TRAINING & SAFETY**  
Ian Oldaker  
142 Mill Street  
Georgetown, ON L7G 2C1  
Mbrs: Mike Apps  
Geo. Eckschmiedt  
John Firth  
Fred Kisil  
Alex Krieger  
Paul Moggach  
Richard Vine

**FREE FLIGHT**  
Tony Burton  
Box 1916  
Claresholm, AB T0L 0T0

**HISTORICAL**  
Christine Firth  
542 Coronation Avenue  
Ottawa, ON K1G 0M4

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

**MEDICAL**  
Dr. Peter Perry  
695 Coronation Blvd  
Cambridge, ON N1R 7J9  
Mbr: Dr. W. Delaney

**PUBLICITY**  
Terry McElligott  
661 Dodsworth Crescent  
Mississauga, ON L4Y 2H6

**METEOROLOGY**  
vacant

**SPORTING**  
Colin Bantin  
1374 Avenue Road  
Toronto, ON M5N 2H4  
(416) 483-9608  
Mbrs: Robert DiPietro  
Wilf Krueger  
Al Sunley  
Hal Wernburg  
Ulli Wernburg

**CONTEST LETTERS**  
Robert Binette  
3819 rue Berri  
Montreal, PQ H2L 4H2

**FAI AWARDS**  
Larry Springfield  
45 Goderich Street  
Kincardine, ON N2Z 2L2

**FAI RECORDS**  
Russ Flint  
96 Harvard Avenue  
Winnipeg, MB R3M 0K4

**STATISTICIAN**  
Dennis Miller  
108 Midcrest Cresc SE  
Calgary, AB T2X 1B5

**TECHNICAL**  
Herbert Lach  
330 Banting Street  
St. Bruno, PQ J3V 1Y3

**TROPHIES & CLAIMS**  
Harold Eley  
4136 Argyle Street  
Regina, SK S4S 3L7

**LOCAL CONTEST**  
Al Schreiter  
3298 Lone Feather Crescent  
Mississauga ON L4Y 3G5  
Mbrs: Hal Wernburg  
Bruce Finlay

# Club News

## AN "EVERYCLUB" MEMBERSHIP REPORT?

At the outset of last season, we were uncertain as to how prospective new members would react to the increased membership fee. It seemed to be generally assumed that the greater fee would prove a deterrent to new members. This, happily, did not turn out to be the case. Over the course of last season, I had the opportunity to speak to many people who were interested in joining our club. Almost no one expressed concern about the cost of joining and learning to fly. What they were concerned about, however, was getting value for their dollar. To a very large extent, I believe we supply this. We offer a number of committed and helpful "veteran" members, an enviable club fleet, virtually daily operations throughout the summer, and many social events. To better understand the impressions of new members, however, a questionnaire was sent to those who were new to our club in 1988. Answers to specific questions and general feedback on club operation were requested.

This, along with anecdotal information provided by many members, allowed me to get a sense of how the club was perceived by those new to our ranks, particularly students. The points made are not new. They are time honoured. But we need not become blasé about what already has been said, perhaps many times. Rather, reiteration may allow for the consideration of an old subject in a new light. So, when students complain (and, for the purposes of the study, I deliberately focus upon complaints), here is what they say:

- It is often difficult to find instructors, particularly in the early morning.
- There is a lack of structure in the learning process. The progress sheet in the logbook is the only record of communication from instructor to instructor. Students are often still confused about how to get from point "A" (familiarization flight) to point "B" (solo).
- Too little time is spent on briefing and debriefing for any flight. Perhaps this is due to the shortage of instructors. No sooner is an instructor finished with one student than he is up with another.
- Students are not given the opportunity to meet as a group to "air their complaints".
- The new student often feels baffled by the system, gets discouraged, and may drop out.
- Too much time is spent waiting around for too little time in the air.

To counterbalance these points somewhat, I would like to share many positive comments I have heard. Our new students are impressed with the generosity of club members. I have often been told that we are a friendly and very helpful group. The calibre of our instructors has been mentioned many times. (I would like to add a personal agreement: I am in awe of the flying skill of so many of you, and fervently hope osmosis works, even just a little). Also, our commitment to safety has been applauded.

However, the point at hand is this: it is one thing to sign up new members, and quite another to keep them. We most definitely want to keep them. In the past, different plans have been proposed to address this issue. These plans have been eloquent and viable and may not have worked for no other reason than bad timing. I would like to institute some mechanism this year which, I hope, will alleviate some of the complaints. These ideas are not new; some have been tried in the past. Perhaps it is time to try them again. So, here are some suggestions:

- **A buddy system** – a "buddy" would be a volunteer who has been a club member for at least a season. Duties would include helping to orient new students to the club and introducing them to flight line operations. A buddy would act as a resource for the new student throughout his/her first season.
- **A mentor system** – a "mentor" would be an instructor assigned one or more students as his or her charges. Duties would include outlining for the student criteria for soloing, acting as a resource, and trying to fly with the student regularly to evaluate progress and offer suggestions for improvement.
- The need for instructors is crucial. Some of you have let your instructor's rating lapse. Some of you would make fine instructors and need only to take the course. Would you please give serious consideration to renewing or obtaining your rating?
- As in the past, the membership director and CFI should keep in close contact regarding new students. Perhaps we should institute one or two new student meetings.
- In the absence of a club ground school, perhaps we could arrange a number of clinics for interested members.
- Of course we must still continue to promote the sport of soaring to the public in an attempt to attract new members. An outline of those publicity events already proposed for this year has been posted, along with some suggestions for other activities. Your suggestions would also be most welcome, and could be passed on to me, or the publicity coordinator. At the AGM I shall ask those of you who can oblige to take a soaring poster with our club's name and a contact number. Would you kindly display it in a public place, such as your school or workplace, health club, a library, grocery store, etc.

I have enjoyed, and am enjoying, acting as membership director. So many of you have helped and supported me, and I thank you with all my heart. May we look forward to a safe and fulfilling season ahead.

**Lorna Novosel**, membership director

## CHAMPLAIN REPORT

Hi Canada! Just thought that you folks would like to hear that we, l'Association de Vol à Voile Champlain, had a great winter.

Firstly, we got an instructors clinic going with twelve instructors and instructor candidates in attendance. The clinic was given by Serge Morin who is back from France after a two year stint as a professional instructor in Fayence and Romans. Our club is putting more emphasis on quality instruction and safety. Our goal is to have the best instruction program around. This is the first step in a multi-year program.

Secondly, our Lark trailer is being covered to provide year-round storage for our bird. The project is headed by Louis Thirion, an aeronautical engineer. If you see a trailer that will look like a homemade space shuttle, you will know it is us.

Thirdly, our faithful Cessna 150 is being repainted professionally and should look like new. Incidentally, we want to thank the folks from Hawkesbury (André Pépin) who relayed over 123.3 the news of the unfortunate accident suffered by the 150 from Gananoque. That same day, we inspected our rear fuselage, the cables, etc... This could have saved a life. Fortunately, this had been checked by our mechanic the week before he replaced a battery cable! Even though the MoT wrote and phoned us that same week, the SAC "line" proved to be faster. Thanks again.

However, back to the story! Winter was active but our last season proved to be a good one. We made 1280 launches with a more than usual share of high (3000 feet) tows. We did not produce as well on the instruction side. Our CFI, Jean Marc Surprenant (SAC "Instructor of the Year" in 1987) spent the summer building his house and was sorely missed. Serge Morin came back from France only in late September. We missed their experience and dedication.

We made three outings to other sites Sugarbush (Vermont), and Grey Rocks/Mont Tremblant (Laurentians). At this latter place, we stayed two weekends (Thanksgiving and the following weekend). Two members from "Les Outardes" showed up with their Club 1-34. We plan to do this again in 1989. The first outing was to Bromont on April first. This was a disaster as the field proved to be unfriendly to gliding activities. We are planning an early start in 1989, but somewhere else!

Late in 1988 we purchased another sailplane that will be delivered early 1989. The Jantar will be a welcome addition to our fleet which will consist of two 2-22s, one 1-26, one IS28B2 Lark, and the Jantar. These and three private ships (Duster, Pirat, Diamond 16.5) will keep our towplane busy and forty members happy and flying.

Oh yes, we are still looking to buy a field. Happy and safe gliding to all in 1989.

**René Pepin**  
Association de Vol à Voile Champlain

## ACTIVITÉS DE L'AÉRO-CLUB SPORTAIR

L'objectif que s'était donné l'an dernier les membres de notre nouvel aéro-club fondé à Saint-Gabriel-de-Brandon, au nord du lac Maskinongé et en lisière des Laurentides, à 80 km au nord-est de Montréal, a été atteint: nous sommes entrés en activité avec notre remorqueur Cessna 150/150 et notre biplace SGS 2-33.

C'est toutefois la saison 1989 qui donnera son essor décisif à notre club attendu que l'arrivée de l'hiver s'est ajoutée aux contretemps de toutes sortes pour limiter notre bilan 1988 à quatorze vols d'ailleurs effectués presque tous en conditions marginales d'automne et par grand vent.

L'aéro-club Sportair se prépare à la prochaine saison véluvole avec un optimisme approprié à ses atouts, notamment le caractère touristique de sa région, le charme de ses installations de camping pour pilotes, plage comprise, et la sérénité bucolique qui émane d'un aéroport respirant la légalité autant que l'absence de dettes, ou à peu près.

Nul doute non plus que le modeste inventaire actuel de notre matériel volant s'ajustera promptement à la demande.

Entre-temps, c'est le recrutement qui prendra la priorité à l'aéro-club Sportair, car nous avons grand besoin de répartir les efforts que requiert notre lutte commune contre la gravité.

## CHAMPLAIN HONOURED

When reviewing the state of our membership and SAC in general in 1988, nearly all clubs remained static both as to flights and membership which is a bit discouraging. However there are notable exceptions.

The club which obviously outperformed all others in 1988 was the Association de Vol à Voile Champlain. You flew the greatest number of flights for any club in Canada with a membership under fifty. For those clubs with only one towplane you were streets ahead of your compatriots. But the outstanding achievement to me was the percentage increase in membership which was a remarkable 41%. My oh my, if we all did that we could even lower our SAC membership fee.

It would be interesting to determine how you did all this and in particular your methods of missionary work to get potential glider pilots to join your club. An article in *free flight* describing your drive for members and methods of operation would be of interest to all of us.

Congratulations to you and your members for such an outstanding year of success in all areas of your organization and my very best wishes for continued high achievement in the coming gliding season. Fly safely.

**Gordon Bruce**  
SAC President

## AERO CLUB OF CANADA

**Ed Hollestelle**, SAC rep to ACC

After the year of the big change, 1988 was a relatively quiet year for the ACC. A lot of housekeeping was done, committees set up and thanks to our able president Bob Carlson, all trust funds are now in place. We moved with SAC to our new head office at 1355 Bank Street, Suite 306, and signed a sub-lease for three years.

*The 81st FAI General Conference*, which took place in Sydney, Australia Oct 9-14, was one of the most difficult meetings of the FAI. Canada was represented by Bob Purves, André Dumas, Bob Clipsham, and Don Fisher. The new statutes were adopted minus the controversial one which would have given the FAI exclusive rights to exploit all world competitions. This matter will be thoroughly reviewed and dealt with at a later date. A new president was elected - Cliff von Kann from the USA.

*Parachuting.* The FAI recognized the success of the colourful and dramatic parachuting demonstration at the opening of the 1988 Olympic Games in Seoul, Korea.

*Tissandier Diplomas* were earned by Oscar Boesch and Walter Piercy, both for their outstanding efforts in their respective areas in gliding. Colin Bantin attended two IGC (formerly CIVV) meetings, the last one being in London, England last October.

## Coming Events

Jun 4-10, **XC camp**, 11-17, **XC practice**, Edmonton Soaring Club, teaching basics of XC, assistance with task-setting. BBQ 10 June. Contact Jack Despres (403) 487-7317 or Neil Bell 481-6664.

Jun 18-24, **SAC Eastern Instructors Course** York Arthur Gliding Club. Course coach: Paul Moggach (416) 656-4282, assisted by Ian Oldaker.

Jun 24-2 Jul, **Western Interprovincial Soaring Contest**, Claresholm, all-POST, no ballast, and hand-capped, exploring new rules and scoring. Should be fun - details out to western clubs and known competition pilots. Others interested may contact Tony Burton (403) 625-4563

Jul 11-20, **Canadian National Gliding Championships**, Rockton, ON. Practice 8-10 July. Contact Helmut Buchholz, 2362 Shaver Road, RR2, Ancaster, ON L9G 3L1 (416) 5433 (H), 575-1666 (B)

Jul 15-?, **1-26 Cross-Country Camp**, Sheridan, WY. Sponsored by the 1-26 Association. Primary objective to break existing 1-26 distance records and have fun. Other sailplanes welcome. Contact Lew Neyland, (719) 632-1202.

Jul 29-7 Aug, **Cowley Summer Camp**, great soaring and camping at Cowley airstrip at Canada's biggest soaring event. A Master Coach Cross-Country Clinic held concurrently. Cu Nim and ESC gliders available to visitors on arrangement with club. Terry Southwood (403) 255-4667.

*World Class glider* - the aim is low cost, safety, ease of handling on the ground and in flight, suitability for use in clubs and by private owners, for training including early solo flights, for badges and for competition flying, and construction from kits.

*POST tasks* - the representatives were asked to go back and experiment at their national competition level with new types of tasks and scoring systems.

*Icarus Games*, World Air Games for 1991, are now definitely in the planning stage and it looks like the government of France will support the efforts of Mr. Richard Fenwick, FAI vice-president for France, and his colleague Mr. Bernard Colas, who is president of all FAI Sporting disciplines. Three sites are being looked at in the south, the southeast and east-southeast of France. All the disciplines would have their competitions at the same time, generally in the same area. Suggested is five days of training, one day opening ceremonies and fifteen days of contest flying with one day closing ceremonies. All the details on rules etc. are to be worked out. There is some concern about a possible conflict with the different world championships already scheduled for various disciplines - the world championships in gliding have already been scheduled for Minden, Nevada in 1991.

Bob Clipsham (ACC official Olympic delegate) is trying hard to get hanggliding, parachuting and gliding in 1996 as demonstration sports if Henderson and his people are successful in getting the Olympics to Toronto.

Aug (date TBA), **SAC French Instructors Course**, CW Québec, St-Raymond (613) 739-1063.

Aug 6-12, **SAC Western Instructors Course**, Hope, BC, hosted by Vancouver Soaring Association. Course coach: Mike Apps (403) 436-9003.

Sep 2-4, **Mountain Soaring Camp**, Fairmont Hot Springs BC airport. Spectacular soaring in the Rockies, organized by Alberta Soaring Council, contact Tony Burton (403) 625-4563.

Oct 7-15, **Cowley Wave Camp**, for first time extended through two weekends for a better opportunity to catch the wave. Club ships available as mentioned above for Summer Camp. Organized by Edmonton Soaring Club, contact Buzz Burwash (403) 465-2394.

## ALBERTA SOARING COUNCIL

### COWLEY CROSS-COUNTRY CLINIC

31 JULY — 6 AUGUST

**Course conductor - TOM KNAUFF**

Course will concentrate on afternoon team flying and evening seminars. The course is oriented towards early cross-country pilots. Some spaces open for out-of-province registrants. Interested persons must register by letter to Mike Apps, 11455 43 Avenue, Edmonton, AB T6J 0Y2.

# FAI Records

**Russ Flint, 96 Harvard Avenue,  
Winnipeg, MB R3M 0K4 (204) 453-6642**

The following new record has been claimed:

**Triangle Distance – Multiplace, Citizens,** 510 km, 25 January 89 Charles Yeates (Kris Yeates), Twin Astir, VH-IKU. Flown from Waikerie, Australia with turnpoints at Coomandook silo and Cullulleraine.

**300 km Triangle Speed – Multiplace, Citizens,** 79.4 km/h, 27 January 89, Charles Yeates (Kris Yeates), Twin Astir, VH-IKU. Flown from Waikerie, Australia with turnpoints at Teal Flat and Meribah silo.

**300 km Out-and Return Speed – Open, Citizens,** 191.3 km/h, 27 April 1989, Walter Weir, ASW-20B, C-GGWW. Flown from Kettle Dam, PA with turnpoint at Williamsport, PA. Exceeds previous citizens record of 171.6 km/h set by Peter Masak in 1983.

**NOTE:** The current Canadian Soaring Records list given in the last issue of *free flight* showed that the Multiplace triangle distance record category was unclaimed, and on that basis Charlie Yeates claimed in that category for his flight in Australia. In fact, the 500 km Multiplace speed record set by John Firth and Danny Webber in 1986 (510.4 km at 88.8 km/h) out of Chipman, Alberta also “filled in” the Triangle distance Multiplace Territorial slot, and will be instated as such at this late date to indicate the distance to exceed for flights in Canada.

## NEW RECORD CLAIM FORMS

The FAI has produced a set of forms on which World Records are to be claimed. “Their use is compulsory, as soon as they become available, for all glider or motorglider World Records, and strongly recommended (modified if necessary to include additional record categories) for National Records” — IGC

SAC is proceeding with production of these forms and copies will be distributed to clubs when they are ready. It is hoped that their use will speed and improve record claim submissions in Canada, which have been of variable quality in the past few years.

## FAI SPORTING CODE — 1988 Revision

The 1988 revision of the Sporting Code for Gliders (\$5) is now available. While the new Sporting Code contains an extraordinary number of typos and other errors, it is still obligatory for Official Observers to have, and highly recommended for badge and record pilots.

In particular, it appears that National Record categories for speed on out and return courses of 750 and 1000 km have been omitted (they were approved for addition in 1983). Also, the remote leg of the permitted “triangle-shaped” flight for Silver distance should obviously be “>50 km”, not “<50 km” as printed.

Most of the other errors shouldn't lead to misinterpretations of the Code (provided you replace the word “deducted” with “deduced” in Section 2.2.9 on altitude measurement!). In any case, by far your best bet (also obligatory for OOs) is to obtain the “FAI Procedures” booklet, written largely by Tony Burton and continually updated by him over the years. It not only interprets the Sporting Code in plain English, but also gives many useful hints on preparing for badge and record flights, on turnpoint photography and interpretation, and a host of other invaluable information. Your Badge and Record Chairmen will also appreciate your reading it.

Since Russ wrote the above, FAI has apparently withdrawn the new Sporting Code for corrections, and now it will not be out until later in the year at the earliest (this has been a very unprofessional bit of work by FAI). However, the updated edition (Edition 5) of the companion manual, the SAC “FAI Badge and Record Procedures” booklet (\$5),

# 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 1 March to 30 April 1989.

### SILVER BADGE

772 Jörg Stieber SOSA

### GOLD ALTITUDE

Richard Grocholski	York	4940 m	Grob 102	California City, CA
Jörg Stieber	SOSA	3400 m	LS4	Grant Co., WV

### SILVER DISTANCE

Jörg Stieber	SOSA	236 km	LS4	Grant Co., WV
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### SILVER ALTITUDE

Peter Whitworth	RVSS	1340 m	Std Cirrus	Lake Placid, NY
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### C BADGE

2084 Peter Beatty	Air Cadets	1:17	1-26E	Reno Stead, NV
2167 Camille Marchand	Outardes	1:06	K8B	St. Esprit, PQ



**CONGRATULATIONS to Chris Apps** of the Edmonton Soaring Club who has claimed Silver Duration and Silver Height for a flight on 14 May in the club 1-23. When he's 16 in three more weeks, he will be getting his licence and then going after the 50 kilometres! He's earning half of his flying money selling hamburgers. If all the clubs had keen youngsters like that, SAC would have no membership worries.

## ACCIDENTS

**2-33, C-GNPF, 23 Apr, Base Borden.** Windy day, glider landed short on final, left wing struck tree, moderate damage. No injuries.



reflecting the new Code, is in production now and will be available from SAC shortly. It is recommended that the Senior Official Observers or CFIs bulk order both publications for the OOs in their club to minimize postage and handling costs. Note: Orders for the FAI Sporting Code, Section 3, Gliders (or the General Section) must now be made payable to the Aero Club of Canada, not SAC. The ACC has the same address as SAC. editor

# NOTES FROM MARCH DIRECTORS MEETINGS

## Al Sunley

Alberta Zone Director

Friday March 3, 1989

The meeting was opened at 13:38 by President Gordon Bruce with a quorum present. The minutes of the January meeting were adopted as amended on a motion by Dixon More and seconded by Harald Tilgner.

### Business arising from the minutes:

Harold Eley has volunteered to become chairman of Trophies and Claims. This will allow George Dunbar to step down as he has wished to do for the last year. We wish to thank George for the excellent work he did in this position in the past several years.

Tax receipts from 1988 membership will be mailed out next week. Discussion took place on procedures for the 1989 receipts and incorporating changes in the computer program.

### free flight

One of the Directors brought queries from two members regarding requests from the editor for more articles when articles they had submitted were never used or acknowledged. Al Sunley requested more information to allow clarification of the situation.

### Ontario Director

The results of the election were in favour of Ulli Werneburg who will become the new Director following the AGM. Thanks go to Dixon More for the four years of dedicated effort he put in this position.

The President reported on the committee meetings with Transport Canada regarding Midair Collision Avoidance Initiatives. The report from the committee should be available next week.

### New Business

#### Financial statement and budget

Due to the unexpected and unavoidable absence of Jim McCollum, the report was given by Al Sunley. Discussion took place on the Auditor's report and the request for motion to increase the fees.

The Calendar of Events for the next six years was reviewed and brought up-to-date.

#### Pioneer trust fund

Discussion took place on how to encourage members to make more donations to the fund and to make people aware that it is a tax deductible charity.

#### Let's teach Joey to fly

Dixon More gave an update on Joey's recovery and how quickly he was recuperating from the very severe burns, but it will be months before he will have full use of his arms. Dixon

stressed that there is an upper limit of twenty dollars of a donation from any one member of SAC, the idea being that as many members as possible be involved in helping Joey to learn to fly.

#### Class Four medical category

Gordon Bruce gave an update on the progress of introducing this category. It has been approved and is on its route through the department's procedural path which is rather overloaded at the present time.

#### Grob 103 AD on spar spigot pins

Failure rate in Australia has been very high, the factory is sending a team around to train other engineers to do the repairs, but this is taking considerable time and will not meet the deadline. There appears to be a time extension in the works and could give one year grace period, but an X-ray examination may be required. This matter is being actively pursued by the Technical committee.

#### Radio frequency 123.3

Harald Tilgner gave further report on the problems at Hope. Harald has received a reply from the Regional Safety Officer in response to his concern of the interference with the traffic announcements through the Hope corridor. Harald's letter has been forwarded to the office responsible for frequency assignment.

### Variometer / Calculator

"Varicalc-1" Only \$500

Versatile pressure-transducer / microprocessor based Variometer and Final-Glide Calculator



Digital Averager	Key in:
Speed to fly	- Distance, Wind
Variable Damping	Provides:
Adj. Dead-band Audio	- Min. Height
Alt. Compensation	- Best Height
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### SKYTRONICS

45 Carmichael Crt, Kanata, Ontario K2K 1K1

F. Vaughan (613) 820-3751  
D. Bonnière (613) 592-0657

Sunday March 5, 1989

The meeting opened by the President at approximately 12:45 with a quorum present.

First item on the agenda was the election/appointment of Officers:

Gordon Bruce was elected President – unanimous  
Harald Tilgner was elected Vice President – unanimous  
Nancy Nault was appointed Executive Secretary – unanimous  
Colin Bantin was appointed as SAC delegate to the Aero Club of Canada.  
The position of Treasurer was not filled.

Business arising from the Directors meeting of March 3, 1989:

### Club site directory

On a motion by Gordon Waugh, seconded by Al Sunley, the decision was made to have a format of three clubs per page, the project would be self financing, it would not be a centrefold insert in *free flight*, a quantity of one hundred would be printed and would sell for \$5 per copy.

### Budget

All Committee chairmen to be advised of their budget, and to be notified when the total has been reached and no further funds available. Travel costs to be reduced by obtaining airplane tickets well in advance to take advantage of the lowest fares. Phone calls to be reduced.

### Insurance

Moved by Paul Moffat, seconded by Gordon Waugh "that approval be given to the insurance program as circulated by Sedgwick Tomenson Inc." Carried.

### Fax machine

Approval given to purchase a fax machine, and budget of \$1400 for the purchase of machine and installation of a line (the number is 613-739-1826)

### AGM

Matters arising from the AGM were reviewed and assigned for further discussion.

### 1989 Nationals

Update received on progress.

Meeting adjourned.

### SAC SUPPLIES changes

– There are many changes to the SAC supplies list beginning with this issue: items, item numbers, prices, and source. Please study carefully before ordering.