

free flight • vol libre

2/93
Apr/May

cover photo not available

POTPOURRI

Many thanks to the London club and other members who worked hard so that the AGM would be a success. Riding in the bus on Thursday night from Toronto to London, I was wondering if we would be stormed out, but fortunately by Friday morning the weather system had blown itself out and the roads were once again open.

The workshops were well attended and many questions asked. The CFI seminar on Friday had a good turnout in spite of the weather, and attendees kept Ian and associates busy. We all congratulate Ian Oldaker on being honoured by the Canadian Airline Pilots Association for his many years of promoting and preaching safety in the soaring movement. Captain Rob McInnis, President of CALPA, presented the award and also gave a thought provoking after dinner speech at the Saturday awards dinner.

I wish to thank all committee chairmen and members for their services to SAC during the past year. I regret that two hard working chairmen, Dave Baker and Russ Flint, have requested to step down from their positions in Airspace and Records. Both have done a lot of work for SAC and I say “Thank you, Dave and Russ.”

We still need considerable input for the Fifty Year celebration in '95. That is only a year and a half away — we must get up and at it. In past issues, ideas have been thrown out for consideration, but there has been no response from the members. Let's hear it — please.

The Insurance committee have been able to obtain an additional option for trailer insurance for our policy. Also they have located a source for health and accident insurance for travelling outside of Canada and which covers the activities of soaring. This is a group policy for SAC members wishing to avail themselves of it. All clubs are receiving an information packet from Rozon Insurance Agency regarding this travel insurance. Please use it when travelling outside of Canada, it could save you many problems.

I am hoping to hear from more clubs about any of their members who have been gliding for forty or fifty years and more. I would have thought clubs would have been enthusiastic to proclaim they had members who were still active after that many years, but the lack of response to my request last year indicates otherwise.

It is time again for spring checkrides and reviews and a critical self analysis on what bad habits may have been picked up during the past year. Remember, there is no better policing than self policing. For safety's sake, admit at least to yourself your bad habits.

To a successful soaring season.

Al Sunley

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Trademark pending Marque de commerce en instance

2/93 Apr/May

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

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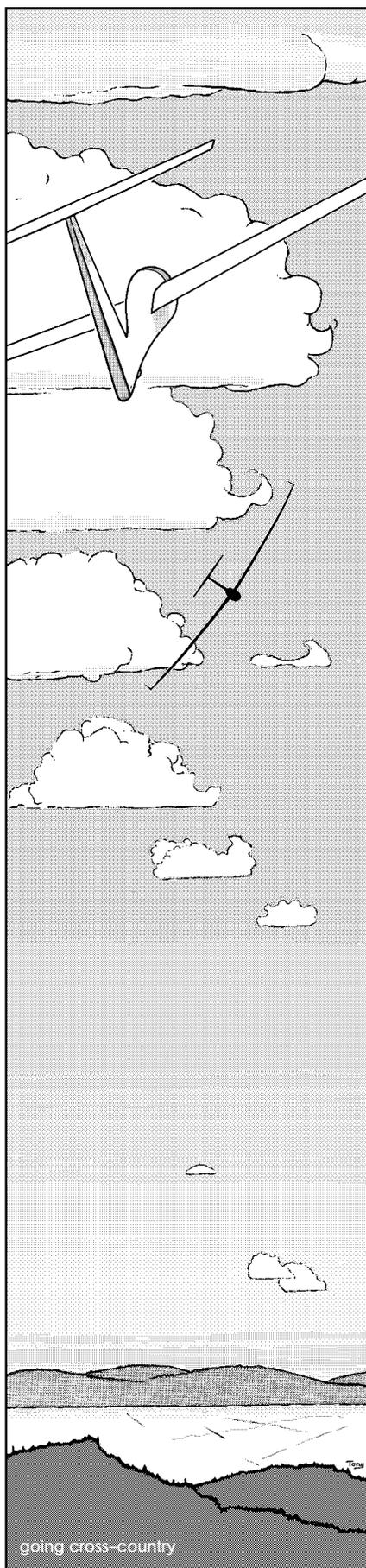
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Cover

A hot sun over Hawkesbury, Ontario and cu developing on the horizon — a nice day to think about as the last of the winter snows melt out of the ditches. Photo by Réal le Goueff



HAVE YOU FLOWN A FORD LATELY?

When was the last time a shiny new single seater showed up at your club, or even your province? The big German glider "werks" have almost without exception been designing and selling sailplanes for a very exclusive clientele of either rich pilots with ambitions to win the next national, European, and World contest, or for the more recent niche of motorglider pilots who don't mind laying out the extra Marks for an obscenely expensive engine as a means of doing their own thing in relative privacy. Of course, German labour costs being what they are, it is simple good economics for them to build the BMWs of the soaring world, especially as it takes just as many manhours to lay up one of those as a "Ford". (This was the major reason no German manufacturer took up the challenge of designing a sailplane for the World class competition.) In the long term though, those profits might dry up as the customer base shrinks away. There are hundreds of hang glider and paraglider pilots out there worldwide who might otherwise be in sailplanes but for the cost.

One would think that the emerging strength of the Eastern European makers would bring the prices down. That isn't happening at the present because, with no low-priced competition, they are pricing their sailplanes to just under what the market will bear to pull in the hard dollars. Maybe it's because their production capacity is limited now, but I believe it's a mistake. For example, the new Blanik L-23 is selling for about US\$29,800 delivered, which isn't outrageous, but still makes clubs carefully check their wallets. Given the labour costs in the Czech Republic, I think if LET knocked about \$5-6000 off, they would have so many more orders they could easily make up their profits on volume.

Anyway, with the supply of reasonably-priced sailplanes in desperate straights, it would appear that other manufacturers are finally discovering that there is a market out there! I attended the SSA convention in Seattle and was heartened by the lower-cost performance that seems to be developing now.

Peter Masak is progressing well on his "Scimitar" 15m class sailplane. He fully expects to finish the prototype of the 50:1 or better racing machine before this summer is out and which he hopes to sell for under US\$40,000. An hour-long lecture by Peter on the design of the new wing, the materials, and the highly experienced technical support he has received, gave the interested crowd a lot of confidence that his claims are not wishful thinking. While definitely not a Ford, "performance-per-dollar" will be taking a giant leap downwards.

Of more interest to the ordinary cross-country pilot is the new composite Standard class kit, the "American Spirit". It's flying, and a complete and a partly-finished ship was on display. It's an attractive ship and appears to be reasonably straightforward to assemble with a good construction manual and earnest company support. With an L/D in the low 40s and priced about US\$19,000, it is capable of almost any flight most cross-country pilots could attempt at a very decent price.

Soon the World class glider winner and a few equivalents will be offering safe, easy to fly ships with L/Ds in the low 30s, suitable for badge and fun flying for delivered prices in the US\$20,000 range (cheaper of course as a kit). The "Cygnet" was on display, the American World class entry that just ran out of preparation time for the prototype fly-off last October in Germany. The design concept of this pretty little ship is innovative, and with a bit more work, a production kit model is possible.

I hope that this surge of effort will result in a lot more pilots staying with the sport. Soaring has needed a Ford and it finally looks like one can be in your trailer soon.




The SOARING ASSOCIATION OF CANADA

is a non-profit organization of enthusiasts who seek to foster and promote all phases of gliding and soaring on a national and international basis. The association is a member of the Aero Club of Canada (ACC), the Canadian national aero club representing Canada in the Fédération Aéronautique Internationale (FAI), the world sport aviation governing body composed of national aero clubs. The ACC delegates to SAC the supervision of FAI-related soaring activities such as competition sanctions, 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. A 3.5" disk copy of text in any common word processing format is welcome (Macintosh preferred, DOS ok in ASCII). All material is subject to editing to the space requirements and the quality standards of the magazine.

Prints in B&W or colour are acceptable. No slides please. 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.

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President Alan Sunley
Vice President Harald Tilgner
Executive Secretary Joan McCagg
Corporate Treasurer Jim McCollum
Corporate Secretary Joan McCagg

SAC National Office
 Suite 306, 1355 Bank Street
 Ottawa, ON K1H 8K7
 (613) 739-1063 Fax (613) 739-1826

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letters & opinions

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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.

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Les épreuves de photos en noir et blanc ou couleur sont acceptables. Les négatifs sont utilisables si accompagnés d'épreuves. Nous ne pouvons malheureusement pas utiliser de diapositives.

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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 (\$20 par an, EU\$22 dans les Etats Unis, et EU\$28 outre-mer) veuillez contacter le bureau national à l'adresse qui apparaît au bas de la page à gauche.

EDITOR

Tony Burton
Box 1916 Claresholm, Alberta T0L 0T0
tel & fax: (403) 625-4563

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ON BOARD NAV EQUIPMENT DISCOURAGES COMPETITION

I understand that the Fédération Aéronautique Internationale (FAI) is rescinding its long-standing ban on navigation equipment (*free flight 3/92*). This decision will allow use of the Global Positioning System (GPS) satellites launched by the US military.

The FAI's rationale is obscure. After all, VOR/DME nav aids have offered area navigation functions for many years. Yet I fear its policy change will harm the sport, and add thousands of dollars to its costs.

GPS units can display the bearing and range to any point. Such an instrument will let a pilot navigate round a course without referring to the ground. In so doing it more or less eliminates traditional problems and the skills for dealing with them — getting lost, finding turn-points, and pinpointing landing fields in rough terrain. The edge it gives is going to ensure its use by competitive types. Those who can't afford it will find themselves at a disadvantage.

Allowing this situation is worse than unfair. The FAI's decision is symptomatic of a push for technology and performance at all costs that is taking competitive soaring further and further from its amateur roots. It is at odds with the motives of the World Class glider design contest. Established pilots can perhaps live with it, but many beginners, especially the younger ones, may be further discouraged.

Nav aids may well have a place in the Open Class. I believe they should be kept out of at least one of the other Classes. If you want to make it easy, get an engine!

Ian Grant
Gatineau Gliding Club

HEALTH = COMPETITION AN OVERSTATEMENT?

If you listed, in order of importance, the many reasons why people try soaring, and then stay with it, I suspect that wanting to engage in soaring competitions would be well down the list. By implying that a healthy competition scene makes a healthy soaring community, Ed Hollestelle's guest editorial (*free flight 1/93*, p4) does a disservice to increasing the number of people in our sport.

To support the benefits of soaring competition to the gliding community, the editorial uses the analogy of motorsport. It repeats many of the invalid benefits to everyday automobiles that motorsport supporters claim to result from auto racing. For example radial ply tires were introduced for passenger cars in the 40s but weren't adopted by Formula 1 racing until the 80s. Automatic transmissions were developed for highway vehicles ages

ago. Only recently have semi-automatics appeared in racing cars. Pollution controls, high on passenger vehicles, are unknown on race-track cars. The list could go on and on.

The reason why there is little transfer from car racing to ordinary cars is that the conditions are almost totally different. The racing car has to last for only a few hundred to a few thousand kilometers but it has to be able to go all out in that short distance. In many races the car can be refuelled, can have its tires changed, and can have repairs made, so that it can resume the race. The cost of the passenger car is a major factor. By contrast, at the national and international levels of motorsport, advertising sponsorship means that the money to build and field a racing car is far less important.

It isn't unreasonable to claim that competition soaring, whatever its benefits, has been more harmful than helpful in getting more people into our sport. Soaring competition, by encouraging the most advanced technology, has contributed significantly to the high price of new and used gliders. Few will deny that we would have far more people in gliding if equipment was less expensive.

A small percentage of glider pilots are keen on competition. The more people in the sport, the more will be in competition. It is the number of people in soaring that influences the number in competition, not the number in competition that increases the population of soarers.

On a totally different matter, the ad for a video of Pendleton's 50th anniversary on page 20 of *free flight 1/93* states that Shorty Boudreault has Canadian glider pilot licence #1. From way back when I learned to fly with the Montreal Soaring Council, my log book has the clearance for me to fly the Blanik signed by John Agnew, GP-1. I asked Shorty about this and he agreed that Agnew obtained the licence first, although there may have been some gamesmanship involved.

Thanks for continuing to produce an excellent periodical.

Len Gelfand
Gatineau Gliding Club

1992 NATIONALS ORGANIZATION

Contrary to Ed Hollestelle's CASG news in the last issue, the 1992 Nationals were *not organized* by the CASG.

While CASG supported the endeavour with a \$2000 loan, the '92 Nationals were organized by a number of individuals from MSC, Gatineau, and Champlain, some of whom were CASG members. Ed's statement in his CASG news is unfair to the many non-CASG people who worked to make the event a success.

Pierre Pépin
Champlain, '92 Contest Manager

Reflections on off-field landings

Rod Crutcher
Cu Nim Gliding Club

It has been said that
uncertainty of outcome
is the
essence
of adventure
...
For the
cross-country
soaring pilot,
this uncertainty includes
where one will land.

THE CURRENT FEBRUARY -30°C weather in Calgary provides a good opportunity to reflect on my cross-country experience over the past several years. In particular I have wanted for some time to review my outlandings, both from the perspective of "what I could have done better" and also "what I have learned".

Context

Although many cross-country flights are planned with the intention of arriving back at the good old home field, off-field landings are sometimes necessary. Although the ability to select fields from the air and land in them safely is one of the greatest challenges all glider pilots must address, in my experience many pilots are not adequately prepared for the task at hand.

Off-field landings can be costly, as our insurers will readily attest. As Tom Knauff observes in an excellent article entitled "*Off-field Landings*" (*Soaring Pilot*, Jan/Feb 1988), "During the 1987 Sports Class Nationals, more than 30% of the pilots entered in the contest damaged their ships during off-field landings."

Fear of off-field landings is a glue that keeps many of our pilots stuck close to the home field. Although soaring in any location has its own joys, for some being "stuck" to the home field is tiresome. If one feels bored, one may act bored ... complacency may exact a great price. Soaring is a sport, and like all sports should be fun. For many, cross-country soaring adds a great richness to the sport. Developing cross-country soaring skills will enhance our piloting skills near the home field or afar.

This article is not a comprehensive review of "all you need to know". There are a number of good resources to which the interested reader is referred, including all of Welch and Irving's pivotal text "*New Soaring Pilot*" and Tom Knauff's "*Glider Basics*".

Background

By way of background, I am a keen soaring pilot with eight seasons experience. I am neither a beginner nor highly experienced. After approximately 450 flights and 350 hours, and three seasons of instructing, I can fly well, teach well and I am aware of at least some of my deficiencies and readily acknowledge I have lots to learn.

I soar cross-country less often than I would like — the common constraints of available time and soarable weather limit the possibilities — but sometimes the Gods are kind and the opportunity to explore the high energy pathways of the sky presents itself.

A snapshot of outlanding experience ('85-'92)

Soaring Seasons	8
Outlandings	11
Cross field landings	5
Field surfaces:	
cultivated	5
harvested	3
crop	2 (one 4", one 8")
"rough"	1

Circuit analysis:
overall rating 3.3 (1 = terrible, 6 = excellent)

I have reviewed each of my outlandings in terms of both field factors and circuit factors.

Field factors

The field factors I considered were: size, surface, slope and obstructions. With one exception, I had no difficulties finding fields of adequate size. Certainly, I may be fortunate flying over the prairies and foothills in that adequate fields are never too far away, but a review of the soaring textbooks and literature suggests that finding fields of adequate size is seldom a major problem where soaring facilities are located. With my eleven outlandings, field surfaces varied, but I found either freshly cultivated or harvested fields ideal. The challenge to accurately assess field surface from the air is not inconsequential; one does get better with experience, but some humility is in order. An old Spanish proverb is relevant here ... "As one moves from the stands to the bullring, the appearance of the bull changes".

I have found it a helpful exercise to choose several potentially landable fields, noting their location; upon return to home base I drive to these same fields and assess them from the ground. The results can be surprising and keep one's confidence tempered with a very earthly reality.

Field slope did not prove problematic, and one slightly downhill landing had a mercifully short run out due to the soft cultivated soil in which I landed. My three slightly uphill landings were quite uneventful, and the short run out was agreeable. (I have come to view a slightly uphill landing as close to ideal, providing one approaches with enough speed to ensure an adequate round out prior to touchdown).

photo not available

One outlanding had an obstruction problem.

Four of my five cross-field landings were done for either practise or when the wind conditions were such that the safest approach was cross-field and into the wind. These landings were all helpful in developing cross-country experience. Landing in a known field lowers the risks substantially; nevertheless, unless one is very precise, the surface either side of the strip is quite important, and can vary at our field from dirt to crops of varying heights. Bales, cows and tractors can add to the challenge. One cross field landing was forced in that I limped back home too low for any circuit at all. The only available option — after I exhausted all other reasonable choices — was to land cross-field. The landing was uneventful. In retrospect, an off-field landing with adequate preparation would have been much safer. Although I did not pay a price for “get-home-itis” in this case, the results of a repeat experience may have been more dismal.

Circuit factors

In considering circuit factors I developed a simple rating scale to assess my performance. I rated the overall quality of my circuits on a six point scale, with “1” at the low end being “terrible” and “6” at the high end being excellent. I attempted to recall the details of each circuit, including adequacy of preparation, assessment of wind strength and direction, estimation of altitude, the completeness of the pattern flown and the skill of flying the circuit in a coordinated manner with good speed control. I acknowledge at the outset it is impossible to be rigorously objective about this exercise, but I recognize that not only do I not wish to delude you, my readers, but more importantly I do not wish to delude myself. My ratings are subjective, but this subjective standard — however inadequate — is the norm. Trained observers watching our chosen field and assessing our performance is rare! If we are to learn anything from our mistakes and if we are to build on our strengths, an honest appraisal of our abilities is in order.

In attempting to quantitatively grade my circuits according to the above scale I ended up with a rating of 3.3, which is qualitatively somewhere between fair and good. My most common mistakes were those generally acknowledged in the literature: flying the circuit too close in, flying too quickly (some variation of “the sooner I am on the ground the better I will feel”), paying attention to my altimeter (particularly on my first few outlanding experiences) and getting myself into a three dimensional corner with few options and not enough preparation time. I have learned a great deal of respect for the following decision heights:

- 3000 ft agl – fly in the vicinity of possible landing fields
- 2000 ft agl – choose several possible landing fields
- 1000 ft agl – be ready to enter a defined circuit for a specific field

If the crude outcome measure of landing without damage to ship or person is used, all my landings were “successful”. However, a careful review of both circuit and field factors revealed only one landing I believe was excellent. There was unquestionably a number of landings in which I can recall some version of the refrain of all cross-country pilots at one

time or another ... “How did I get into this situation anyway?” I recall that an accident or incident (an accident that should have happened) is not an isolated event, but rather the culmination of a series of events.

First steps

My first consideration of an outlanding field occurred on flight #8. My instructor was Hans König and I remember while on tow and a little way from the field he asked me to look down and choose a field in which I could land. I was completely flustered. I thought, “but we’re going to land back at the glider strip”. I struggled to get my head around what he was saying, and somewhere in that flight I developed the beginnings of an appreciation for the ground below me.

The basic flight instruction that I received at Cu Nim nurtured knowledge, skills, and attitudes that would assist me and my fellow students favourably for future cross-country experience; indeed, I now recognize that optimal training for cross-country flying must include insistence on excellence in airmanship — irrespective of the nearness of home field.

As a student I recall often looking up and seeing sleek ships thermalling high overhead, and then watching the pilots straighten out and rocket out of sight. This was the stuff of dreams — dreams, I mused, which could become a personal reality.

As my flying skills gradually improved I was encouraged to develop the ability to land as closely as possible to a chosen touchdown point. I now realize that the ability to consistently land with precision and low energy is an essential skill of the aspiring cross-country pilot.

On my 85th flight in calm conditions and with a few hundred feet to go prior to lining up for downwind my instructor, Dave Fowlow, asked me to fly a circuit appropriate for a landing across the airstrip. This initially took me by surprise — I thought something like, “but the dotted line in the sky doesn’t go that way ... and what about the familiar landmarks ... (on which we were told not to rely, although in reality it was hard to ignore them) ...” After a period of reorientation I rethought the circuit and realized I had adequate height ... and in effect I performed my first cross-country circuit, with the advantage that I was landing on a known field with a known slope and surface and a field relatively free of obstructions, not to mention the advantage an instructor in the back seat who could take over if I really messed it up! The landing was uneventful, my confidence was boosted, and several flights later I was licensed.

First outlanding

My first true outlanding occurred on my 34th flight. My instructor was Rick Zabrodski and we were enthused about the possibilities for the day. It was late morning and several promising cu were developing to the north of the airstrip. We took a 4000 foot tow, released and flew towards the clouds. We found a weak thermal, and climbed a little. Shortly thereafter both the cloud and our lift disappeared. I remember Rick asked me, “Where is the field?” I looked all around, including vaguely in the direction from which we had come. I couldn’t see it. Rick asked me several times and I

finally conceded that I didn’t know. I asked Rick if he could see it and he said no. I soon gathered that given our altitude and location and lack of lift there was a problem. As we meandered back towards the field we could not see Rick asked me, “What do you think we should do now?” I was feeling uneasy, but I flew at best L/D to the southwest and when it became apparent we were not going to make it back, he asked me which field we should land in. A number of fields looked good to me and I had some trouble choosing. He told me “farmers know best” and several moments later we were downwind in a circuit placing us on touchdown in the centre of a large, relatively flat mown field. We survived! Indeed, in retrospect what I remember most was the seeming normalcy of the whole affair — a chosen field, a defined circuit, a conventional pattern and an uneventful touchdown. This experience early in my training provided me with the perspective that with proper training and good airmanship cross-country landings can be performed safely. There were risks, to be sure, but I had a sense they could be understood and addressed. My horizon expanded, although I confess for quite some time while airborne I made sure my home field was very near!

I will share some observations on four off-field landings which highlight different dimensions of my outlanding experience. These outlandings are entitled: the Good, the Bad, the Curious, the Almost.

The Good

It was a fine Cowley soaring day, with lift over the mountains to the west and an obvious cloudstreet over the Porcupine Hills to the east. I flew north from Cowley to Longview, a distance of about 100 km, in the company of three Cu Nim buddies. By the time I reached Longview I noticed the lift was deteriorating — being broken up, I imagined, by the wind blasting out of the Highwood Pass to the west. Tony Burton and Jay Poscente were out in front and they both decided to head for the Rocks to find their way home (which they did, although not without some interesting moments).

I looked to the south and although it looked marginal it was more appealing to me than the Rocks to the west, given my altitude and stomach. It is one thing to get low over landable terrain, but quite another to get low over mountain valleys and ridges — so, back to the south I flew. I knew there were a few good fields along the way, although you did have to look for them, and I decided I would fly as far as I safely could manage. The lift continued to deteriorate over the valley and I did not have enough height to fly to the hills to the east or the west to see if conditions were any better. I continued south and watched the weather close in.

I remember being quite attentive to the environment — both inside the cockpit and without — and I felt relatively relaxed; I knew the worst that could happen is I would land sooner rather than later, and I did not doubt a safe landing could and would be made. The further south I flew the lower I got and looking ahead I realized things were not likely to get any better. I chose a potential field that looked fine — freshly harvested, nearly flat and of decent size with few obstructions. The trees

below on the downwind would not pose a problem unless my circuit was truly bizarre. At this point I estimated I was probably at 10–1200 feet — the precise altitude didn't matter a hoot — I knew under the circumstances not to rely on my altimeter. Having chosen a potential field, and having a little altitude to spare I spent the next five minutes or so trying to find nonexistent lift. I turned off my radio once I had committed myself to my circuit as I wanted no distractions. I flew a rectangular pattern at an appropriate speed, and was far enough away from my touchdown point: I had adequate time to assess both the field in detail and line up properly. The freshly mown field was beautiful and was as smooth as could be, and I had a short run out... "Terra firma... and me and the plane all intacto."

The Bad

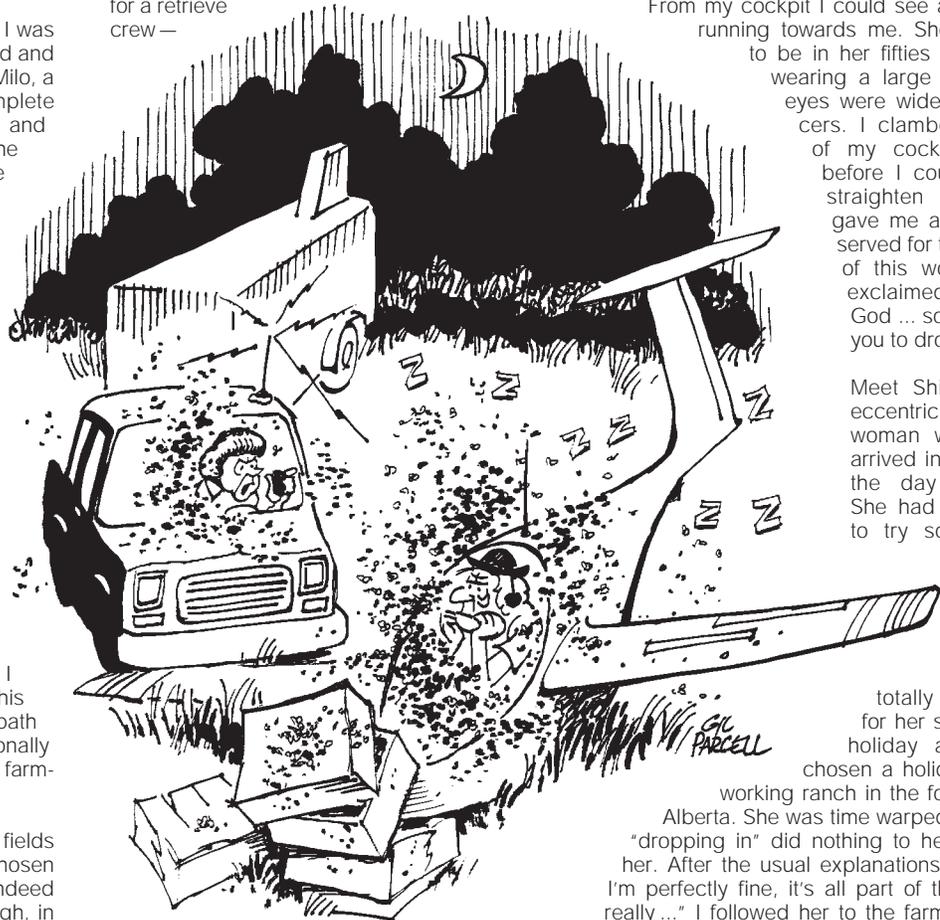
I had declared my Silver C 50 km task. I was to leave the glider strip at Black Diamond and fly to the east to land somewhere past Milo, a distance that would comfortably complete the required task. The lift was strong and arriving at Milo was not a problem. The only "problem" was getting down as the thermal strength was consistently 4–6 knots and even though I committed myself to landing near Milo I did wonder where else I might go. My crew had already left Black Diamond and were expecting me to land nearby. I spent literally well over an hour looking over all the landing possibilities. I looked at all sorts of fields — large, small, surfaces of all descriptions — and dutifully reflected on both slope and wind conditions. In retrospect, I suppose the field I chose was largely chosen because I thought it both was acceptable and would provide the easiest retrieve. It was near some grain elevators on the edge of town and I could see a road approaching the field. I had noted from my vantage point of 5 or 6000 feet AGL some variations in the surface of the field, but as I repeatedly flew over the field I thought this not significant. There appeared to be a path of some sort traversing the field diagonally and I surmised this must have been a farmer's airstrip.

I flew over many large, even coloured fields nearby, but decided to stick with my chosen field. I had lots of time for a circuit and indeed my circuit was quite reasonable although, in retrospect, flown too quickly. I knew I would be landing into the brisk wind, so I wanted to have adequate speed to avoid any potential problems with windshear. I did note on the crosswind and downwind some telephone poles on the approach, but I thought with adequate height they would not be a problem. I had decided that field was of more than adequate size. On my downwind I acknowledged the "strip" was a bit rougher than I first anticipated, but I was committed and it seemed a go. As I turned on to base and then final, I realized I needed plenty of height to clear the poles and wires: I ensured I cleared the poles but then the field looked considerably shorter than I expected. I used both spoilers and side-slipped (a manoeuvre in combination I had rarely practised in my fibreglass ship) and was distressed to see both the undulations in the "strip" and the end of the field in view. I touched down rather

firmly, bounced and flew over several big dips in this rough gravel road about 200 feet short of the far fence. I got out of the cockpit, a little shaken, but relieved that I was down in one piece. I remember turning around, looking at the 20 foot dip in my landing strip and thought ... "you've got to be kidding".

I had planned an easy retrieve and it was just that. My crew arrived shortly thereafter, congratulated me on completing my task and expressed some intrigue with my choice of fields. It was not obvious to me that they appreciated my great effort to make a convenient retrieve for them a priority!

I learned lots from this flight, including ensuring that safety remain the number one priority. Convenience for a retrieve crew —



"Good grief, all of Canada to land on, but oh no, you had to drop in on the bit with the beehive on it!"

especially for a low time pilot — must never be a principle consideration. Any irregularity in a field notable from the air is probably quite significant, as my flight attested. An alternate field should be chosen. Any obstruction will substantially shorten the length of the available field by a factor of 10. The telephone poles, perhaps 35 feet in height, required me to clear them by at least that height again; thus, with a height of 70 feet over the threshold to my circuit even a glide angle of 5:1 (with full spoilers and side-slipping) my field length was shortened by $70 \times 5 = 350$ feet. Avoiding obstructions is essential.

The Curious

Flying north from Cowley I made my way the 120 km to Black Diamond, then east over to High River and looked south and acknowledged that the hazy blue murk before me was not a likely ticket home. I flew back to the west. I remember thinking I could land in Black Diamond — the home strip did offer some comfort — but the mountains were beckoning ... I decided to press on to the west and find some lift over the rocks. I was, in retrospect naive — indeed had I made it to the mountains with little or no lift the situation would have been a bit dicey. I pressed on west of Longview until hope was clearly fading. With adequate height I picked a large cultivated field, made a circuit (too close in, but otherwise reasonable) and landed.

From my cockpit I could see a woman running towards me. She looked to be in her fifties and was wearing a large hat. Her eyes were wide as saucers. I clambered out of my cockpit, and before I could even straighten out she gave me a look reserved for those not of this world and exclaimed ... "My God ... so good of you to drop in!"

Meet Shirley. An eccentric English-woman who had arrived in Canada the day before. She had decided to try something

totally different for her summer's holiday and had chosen a holiday on a working ranch in the foothills of Alberta. She was time warped and my "dropping in" did nothing to help orient her. After the usual explanations ... "Yes, I'm perfectly fine, it's all part of the sport, really ..." I followed her to the farmhouse. I met her hosts, had some refreshments and got hold of my trusty crew. Shirley remained enthralled by the realization I had spent nearly six hours in the air without a motor. I offered to take her for a flight should she be able to find her way south to Cowley. She thought this was an "absolutely marvellous idea", and several hours later she accompanied my crew and me back to Cowley. She told us she had always wanted to sleep under the stars, and tonight was going to be the night — as long as there were no bears. We reassured her about the bears, and some time later arrived at the field. It was dark. As we got out of the car we heard in the distance the howling of coyotes. We reassured her they did not sound very hungry tonight. She smiled nervously and asked where would be a good place to sleep. I thought she might prefer to sleep in our tent

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Ridin' the wind

Prologue: After the pre-Worlds in July 1990 in Minden, I had planned to make the 4000 km trip home more interesting by flying part of the way. On 10 July the first leg from Minden to Jerome, near Twin Falls, Idaho was completed with Bob Gladics, a pilot from Sun Valley. Friends invited us to stay overnight in Sun Valley, where the flight was to be continued the next day.

Jörg Stieber
from the CASG newsletter

THE NEXT MORNING when we woke up we were awed by our surroundings. 12,000 feet tall peaks gleamed in the right sunlight and the sky was a spotless dome of dark blue. The mountains here were very different, very steep and rough like the Canadian Rockies with narrow valleys cut deep. In Nevada I had flown over mountains shaped like round hills although many of them were over 10,000 feet tall.

Not before we went to town with our hosts for breakfast did I realize that this was actually the well-known ski resort Sun Valley, Idaho. For a ski resort in summer, the town was surprisingly busy. During the skiing season it must be a zoo.

Over breakfast we discussed the plans for the day. Bob wanted to take advantage of the weather and try a record 500 km triangle.

We went to the airport together to rig the ships. The runway of Hailey County airport is in the centre of the valley with steep flanks to either side and has no noticeable grade. Larger planes (from twins up) don't have a lot of room to fly a circuit. A missed approach must be interesting because the pilot has to climb straight out until he finds enough room to turn. I counted a handful of business jets (the larger variety) and was told they belonged to the LA crowd who have their weekend chalets here. Wondering if I would find it difficult to get used to that kind of life I watered up JS to max takeoff weight. It was not easy to convince the rather posh service outfit at the field that we needed oxygen and we needed it right away. Somehow I have the feeling that unless one has a ten million dollar plane parked on the tarmac one's wishes and desires rank somewhat low on their priorities list.

Since he was trying for a record, Bob took off first. At 1 pm JS finally left the ground, unfortunately a bit late. Climbing out, the glider danced behind the trusty old Cessna as the strong gusts coming off the rocks hit the wings. Bob reported good lift and I released at the edge of a steep ridge and climbed to 12,000 feet in 13 minutes.

To the north there were snow covered peaks as far as I could see. Good cu hovered over many of them. To the south and east was the Snake River Valley, all blue and too wide (100 km) to cross. It was clear that I would have to cross the valley eventually since it runs from

NE to SW and my intended course line was roughly ESE. I decided to stay in the mountains for the time being, flying parallel to the valley in NE direction until thermal development would allow a safe crossing.

Although I had to jump from ridge to ridge rather than following them I made good progress. There was no problem to maintain a safe working band of 12,000 to 15,000 feet.

A good two hours after takeoff and about 200 km on course the valley started to curve more and more to the north and I had no choice but to cross. The valley was still blue but it had narrowed to about 80 km and my new course indicated a perpendicular crossing. I crossed via Rexburg, north of Idaho Falls and aimed for the nearest mountains on the other side. Surprisingly the air over the valley was not as dead as it looked and I lost much less altitude than expected.

To the east the three distinctive peaks of the Tetons dominated the scenery. Admiring this unique formation from my vantage point I knew then that this flight would be among the handful of flights one will always remember. All the efforts of becoming a glider pilot and the frustrations of early cross-country flying seem insignificant in the face of such a flight.

I passed up a mediocre thermal in the foothills on the SE side of the valley and continued on towards the higher mountains. Minutes later I had to regret this decision.

I was hit by very strong sink, losing altitude at the rate of 1000 fpm and was forced into a narrow valley (Swan Valley) with the mountains to both sides towering high above now. The spectre of an unscheduled landing loomed larger by the minute and JS' shadow jumped along the rock faces as I was searching for the saving thermal. The gusts indicated strong activity but they were too broken up to be of any use. At last, crossing over a shoulder the vario peaked and stayed there for a moment — this had to be it. The thermal was at least 10 knots in the core but extremely narrow and rough. The fully loaded glider was sluggish in the controls and I could stay in the core only over a fraction of the turn. The averager showed a disappointing 2 knots. My hand on the dump valve, I was prepared to let the ballast go as soon as the average lift declined.

Precious time was lost as the altimeter wound itself up ever so slowly, but things improved

with increasing altitude with the thermal getting wider and smoother and cloudbase was eventually reached.

In a more conservative mood I proceeded along high ridges in an easterly direction, passing to the south of Jackson, WY and enjoying another spectacular view of the Tetons, this time from the SW side.

A good looking cloud fell apart just as I approached and served as a reminder that the day would weaken soon and I would have to find a suitable place to put JS down within the next 1.5 to 2 hours. To the south stretched a grassy plateau at an elevation of about 7500 feet. There were no signs of cultivation and although it looked smooth from my altitude I suspected that a landing would be very rough. To the west there was the Wind River Range, an impressive mountain range and part of the Continental Divide, running NW to SE, 13,000 feet high and 40 to 50 km wide. I decided to head for the NW end of the range and pick up a beautifully developed cloudstreet that ran its entire length.

The options were:

- land at the airport of Lander, WY on the far side of the range, distance about 140 km (my chart ended right after Lander).
- land at Wenz airport on this side of the range (in case a crossing was impossible), distance 60 km.
- keep going along the range and get closer to I-80.

I had lost radio contact with my crew, Vicky Stamison, and also Bob quite a while ago. Bob had run into difficulties and given up on his record attempt. As I learned later, Vicky had a difficult time following the route we had planned before departure. She drove for hours on end following lonely backroads over seemingly endless empty plains.

The Wind River Range rises out of the prairie in three terrace like levels. The forests with lakes interspersed covering the first level form quite a contrast to the surrounding flat grassland. I saw tour boats on the lakes and cottages around the shores. Next up is hilly grassland, carrying no other vegetation and with visible trails. Ice and rocks form the top level, the highest summit being 13,804 feet.

Approaching and climbing up the Wind River Range I was awed by its massiveness and diversity. One could probably tour the range on horseback for months without ever coming back to the same spot.

The sun was getting lower and the thermals were weakening noticeably. It was getting harder to reach cloudbase. Carefully I worked my way up to the centre of the range, always making sure I could retreat safely if I were ambushed by a sudden downdraft. I climbed as high as the weakening conditions allowed and still the tops looked awfully close. It was clear, once the decision was made to go over the top, it would be final. No matter how strong the sink I would encounter on the other side, I would have to keep going. I pondered this for a couple of minutes, trying to figure out if I could get away from the mountain, even in a

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Escape from Winterpeg!

“Good morning, ladies and gentlemen. Welcome aboard Air Canada Vacations Flight 081 for Honolulu. Our flying time will be 7 hours and 45 minutes at a planned cruising altitude of 37,000 feet. We hope that you will sit back and enjoy your flight with us today.”

Mike Maskell
Winnipeg Gliding Club

HAWAII. The very name conjures up a mind's rush of white sand beaches and soft warm breezes, where women wear grass skirts and men roast pigs buried in the sand. But for a glider pilot on the prairies in mid-November with two feet of snow on the ground and temperatures hovering around the -20°C mark, the idea of visiting Hawaii only brings to mind one thing: soaring along the north shore of the island of Oahu.

We had planned this trip for several months and the day of departure could not get here fast enough. We had our tickets bought and paid for even before our own flying season ended at the Winnipeg Gliding Club. The thought of going filled our days and we had discussed what we would like to do once we got to the island. Fortunately, my wife Susan is also a glider pilot and she was all for the idea of us getting checked out at the gliding club (actually more of a commercial gliding operation than a true club). The plan for our visit would include a couple of days of sightseeing and recovery from the long flight over before we would actually go gliding.

The island of Oahu is quite small in size, as are all the Hawaiian islands. The total land mass only measures about 25 miles by 30 miles and the whole island can be driven in a short time. Most of the population is concentrated in the lower portion around the city of Honolulu with the popular tourist attraction being Waikiki which is Hawaiian for “we take your American dollars in exchange for cheaply made T-shirts”. A walk through the shops of the beach area soon makes you realize that there are probably enough T-shirts for every man, woman and child in all of North America. We bought our limit! The north shore of the island is mostly agricultural with sugar cane and pineapples being the cash crop. The gliding field is located up on the north shore, 45 minutes from Waikiki. It operates from an old abandoned but well maintained Air Force strip which is 9000 feet long! There are actually two outfits offering glider rides and rentals, but we had been told that the only one to rent from was SOAR HAWAII.

Meanwhile back at Tourist Trap USA, Sue and I were starting to get the urge to rent a car

and head off in search of the gliding field at Dillingham. There are many car rental firms in Waikiki, some with very attractive rental rates. Attractive that is, until you learn that you will have to sit through a 2 hour hard-sell talk on Hawaii's Condos. Well, we opted for the slightly higher charge that did not include the arm-twisting clause in the contract. And early on a Monday morning, we were off.

Leaving the beach area and heading into the higher elevations brought some scattered rain showers (what did you expect, we were on vacation and going gliding!), which turned into heavier showers as we got closer to the field. But as it turned out, these showers are quite common in the hills and everything around the shoreline was clear. Finding the airport was simple. Large road signs direct you right up to the front steps of SOAR HAWAII. It also leads you to the other flying service — THE ORIGINAL GLIDER RIDES WITH MR BILL.

Let me tell you about Mr. Bill and his outfit. Both offices are located in a common open building with a small roof affording cover for the 6 foot by 6 foot office that each company has. The parking lot is right next to this, so as you drive up and park, both owners come running up to your car, almost begging you to fly with them. On the day that we arrived, Mr. Bill must have been on vacation, as he had a young lady working there assisted by her husband who did not identify himself (maybe it was MR BILL). Being that I had already booked with Soar Hawaii I knew who to go to. The other lady at this point started to hassle not only me but the other owner to the point that I felt trapped in the middle of a domestic dispute. There was obviously more than thermals in the air that day. However, I managed to prove to Elmer that I was a licensed pilot from Canada and showed him my American glider licence (to fly in the US you must apply for an FAA temporary licence, which can be done at the local office of the FAA. I got mine during a trip to Phoenix for another soaring adventure). Elmer has been flying at this same location for over 15 years and was very friendly and we were soon strapping into a 2-33 for a quick checkflight. I have noticed that in the States most operators do not like to take time with cockpit checks and as soon as Elmer

strapped into the front seat the towplane was taxiing up and away we went. Fortunately for me — while Elmer was hooking up the rope — I was preparing for takeoff with our customary CISTRSC checklist.

The brief checkflight was more for sightseeing than anything else. And what sights there are to see. As you are flying directly parallel to the beach and a 3000 foot ridge, there is plenty to see. As our luck would have it, the winds that day were also parallel to the ridge, so there was almost a complete lack of any decent ridge lift so we were back in about 25 minutes. Elmer signed me off OK for solo and Susan then prepared to get in. The towplane came over to suggest that we go to 3000 feet AGL, to allow a bit more time for sightseeing. We agreed and again after a more thorough pre-takeoff check, we were off. The towplane that they use is a Piper Pawnee with I believe, 235 hp, which gets you to altitude in short order. We were towed directly to the ridge and after playing around and taking in all the views, managed to scrape in some zero sink on the ridge that projected more at right angles to the winds. As I had said earlier, the winds were parallel (from the east) to the ridge where they are normally from the north, thereby providing almost steady lift on most days.

After several minutes of attempted ridge soaring we entered the circuit. The normal pattern for gliders is on the beach side of the airstrip. It is hard to describe the feeling of flying a glider over open water. Sue was not impressed when I turned slightly away from downwind and headed out to sea. An uneventful landing followed with the glider coming to a stop almost exactly where we took off from. Ah, the beauty of having the launch point 2000 feet from the threshold of the runway! Almost immediately the lineboy was there to help us push off to the side and we went to explore the hangar and tiedown areas. All in all it had been a fantastic if somewhat short flight. Since we wanted to see and do as much on the island as we could we were not able to fly on any other days. Next time.

So if you ever get to the island of Oahu, look up SOAR HAWAII and Elmer. I guarantee that you will enjoy your visit, but after flying is over be careful of the waves near the beach (we weren't, but that is a story for another day). •

Accident/ Incident Report & Analysis for 1992

George Eckschmiedt
member Flight Training & Safety Committee

The 1992 soaring season is finished and once again I am spending my Christmas break in evaluating the Canadian accident reports; the fifth year in a row.

The first thought that comes to mind is to pay homage to the two fraternity members deceased in gliding accidents. May their tragic fate provide a lesson for all glider pilots.

Fewer reports were received this year than in any of the previous years. It would be nice to be able to attribute this to actually lower numbers of accidents/incidents, but my experience suggests otherwise. The previous year's experience suggests that we should have had about 15 more reports.

The data for this report was obtained by, as the saying goes, hook or crook; any possible means. Some by the graciousness of the insurer, as they pass on to SAC the one liner description of the original event, but not much else. *free flight* lists some of the events from wherever Tony gets his information, and from the diminishing number of reports submitted to SAC. All the information from the various sources were cross checked for whatever more data can be extracted from each, to try to get it as complete as possible but without duplication.

It has to be repeated time and time again: the Flight Training and Safety Committee is very concerned, and we are trying to do anything possible to improve the safety picture. That is the reason this report is prepared. This report has no intention of being related to the SAC insurance scheme, or for that matter any other schemes. The FTSC is working independently on this report (believe me, very independently — I do it), but we intend to make use of any information we can get.

Here is a list of the known events in 1992 in Canada, as gathered from reports to SAC, to the insurer, and obtained by any means.

TABLE OF EVENTS

NR – not reported NA – not applicable

Pilot age	Description	Flying hrs
<i>Aviation accidents not reported to SAC</i>		
NR	Glider wingtip struck power lines	NR
NR	Rudder cable broke on takeoff	NR
NR	Rear canopy opened on takeoff roll	NR

NR	Landed short, ground looped	NR
NR	Towplane went into ditch, landing gear collapsed	NR
NR	Towplane ground looped, landing gear fractured	NR
32	Pilot induced oscillation on landing	60
NR	Hard landing after aborted takeoff	NR
NR	Motorglider spun in. Fatal	NR
NR	Towplane ground looped on landing	NR

Aviation accidents reported to SAC

NR	Heavy landing	NR
32	Accidentally flew into the mountain	35
59	Crashed into the mountainside. Fatal	332
NR	Undershot runway, hit edge of small ridge	258
45	Glider ground looped on cross wind off-field landing	260

Non-flying accidents not reported to SAC

NA	Canopy forced open by a gust of wind	NA
NA	Canopy hinge severely bent by uninformed operator	NA
NA	Damaged soybean field at landing	NA

Non-flying accidents reported to SAC

NA	Trailer undercarriage failed at 100 km/h	NA
NA	Trailer rolled during transport	NA

Aviation incidents reported to SAC

64	Winch launch with divebrakes open	2085
NR	Release failed thru use of wrong tow ring	NR
50	Incorrectly assembled control resulted in reduced elevator	183
42	Battery fell out of its box, jamming aileron pushrod	41

ANALYSIS

The status quo is being maintained. We have had an almost identical number of accidents last year, but with much less incidents reported. I doubt it if we had fewer incidents, just fewer reports. In fact, the major difference is the lack of reporting, the lack of concern of the membership for allowing others to learn from their mistakes.

Some highly respected pilots sent in incident reports. They certainly kept my respect for them. Thumbs-up for Champlain, Air Sailing, Bulkley Valley, Regina, Borden and Bluenose clubs for sending in their reports. Bluenose is particularly complimented here for their detailed reporting. To all other clubs (including my own) that had insurance claims — you have some opportunities to improve ...

As in previous years, the events were grouped to highlight certain common characteristics. We had 15 (also 15 in 1991) aviation type accidents and 5 (7 in 1991) in which no flying activity was involved! These non-flying accidents with insurance claims could have been caused by anyone, yet they reflect on the soaring community. The crop damage caused by outfield landings is one item that is close to being unpredictable; the insurance is just for such an event.

Considering the fatal accidents, our sympathy goes to the survivors of these two unfortunate events. Both were flying motorgliders on a cross-country flight when fate intercepted their life. One of them had no witness, only some assumptions can be made from the recovered remains of the glider. The other seemed to have spun in. The lessons to be learned are classics: do not push your progress beyond the conditions.

Of the 24 events, 7 were landing related. Last year we could not take off, (8 events), this year we can't land. A couple of ground loops, hitting objects, PIOs, undershooting — all point to one thing: inadequate landing preparation. No time for the SWAFTS check, you say? You certainly will not have time for a good landing either. You do your checks automatically, you say? Please look at the statistics.

We had only one takeoff related incident reported, a 2000 hour pilot taking off with dive brakes open. A very special thank you for reporting this. The lesson here is that distraction from the routine can have adverse consequences. Again, a classic: when a routine is interrupted the whole routine must be repeated.

This year a canopy was damaged during a takeoff. Last year we lost one during landing. Canopies are more fragile, yet get handled more than any other part of the glider. We leave them open, leave them unlocked, then force them into place. Perhaps we should have a consciousness-raising rally about the poor canopy. Would a little label help that reads "This canopy costs \$5000 to replace"?

Mechanical problems are on the increase and are a cause for concern. We had another rudder cable failure in flight. No details are available for this year's event other than major wing and tail damage. Last year's rudder cable event was described in detail and there was no further damage to the glider. Both gliders were older classics. Rudder cable connections are difficult to inspect in some gliders but the statistics indicate that it should be done regardless of the difficulty. It could be said that it must be done because of the difficulty of inspection.

The venerable Blanik L-13 event is worth describing in detail as it may happen to someone else. The T-shaped lever that connects the elevator to the pushrod was removed for some annual maintenance work and was reinstalled backwards. This resulted in insufficient down elevator movement which was discovered only during flight. The Blanik manual clearly shows the control deflection requirements (up 32 deg, down 25 deg), but obviously, it was not checked correctly by neither the pilot, nor the mechanic that installed this lever. (The removal of the lever is not part of the routine rigging/derigging associated with gliders, so the lever must have been installed by the licensed mechanic.) If the test pilot was lighter, no telling what could have happened. Thank you for the description; by highlighting it here, it is hoped that its repeat can be prevented.

Another event was a dislocated battery jamming the controls. Now a battery is an item that is prone to be fiddled with, by people not too technically minded. It is often an add-on, often installed by the owner and handled daily by any pilot. Yet few people realize that a good battery can be a very dangerous item if mistreated. In this case the battery came out from its already ill fitting box during a 2000 foot winch launch. A winch launch that results in such an altitude subjects the glider and anything not fastened down to quite some negative G force, so the event can be predicted. It is fortunate that the battery terminals did not get into contact with the tubes or

cables as that could have resulted in a control cable burn, a fire, or even in an explosion. In 1988 we have lost a pilot and a Cessna 150 because of battery and control cable contact. I am afraid, I have seen some pretty scary battery lash-ups in gliders. It even happened to me in the G-103 when flying inverted; the retaining rubber band was not strong enough to hold the battery in place. Thank you for reporting the event. By highlighting it here, it is hoped that all glider owners take a second look at their battery installation. A battery installation cannot be just "good enough". It has to be fool proof.

The Schweizer type tow hook has been the subject of many opinions for many years. The Schweizer hook requires the use of a Schweizer ring and nothing else. Yes, nothing else. I saw the commercial operator in Hawaii using a simple knot on the rope without a ring operating for many thousands of tows without any problems. Yet the largest club in Canada allowed the use of an oval Tost ring on a Schweizer hook. Thank you for reporting it in *free flight*. The real scary thing is the proposed solution to the problem: more than one ring on the same towrope. How long before someone mixes up the rings? The only real solution is a dedicated weak link for each glider type, with the correct ring attached, and discipline in using it.

Towplane events were concentrated on ground loops during landings. The damage varied; the fact of ground loops did not. No report was received on either of them.

CODING SHEETS

The completion of the coding sheets has deteriorated from the previous years. Much interpretation of the accidents was required as only nine coding sheets were received.

The object of the coding sheet is to identify the factors in the event. Items that could have caused the event, the reason, the result, the damaged component, or anything that was directly involved. Simply, only the FACTORS. The coding sheets are processed by first examining the reported codes. If they make sense, an X is placed at the corresponding place in this analysis. Then each and every report, even if it is only a one liner from the insurer, is mentally recreated and examined for possible factors. A painful process, visualizing all the mistakes and damages of our friends and equipment.

Some reports were excellently described, leaving little for assumptions. On others, some assumptions had to be made, or simply were lending themselves to assumptions.

CODING SHEET SUMMARY

		'92	'91	'90	'89	'88
Number of events 24 37 40 47 27						
1	TYPE OF EVENT					
1.1	Heavy landing	xxx	3	6	5	5
1.2	Undershoot	xxx	3	2	6	18
1.3	Overshoot	x	1	0	1	1
1.4	Groundloop	xxxxx	5	5	4	3
1.5	Collision (ground)		0	0	0	4
1.6	Collision (air)		0	0	0	0
1.7	Stall		0	0	2	0
1.8	Spin	x	1	1	2	0

		'92	'91	'90	'89	'88
1.9	Structural failure		0	3	2	1
1.10	Blow/flip over		0	0	3	2
1.11	Gear-up landing		0	2	0	2
1.12	Gear collapse	x	1	0	1	1
1.13	Takeoff	xxxx	4	5	4	2
1.14	Other	xxxxxxxxx	10	16	15	14

2	AIRCRAFT DAMAGE					
2.1	None	xxxxx	5	14	13	17
2.2	Minor	xxxxxx	6	17	10	13
2.3	Substantial	xxxxxxxxx	10	3	9	11
2.4	Destroyed	xxx	3	2	5	4

3	PERSONNEL INJURY					
3.1	None	xxxxx20xxxxxx	20	29	24	43
3.2	Minor	x	1	0	4	1
3.3	Serious	x	1	0	0	3
3.4	Fatality	xx	2	1	4	0

4	AIRFRAME FAILURE OR DAMAGE					
a.	In flight failure	xxxx	4	5	-	-
b.	Damage at accident	14xx	14	-	-	-
c.	Handling damage	xxxxx	5	7	-	-

4.1	Flight controls	xx	2	2	3	2
4.2	Elevator	xxxx	4	4	5	3
4.3	Rudder	xxxxx	5	3	6	2
4.4	Ailerons	xxx	3	2	5	1
4.5	Flaps	x	1	3	2	1
4.6	Wings	xxxxxxxxx	8	5	10	6
4.7	Spoilers/divebrakes		0	1	1	2
4.8	Wheel/mount	xxxx	4	5	6	1
4.9	Canopy	xxxxx	5	6	6	7
4.10	Fuselage	xxxxxxxxx	9	7	5	13
4.11	Release	x	1	2	-	-
4.12	Instrumentation	xxx	3	0	1	-

5	TOWING					
5.1	Premature release		0	3	0	0
5.2	Rope/cable break		0	0	0	0
5.3	Winch/tug failed		0	0	0	2
5.4	Cable snagged or release failed	x	1	1	0	2
5.5	Divebrake opened	x	1	0	1	4
5.6	TP upset on ground		0	1	0	0
5.7	Run out of fuel		0	1	2	-
5.8	Taxiing mishap	xxx	3	0	2	-

6	PILOT FACTORS					
6.1	Misused controls	xxxxxxx	7	4	3	9
6.2	Misused spoilers	xxx	3	1	2	1
6.3	Misused flaps		0	1	1	2
6.4	Misjudged distance	xxx	3	6	4	8
6.5	Misjudged speed	xxx	3	2	2	1
6.6	Misjudged altitude	xxx	3	4	10	13
6.7	Misjudged conditions	8xx	8	7	8	10
6.8	No wind compensat'n	xxx	3	5	3	8
6.9	Did not see object	xx	2	3	2	4
6.10	Did not keep speed	xxx	3	1	2	1
6.11	Overstressed A/C	xx	2	1	1	0
6.12	Exceeded experience	x	1	4	3	4
6.13	Reckless flying		0	2	4	1
6.14	Insufficient training		0	1	2	5
6.15	Physical impairment		0	1	0	0
6.16	Poor circuit plan	xxx	3	5	11	16
6.17	Instructor failed	x	1	3	0	0
6.18	Other	xxx	3	7	9	4

7	WEATHER					
7.1	Low ceiling		0	0	0	0
7.2	Rain		0	0	0	0
7.3	Hail		0	1	3	0
7.4	Crosswind	x	1	2	3	1
7.5	Severe turbulence		0	1	0	0
7.6	Wind gradient		0	1	0	1
7.7	Wind shift		0	1	0	0
7.8	Thunderstorm		0	0	1	0

		'92	'91	'90	'89	'88
7.9	Severe sink		0	1	1	0
7.10	Line squall	x	1	1	3	0
7.11	Lightning		0	0	0	0
7.12	Poor visibility		0	0	1	0
7.13	Clear (if factor)		0	0	-	-
7.14	No factor in event	xx22xx	22	29	-	-

		'92	'91	'90	'89	'88
Flying hours distribution						
	0 - 100 hours	2	7	7	10	1
	101 - 300 hours	3	7	5	11	4
	301 - 800 hours	1	6	5	7	6
	801 - above	1	4	3	2	5

No. times hours were reported in flying events	7of	24of	20of
	19	30	31

		7of	22of	16of
Reported pilot age distribution				
	16 - 25	0	4	3
	26 - 49	4	9	9
	50 - 59	2	6	1
	60 - up	1	3	3
Times age reported (in flying events)				
		19	30	31

As can be seen, five previous years' data is available simultaneously. The comparison should be made by the readers, as the numbers are self evident. Any apparent inconsistencies between the number of Xs and the number of events may be the results of assumptions, and the fact that some events may have had more than one factor.

The available data is consistent with all the previous years, even when considering the variation in the yearly event quantities.

Heavy landings, undershooting and ground-loops are dominating, as last year. In-flight mechanical failures are also worrisome, but at least they are being reported. Minor damages increased; we must look at the way we care for our canopies. Maybe our insurance claims are better this year, but I cannot see an improvement in our safety attitude. Not when we are not willing to share our experiences so others will not make them.

Examining Section 6, Pilot Factors, the sum of the "misjudged xxx" still stands out. The club CFIs and safety officers would do well to train pilots for applied self discipline under stressful conditions.

CONCLUSION

The disappointingly low number of incident reports prompts me to review the reports of the last five years.

	'92	'91	'90	'89	'88
Aviation accidents					
• not reported to SAC	10	4	7	4	1
• reported to SAC	5	11	12	17	14
Non flying accidents					
• not reported to SAC	3	5	7	3	0
• reported to SAC	2	2	3	5	2

	'92	'91	'90	'89	'88
Aviation incidents reported to SAC					
	4	15	11	18	10
Total reports	24	37	40	47	27
Aviation accidents (%)	63	41	48	45	56

The numbers speak for themselves. We have practically the same number of accidents year after year. Only the reporting pattern changes;



Coming Events in 1993

5-9 July 1993, **Fun soaring contest**, Gatineau Gliding Club, Pendleton, ON. For sports, club, and 1-26 sailplanes. Contacts: Richard Officer (613) 824-1174, Glenn Lockhard (613) 692-3622.

6-15 July, **National Soaring Championships**, Swift Current, SK. Practice days 4-5 July. Supported by the prairie clubs. More details on page 18. Contest manager, Tony Burton (403) 625-4563.

24 July - 2 August, **Cowley Summer Camp**, Canada's largest and best soaring get-together. Sponsored by the Alberta Soaring Council, contact: Tony Burton (403) 625-4563.

7-11 October, **Cowley Wave Camp**. Contact Tony Burton (403) 625-4563.

1992 Accident/Incident Analysis

the incidents are not reported. The pilots are getting reluctant to allow others to learn from their own bad experiences. Is it laziness or fragile egos; I hate to think of either.

The five year data trend shows that Canadian soaring is on a plateau of accidents. We maintain the status quo. The presented data seems to be a standard, a normal distribution.

The industrialized world discovered something that the North Americans taught the Japanese forty years ago but conveniently forgot themselves: the concept of continuous improvement. Very little things are improved by a great deal overnight. The cowboy mentality, the instant gratification idea will no longer provide the expected results in our complex world. Soaring is a very complex activity. To improve anything, the item must be critically examined, measured and the offending things eliminated bit by bit. There are no golden bullets for eliminating accidents. The FTSC cannot do it for you. We can only point out what happened so you learn from it. If you already know everything, please cancel your insurance, you don't need it and you don't need us. But the rest of the world needs you, so let us know how you did it.

The concept of continuous improvement has certain prerequisites. One of them is the Champion. No, not the Nationals, but those that champion the improvement process. In our little fraternity they have only to be the club safety officers and the club CFIs. It should be their duty and responsibility to assure a safety mentality and that this mentality is communicated first to their own little circles, then to the rest of us. Right now there seems to be little moral obligation to do anything after a mishap. The insurance will pay for it, the worst thing that happens is the glider is out of service for a while. Who knows, maybe if we would say to people "you screw up, you write a report", this may be effective enough to prevent some accidents.

We have a lot to think about.

club news

APPALACHIAN IN 1992

Appalachian started the year in good shape - finances in order, equipment ready, a private hangar for the Libelle completed, and plans for a spring cross-country competition prepared. Early season weather was fair with a few glorious days at 6-8000 feet ranging afield, listening in on happy soaring pilots in Vermont or Champlain pilots across the mountains east of us.

During the summer the weekends died, except for a few. On these days we flew demonstrations or passengers at a Sherbrooke Aviation Rendez-Vous and an EAA fly-in, or practical distance flights south and west of the field towards Asbestos and beyond. Some of our best soaring was done in mid-week.

For a number of reasons our total flights were down to 206 - about half of our best year's performance. With one student for part of the year and fewer members (9), we were unable to maintain the momentum. On the other hand we sent a pilot to instructor's school, another to the excellent cross-country clinic at Gatineau, and tested Dave Lord's and Doug Clement's BG12-16 which flew beautifully.

Kemp Ward

YORK SOARING CLUB

On January 9, 1993 a small group of about a dozen stir-crazy pilots gathered at York to welcome the new year with a little flying. The day dawned clear and cold with a forecast of afternoon cloudy periods and a high near freezing. To us, that sounded like a soaring forecast. The field was in good shape with about 1" to 2" of packed snow on the runways, and as luck would have it no drifts against the hangar doors. Around 11:30 we started by pulling out a 2-33, 1-23, Blanik and towplane. It took about a half hour to DI the gliders and scrape off the ice formed on them by hangar leaks. However, the big problem turned out to be getting the towplane to start. After a lot of effort, it was decided to try a second tug but it was uncooperative as well. As efforts continued on the first two tugs, the chief towpilot showed up and decided he

would try his luck with a third towplane. He was the first to have any success with the engine firing on the first try - however it stalled about five seconds later. Having become the centre of attention, the starter then refused to engage and we had to start hand cranking the engine. All the effort eventually paid off and we at last had our towplane - after two hours of trying. The gliders were then quickly pushed into line so that the fun could begin. The air was quite smooth, but that didn't seem to bother anyone as we managed nearly twenty flights. As usual the day ended all too quickly with the hangar being closed just after 5 o'clock. But everyone went home with a contented grin on their face from a day well spent - in the air.

Alex Upchurch

RIDEAU GLIDING CLUB

Rideau welcomes SAC members interested in an early start in the '93 soaring season. We fly out of Gananoque airport near Kingston, ON. We have paved runways at the airport and as soon as the snow is gone, activities start weather permitting, usually end of March to middle of April. Contact persons: Helmut (613) 548-7564, Ray (613) 389-0483, Peter (613) 376-3491, John (613) 389-2209.

We are about 20 km from Lake Ontario; this proximity with the help of prevailing winds brings in lake effect. Many days start out good but by early afternoon thermals seem to mysteriously vanish. But if one can get an early start 10 to 20 km north of the airport there usually is excellent soaring, but on occasion the problem is getting back against a strong headwind which may not be apparent until closer and lower. On several occasions last year the flight back was over the top of the clouds formed by the lake front. It made for some memorable flying.

A common 300 km in eastern Ontario is Pendleton to Gananoque return. To our knowledge no one has tried a 300 from Gananoque to Pendleton; on a good day I think it can be done. There are several members in our club who are ready to try this.

Helmut Wieland

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Special notice to all FAI badge applicants

Walter Weir, our FAI badge chairman, is going to be travelling a lot this year and be of "no fixed address". Therefore, until further notice, all pilots sending in badge applications should mail them to the *National Office* and the office will forward them to Walter.

SAC affairs

INSURANCE MATTERS

Richard Longhurst
chairman, SAC Insurance committee

SAC GLIDER INSURANCE FOR 1993

Significant rationalizations have taken place in the insurance industry over the past year. The two main competitors for our existing plan with CAIG, being BAIG and Stewart Smith, amalgamated into BAIG. When we commenced asking for proposals, there were therefore only two serious contenders for our business. Companies that had quoted in prior years including AIG, AAU, and CIGNA declined, and Lloyds of London proposed a premium that was immediately rejected.

Both proposals presented a premium of \$285,000 based upon the 1992 fleet, and accordingly the Committee evaluated detail differences in policy coverage and exclusions.

The CAIG policy has the advantage of having been regularly examined by previous Insurance committees of SAC, and has evolved through a number of detailed changes into a document that deals exceptionally well with the current needs of the gliding community. The Committee is very satisfied with the overall administration of the plan, and has received no negative feedback with respect to claim settlements through CAIG. Accordingly the CAIG plan as proposed by Sedgwick was accepted by the Board of SAC at the AGM on 7 March.

A number of important additional benefits have been obtained in the 1993/94 CAIG proposal:

- The basic premium proposed, exclusive of profit-sharing credit has been reduced over the prior year by approximately 4%.
- The 1992/93 insurance program showed a continuing significant increase in the number of aircraft insured, a portion of which represents owners of private aircraft coming back into the plan due to the more competitive premium offered. The Insurance committee, in allocating the proposed 1993/94 premium to individual aircraft, has maintained the forthcoming year's premium for private owners at a level that is comparable to last year. It is considered that this has proven to be a competitive premium in the market place, and accordingly, all of the premium reduction has been applied to lower the cost of coverage on the club fleet, thereby reducing the insurance cost of club aircraft by 5–10%. The only area of significant premium increase is that of aircraft which are insured for liability only (no hull).
- Deductibles have been reduced to \$500 (1992/93 in motion was \$1000).
- We have also obtained a quote of \$100 per trailer for first party accident coverage only, all risks physical damage, to a market

value not to exceed \$15,000. This coverage is optional and carries a \$500 deductible. A comparison of direct quotations for trailer coverage from automobile insurers averaged a premium of \$225 for a trailer of \$13,000 current value. It is considered that this coverage will be cost effective for any SAC member with a trailer whose current market value exceeds \$5000.

- The Insurance committee strongly recommends to clubs that the \$2 million liability coverage per aircraft be considered as a minimum level, and essential for two-seat training aircraft. Certain clubs are adhering to the \$1 million limit, and it is recommended that the current premium reduction offered on club aircraft be ploughed back into increasing liability limits on the training fleet.

I wish to acknowledge Doug Eaton for the contribution of his significant expertise in evaluating the proposals and analyzing alternative premium distribution methods.

SAC TRAVEL HEALTH INSURANCE

A significant change occurred in government health insurance plans on October 1, 1991. Prior to that date plans paid 100% of emergency hospital bills incurred by Canadians travelling outside of the country. Now each province has set daily limits, eg. OHIP will pay up to a maximum of \$400, leaving the balance to be paid by the individual.

Many people travel to other countries either without travel insurance, or relying on travel insurance coverage provided by employer plans, credit cards, or other organizations. Private pilots in particular need to review the policy details of any travel health insurance plan they are relying upon, since in many cases there is an exclusion for accidental injury or death from a flight accident other than as a fare paying passenger on a commercial airline or chartered aircraft. I have also found other relevant exclusions such as for accidents incurred in competitions or when participating in speed contests. Unfortunately, many in the gliding community were forcibly made aware of this through the tragic experience of Andy Gough last year.

Accordingly your Insurance committee has been researching available travel health insurance plans, comparing proposals offered by several companies, and negotiating for a group plan that would provide the required coverage at a reasonable price.

Our considered opinion was that the best proposal presented was from *Medicare International*, who were thoughtfully recommended to us by Ken Brewin and soaring members in

the Ottawa area, who have had previous experience in dealing with this company.

We are pleased to report that this proposal was presented to, and endorsed by the Board of the Soaring Association of Canada at the AGM on March 7, 1993.

The chosen plan provides, in particular, coverage for pleasure or competitive gliding, as well as regular travel health benefits. It is available at a special group price of \$50 per individual which covers any number of ten days trips during the policy year. If any of the proposed trips exceed the ten day limit, coverage for additional days may be purchased at a price dependent on age, typically \$1.75 per day. If a member is travelling with a spouse and/or child under 21, they may also be included under the plan, the spousal premium being the same as the individual, and the child being 10% of the regular premium.

Briefly, the benefits provided are as follows:

- extended term coverage
- no restrictions covering soaring other than professional
- toll free telephone number for emergency assistance
- payment of emergency return home
- unlimited coverage
- fill out one application form only; for future trips call a 1–800 number to activate your coverage
- claim information available 24 hours per day in over 70 languages
- most competitive rates
- air ambulance
- all diagnostic tests
- private nursing and other professional services
- medical appliances
- emergency dental repair
- vehicle return
- subsistence allowance
- incidental expenses
- automatic extension
- return of deceased
- emergency visitation

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and ask for the SAC Group Plan.

Members pay the annual premium and complete an application, and merely have to call 1-800-461-2100 to activate the coverage, quoting the policy number, a minimum of five days prior to departure from Canada.

I would appreciate feedback from any members during the course of the ensuing year as to their experiences on service, and processing of any claims. I would also like to acknowledge the invaluable assistance provided by Doug Eaton in analyzing the proposals.

Cours d'instructeurs '92

Jean Lapierre, AVV Champlain

La semaine du 13 au 17 juillet s'est tenu au club Champlain un événement: un cours d'instructeurs de vol à voile réunissant des membres de cinq clubs du Québec. Serge Morin, chevronné pilote a été l'instructeur du cours et sous sa gouverne les sept participants ont sué et appris tout en s'amusant.

Vous serez peut-être surpris d'apprendre que l'on peut compter sur les doigts de la main les instructeurs francophones dument formés. Pour pallier à ce manque flagrant, le club Champlain a organisé ce cours avec l'appui de notre directeur régional Pierre Pépin. Les circonstances ont fait que nous avons eu le privilège d'avoir Serge Morin comme chargé de cours. Serge possède une expérience de chef pilotes (équivalent au CFI) au club de Roman en France et a son carnet de vol des milliers d'heures de vol à voile en plus d'avoir sa licence de pilote commercial d'instructeur

PREMISES LIABILITY INSURANCE HAS BROAD APPLICATION FOR CLUBS

I have clarified with our insurers that the airport premises liability coverage of \$3 million per club covers *any* location being used either by the club, or by an individual member. For example, even if a single club member flies at a remote location, eg. a US contest, and injures persons or property on that airport, then the liability coverage of \$3 million carried by his club will apply.

A particular reason for this explanation is that the coverage is multiplied if several clubs are documented as jointly supporting an event, such as the upcoming Nationals. Any material being distributed with respect to a joint event should therefore clearly state the names of the sponsoring clubs, and each one of the \$3 million coverages will be added cumulatively to the event coverage.

avion. (Avis aux intéressés, Serge recevra toute offre d'emploi de pilote commercial). Très bien préparé, ce cours nous a permis d'apprendre les techniques d'enseignement, les normes de la SAC, en plus d'avoir un point de vue sur la formation et les techniques européennes. Les journées de 10-12 heures étaient réparties en cours théorique et pratique en vol.

Un bénéfice de ce cours a été le plaisir de découvrir des pilotes d'autres clubs ayant des préoccupations semblables aux nôtres et une expérience différente enfin partagée. Jean Papillon du club de Québec nous a montré que sous la poid d'une aile de Blanik son vocabulaire pouvait être moins chatié; Réginald Spinhayer nous a fait découvrir le vol musette en jouant de l'accordéon; Michel Ravary des Outardes pour sa part a découvert qu'il faut continuellement savoir où l'on est, et Claude Tanguay de Champlain a découvert qu'il ne faut pas laisser trainer sa licence de pilote près de Mario Noël si l'on désire que

PUBLICITY

I thank the members of the Soaring Association of Canada for their support in appointing me to the Board as Ontario Zone Director.

One of the responsibilities that has been assigned to me is that of publicity. I have already received from Ed Hollestelle an edited VCR tape and the promotional material that was prepared for the purpose of obtaining funding for the National Team at the World Championships in Austria. I need further help from the members in the form of any material that was prepared or presentations made to prospective sponsors for any competitive event or club operation. Additionally, I would appreciate hearing from any individuals who have made efforts in this area, successful or not; receiving information on any successful sponsors that were obtained in the past; and hearing from any individuals who have expertise in this or related fields and would be willing to assist the efforts of SAC to become more visible.

Please call me any time at (416) 391-3100 ext 250 as my office has a 24 hour voicemail system, or fax any information to (416) 391-2748. Your help and support in this area is essential for a success!

Richard Longhurst

free flight's **BEST STORY IN 1992**

The best article appearing in *free flight* by a Canadian pilot last year, based on a compilation of votes by the Board, was

"Playing for High Stakes in Nevada"

by Tillmann Steckner of London Soaring. Tillmann's story narrowly edged out Ed Hollestelle's, "Building 57". Tillmann will be receiving an award certificate and a laminated copy of his story.

son deuxième prénom ne soit pas connu. Yvan Chassé des Appalachiens s'est improvisé mécanicien. Tant qu'à moi, j'ai ri ...

Une journée, Michel et Réginald formaient équipe pour les fins du cours. Une heure de préparation de leur vol, largage à 3000 pieds. Conditions, médiocres. Une heure plus tard, pas de nouvelles de nos deux aspirants instructeurs. Finalement un appel, nos deux amis s'étaient posés aux vaches. Pris dans leur instruction ils avaient oublié de prendre des repères et se sont posés à St-Valérien.

Ce cours d'instructeurs nous a permis de réaliser la grande faiblesse de nos clubs en ce qui concerne la formation de nos membres. Pour réussir d'une façon sécuritaire plus d'instructeurs doivent être formés. La SAC nous offre des outils et manuels que nous pourrions améliorer à l'usage. Nous vous invitons à participer au prochain cours qui se tiendra au printemps prochain à St-Dominique à l'AVV Champlain. Veuillez communiquer avec AVVC pour vous inscrire.

Summary of SAC Board Meetings 5&7 March 1993

Update of SAC Procedures Manual

All Directors will review the manual by 31 August to see which sections should remain, which should be deleted, and which should be placed in other documents (for example, the section on glider weight and balance calculations should be in the training manual).

International Gliding Committee meeting

Pierre Pépin reported on discussion with Colin Bantin regarding questions the Board wished Colin to correspond with the IGC on, and to emphasize our concerns about the lack of prior notification of IGC meeting agenda items. A motion for SAC to contribute \$1000 towards Colin's attendance at the IGC meeting was defeated after considerable discussion.

SAC Glider and Medical Insurance

Richard Longhurst reported on negotiations with the two insurance groups remaining interested in quoting on the SAC group policy, and he gave a summary of each proposal. Richard will give a workshop to SAC members at the AGM. Richard also introduced a submission from *Medicare International* for an accident and health insurance policy for SAC members wishing trip medical insurance when gliding in the USA for example.

National Office The secretary's salary was reviewed and an incremental increase

approved retroactive to 1 January. There was considerable discussion as to the merits of and problems with dividing the office function into two part time positions, and to moving the office. It would be too expensive to move before the expiration of the present lease in September 1994. Further discussions took place on the problems of retaining staff, and on the considerable time and effort wasted interviewing and training people who left after one or two weeks.

Publicity for clubs Ulli Werneburg gave a presentation on inducing power pilots to join our clubs. He will write an article for *free flight*.

Nationals George Dunbar gave a report on the status of the Nationals organization for Swift Current. Discussions are going on between CFB Moose Jaw operations personnel and Jim Oke regarding airspace use in the Jet Training Area.

Sporting Committee George gave a report on the latest revisions to the contest rules. There are a lot of editorial changes but the substance is basically unchanged.

Club statistics Thirty-three clubs out of 39 had reported to Randy Saueracker up to March 1. This was not as good as last year but still commendable.

Towplane STCs Chris Eaves reported on STCs available for modifications to towplanes which will improve their performance. Chris will be doing further work on improving the distribution of such information to clubs.

Election of Officers The Board reconvened following the Sunday AGM and welcomed Richard Longhurst as the new Ontario Zone Director. The present president, vice-president, executive secretary, and treasurer were all re-elected by acclamation. Colin Bantin was reappointed as the SAC delegate to the Aero Club of Canada. All committee chairmen who indicated a willingness to continue were reappointed. The Board wishes to thank all committee members for their many contributions over the last year, and particularly to Russ Flint (Records) and Dave Baker (Airspace) who are stepping down.

Insurance The Board formally accepted the Canadian Aviation proposal for the 1993 year, as presented by Sedgwick Ltd. The Board also endorsed the proposal presented by Medicare International for health insurance coverage outside of Canada.

Other business The new training manual by Ian Oldaker will require quotes for printing. The winner of the best article in *free flight* last year will receive an award and a laminate of his story. The letter from Ed Hollestelle, president of CASA, was studied and letters will be sent to various MPs. Further discussion will be taken.

AI Sunley SAC President

CURRENT CANADIAN RECORDS

C indicates a record by a Canadian citizen originating outside the country.
T indicates the corresponding record set within Canada. (These are noted only when a greater "C" record exists.)

RECORD TYPE	OPEN	FEMININE	MULTIPLACE (OPEN)	MULTIPLACE (FEM)
DISTANCE (km)				
4.3.2.1 Straight distance	Marsden / Apps 1093 1984	U Wiese 607 1986	C Zwarych (R Adam) 495 1986	not claimed
4.3.2.2 Distance to goal	Marsden / Apps 707 1984	A Williams 305.(C) 1975	Proudfoot (G Fitzhugh) 304 (C) 1981	A Williams (E Bell) 76 1979
4.3.2.3 Goal & Return	Apps / Marsden 615 (T) 1983	U Wiese 328 1984	Zwarych (McColeman) 310 (T) 1984	not claimed
4.3.2.4 Triangle distance	B Milner 1001 (C) 1983 H Werneburg 804 (T) 1982 P Masak 1007 (C) 1987	J Midwinter 318 1988	D Marsden (E Dumas) 422 1979 John Firth (D Webber) 510.4(T) 1986 C Yeates (K Yeates) 510.2(C) 1989	not claimed
SPEED, Δ (km/h)				
4.3.2.5a 100 km	P Masak 141.4 (C) 1985 K Bennett 131.1 (T) 1989 J Firth 110.6 1984	A Williams 54.5 1976 M Barritt 68.7 (C) 1970	D Marsden (M Jones) 98.1 1975 C Yeates (K Yeates) 79.5 (C) 1987	A Williams (M Stone) 31.0 (C) 1970
not FAI 200 km	K Bennett 113.1 (T) 1988	U Wiese 55.6 1983	I Spence (J-R. Faliu) 128.5 (C) 1991	not claimed
4.3.2.5b 300 km	P Masak 148.9 (C) 1985		D Marsden (E Dumas) 69.9 (T) 1975	not claimed
not FAI 400 km	J Firth 99.0 1988	not claimed	not claimed	not claimed
4.3.2.5c 500 km	W Weir 105.7 (T) 1991	not claimed	J Firth (D Webber) 88.8 1986	not claimed
4.3.2.5d 750 km	P Masak 151.2 (C) 1985	not claimed	not claimed	not claimed
4.3.2.5e 1000 km	W Krug 108.8 1982 P Masak 106.5 (C) 1987	not claimed	not claimed	not claimed
ALTITUDE (m)				
4.3.2.6 Gain of Height	W Chmela 8321 (C) 1974 J Beattie 8153 (T) 1983	D Duffy 6575 1991	Shirley (Campbell) 7100 1961	Williams (Kossuth) 2987.(C) 1970
4.3.2.7 Absolute Altitude	W Chmela 12449 (C) 1974 B Hea 10485 (T) 1981	A Williams 9772 (C) 1969 D Duffy 8986 (T) 1991	Chmela (VanMaurik) 10390 (C) 1975 Shirley (Campbell) 9085 (T) 1961	Williams (Kossuth) 4206.(C) 1970
SPEED, O & R (km/h)				
4.3.2.8a 300 km	W Weir 191.3 (C) 1989 H Werneburg 115.2 (T) 1983	U Wiese 59.6 1984	Chmela (Rominger) 65.0 (C) 1976	not claimed
4.3.2.8b 500 km	P Masak 144.3 (C) 1985 K Bennett 126.3 (T) 1992	not claimed	not claimed	not claimed
4.3.2.8c 750 km	not claimed	not claimed	not claimed	not claimed
4.3.2.8d 1000 km	B Milner 94.7 (C) 1983	not claimed	not claimed	not claimed
SPEED, GOAL (km/h)				
not FAI 100 km	W Weir 147.7(C) 1992 K Bennett 118.7(T) 1985 K Bennett 125.9 1992	not claimed	W Chmela (R Zimm) 47.0 1971	not claimed
not FAI 200 km	W Mix 108.6 1966	not claimed	not claimed	not claimed
not FAI 300 km	T Burton 81.5 1990	not claimed	Proudfoot (Fitzhugh) 70.2 (C) 1981	not claimed
not FAI 400 km	D Marsden 97.1 1970	not claimed	not claimed	not claimed
not FAI 500 km				

Reflections on off-field landings

continued from page 8

— it was late so we walked over towards it. I realized my wife and children were inside and all was quiet. I unzipped the flap and stuck my head in ... “Jan, I’d like you to meet Shirley”. Jan was half awake but sat up with a start ... “Shirley ... Shirley who?” Shirley said hello, but insisted she would prefer to sleep under the stars. Shirley slept outdoors, just beside our tent. The next morning I awoke early and went outside to ensure she had not been eaten alive. Shirley was awake and obviously proud she had survived the night. Her only complaint was the rocky terrain that made her repose a bit uncomfortable. I was curious, as there are few if any rocks nearby ... I looked under her sleeping bag once she had got up and the only “rocks” I saw were those with shoelaces — her pair of walking shoes on which she had slept all night. I didn’t have the heart to tell her.

At the pilot’s meeting the next day I introduced her to the camp, and later that day she had her first Blanik flight ... You meet many fine folks in the world of soaring, and outlandings always bring surprises of one kind or another.

The Almost

In my cross-country soaring career to date there have been many “almosts”. The challenge is not so much to stay up far from home when the conditions are great but to press on safely and with finesse when the conditions are more demanding ... I think the “almosts” test the pilot the most.

It was the final day of our provincial POST contest in 1991. I had chosen to fly about 100 km to the southeast in strong conditions. From a contest strategy point of view this did not make a whole lot of sense, for if conditions weakened getting back could be a problem ... still my agenda was not so much to win the contest (the many more experienced

pilots in our club would see to that) but to enjoy the day and fly “far from the madding crowd.”

The way back was difficult. I looked rather closely at many fields and I reckon I planned at least ten or twenty circuits that I might need ... the challenge remains to balance one’s desire to keep on flying when gravity is declaring otherwise. I recall being low — how low I don’t know — close enough to the deck that I knew I must be very careful and very precise. This was not the time for poor speed control or uncoordinated flight. I was in the circuit on downwind with my gear down but I decided that if I hit lift I would allow myself one attempt to stay up — if I did not crank into the lift immediately I would put down safely as per my plan. Just before entering the downwind leg I noticed a swarm of birds a few seconds of flying time in front of me. I thought maybe they were eating insects lifted up by an otherwise invisible thermal ... I looked to my aiming point, confirmed that one turn would be safe, flew just a little further, felt lift, banked steeply and connected ... a few steep well coordinated turns later and a few hundred feet of altitude and I began to relax ... as I climbed higher I eased off my angle of bank and looked to the west to see just how much further I might go ... then higher and away.

I landed out later on this flight. Following a similar strategy, the hope for lift was not to be found and a conventional circuit found me safely on the ground in soft field with an eight inch crop.

I know that with experience one’s comfort threshold changes — if a circuit is going to be flown that is in any way unconventional, the risks must be carefully assessed. A purist might argue that once in circuit no consideration of staying up should be entertained. I would argue that safe cross-country soaring requires always being mindful of the landing options, and that it is better to enter a circuit with acceptable height and a few options than to struggle to stay afloat, get low, and be

forced land without adequate preparation. There is no question that off-field landings pose greater potential risks than landing in a known field, but these risks are controllable. The further one strays from a conventional circuit the higher the risks. We generally revert to well-established psychomotor patterns when stressed. If we know we can fly a conventional circuit well, then if we are landing in an acceptable field with good preparation and piloting skill the risks are certainly manageable.

Conclusion and additional resources

Off-field landings are but one small portion of the cross-country experience. Cross-country soaring has many challenges and rewards, both human and technical. Each soaring flight has its own unique combination of spices, and although we may learn something of the cross-country “recipe” from others, we must at some point discover this world for ourselves.

It is a challenge for all our clubs to provide better cross-country instruction. While we must learn much on our own, we do not need to — nor cannot — make all the mistakes for ourselves. There are many potential resources in learning how to soar cross-country safely, and I do not believe there is any single best way as to how to go about this. Certainly, solid and consistent basic flying skills are the *sine qua non* for the aspiring cross-country pilot. Classical textbooks, soaring journals and seminars may all provide useful information. In my experience, cross-country clinics provide a particularly appealing blend of theory and practise.

Certainly, the environment in which one learns basic flying skills is helpful in developing subsequent cross-country skills. If a club encourages this activity, there will be role models from whom we can learn. Dual cross-country instruction is ideal, although seemingly too limited in application. Finally, perhaps we too often ignore the resource we all have within: the ability to reflect on our experience and learn. •

Ridin’ the wind continued from page 9

worst case sink scenario. I concluded that the safety margin was sufficient, put the nose down and went. There were a couple of tense seconds as JS sped through the pass, then the ground fell away and I was free and clear on the other side.

At 6:15 pm I looked down on Lander airport from 11,000 feet (5400 AGL). There was a certain temptation to keep going although the terrain ahead looked pretty rough and rocky. If my chart would have extended past Lander showing airports I would have continued, but failing that I decided to call it a day and pulled the blue lever. At 6:24, after a 5:24 hour flight, JS settled on the runway still trailing water and came to a halt at an intersection. The direct distance from Hailey / Sun Valley was a somewhat disappointing 460 km. If Dubois, ID were assumed to be a turnpoint, the dog-leg distance would be 520 km.

Again, it didn’t take long for an interested crowd to gather and to start firing questions ranging from “where do you come from?” to

“is this fuel leaking out of the plane?” at me. Meanwhile many helping hands pushed JS up to the apron. One fellow just wouldn’t believe that I had just flown over the Wind River Range because everybody knew that “this couldn’t be done without a turbocharger”. It took a while for my reply, that I didn’t have an engine either, to sink in and he walked away shaking his head.

After I had called home to report my position there was no reason to stay at the airport since it would take Vicky at least four hours to arrive. The head of the airport commission invited me to dinner at her ranch. I spent a lovely evening in the company of my host and her husband who had retired from ranching recently because he was getting a bit old for sitting in the saddle all day. Both were pilots and had a Centurion stationed at the airport. Listening to their stories while sitting on the veranda of the ranch house I got some idea of what life is like in Lander, WY.

I would have liked to add another day’s flying across Wyoming and Nebraska, but my fam-

ily sent pretty clear signals that they wanted me home. Crew burnout was also a factor, so I decided to continue the trip on the road.

With the experience of this flight I would do some things different the next time:

- better planning in terms of charts, gliding fields on course, etc.
- earlier takeoff. On both days 60–90 minutes could have been gained.
- leaving Minden, I would stay south of the Snake River Valley and try to reach Driggs, ID (gliding operation) on the first day.

Flying open distance like a migratory bird has always held a certain fascination for me compared to triangles and out-and-returns. So much more terrain can be covered this way. Of course, the speeds achieved are usually not that exciting (unless there is a strong tailwind), because the unfamiliar terrain calls for fairly conservative decision making.

I am determined to go “ridin’ the wind” again — hopefully with company. •

SWIFT CURRENT NATIONALS UPDATE

50° 17.52' N, 101° 14.13 W, elev. 2682' var 16°E

Well, the universe is unfolding as it should. Now early March, various jobs are getting filled in, site preparations and approvals established, and grant monies being chased after. The Calgary, Regina, and Winnipeg clubs are the primary clubs hosting the contest, with further support from Edmonton and Saskatoon to date. With the work spread right across the prairies, Canada Post and the telephone system are getting exercised.

Jim Oke is hard at work out of Winnipeg preparing a turnpoint set. The chief problem of this job is to make sure we are not shut out of too much airspace by CFB Moose Jaw and its jet training area. Jim, a former military jet pilot, is dealing with Base Operations at Moose Jaw in order to reach a reasonable compromise. Denis Bergeron, a Cu Nim pilot living in Medicine Hat, is organizing the towplanes. Gary Bozek of Regina is going after a provincial competition hosting grant. George Dunbar is our Scorer as ever, and Al Sunley is Competition Director. A meteorologist hasn't been found yet, but support has been requested from AES, and I know of two retired weathermen who may be coerced into coming. There's an FSS on site, so some weather and forecast power is already available. Steven Foster's data recording package for soundings and the software will be used for onsite airmass analysis.

A significant amount of funds are available from the Alberta Soaring Council, the Soaring Association of Saskatchewan, and Sask Sport and Alberta Sport Council lottery dollars to support operational expenses, so the entry fee will likely be less than in 1992 (I will notify the National Office as soon as it is set). I trust a high late entry fee of \$275 will prompt pilots to sign up early! Early entries will get two free Regina sectionals (though perhaps recently out of date). 6 May is the deadline for the bargain rate, but please don't wait until the last day to mail the entry fee to me c/o "1993 Nats" — the toughest part of contest organization is planning for an unknown number of competitors. The first letter to clubs and potential pilots will be mailed out soon.

Camping will be allowed on the airfield. Databack cameras will be required. Tows will be available from July 3 (maybe even 2) and the contest begins 6 July. Good tie-down gear a must. Some volunteer crewing help will likely be available by local club members.

The task area is generally sandy, well-drained soil with rolling to flat topography conducive to thermal generation. Here is some climatological information for Swift Current for the summer months (52 year average):

	Jun	Jul	Aug
Daily max temp (°C)	22.3	25.4	24.9
Daily min temp (°C)	8.9	11.1	10.3
Rainfall (mm)	66.8	48.9	38.2
Days of measurable rain	12	9	8
Thunderstorms	6	7	5
Sunshine (hrs)	295.3	340.0	303.8
Relative humidity (@ 1500 h)	45	42	41
Windspeed (km/h)	21	18	18
Most frequent direction	W	W	W
Windspeed, max over one hour	111	97	77
Dew point (°C)	7.3	10.2	10.5

Very interestingly, it looks certain that there will be enough Open class sailplanes coming to have a contest for them, which is a change from recent Nationals. As most of these ships will be of medium performance (HPs, Phoebus, Open Cirrus, perhaps a glass trainer or two, etc), the Open class is planned to be scored on a handicapped basis. So I encourage clubs to enter a club ship team, and other such pilots to come and enjoy a contest-within-a-contest designed for them.

Tony Burton Contest Manager

FAI badges

Walter Weir 24 Holliday Drive

Whitby, ON L1P 1E6 (416) 668-9976 (H)

Please mail letters to National Office until further notice

The following Badges and Badge legs were recorded in the Canadian Soaring Register during the period 1 January 1993 to 8 March 1993.

GOLD ALTITUDE

Mike Glatiotis	Cu Nim	6130 m	Std Jantar	Cowley, AB
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SILVER DURATION

Serge Valade	SOSA	5:30 h	Blanik L13	Rockton, ON
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SILVER ALTITUDE

Douglas O'Connell	SOSA	1570 m	1-26	Rockton, ON
Mike Glatiotis	Cu Nim	6130 m	Std Jantar	Cowley, AB

C BADGE

2368	Serge Valade	SOSA	5:30 h	Blanik L13	Rockton, ON
2369	Edward Hearn	Borden	1:08 h	2-33	CFB Borden, ON
2370	Heidi Lindschinger	York	1:26 h	1-26	Arthur, ON
2371	Mike Glatiotis	Cu Nim			

Please remember that badge rules changed as of 1 Oct 92. Refer to *free flight 3/92* page 22. Have you obtained the new Sporting Code for gliders and the Guide to FAI Badge & Record Procedures, edition 6?

COMPETITION RULES – YOUR LAST CHANCE TO GIVE INPUT

The Sporting committee is hard at work updating the competition rules for the current year. If anyone has any suggestions please contact the Committee before the end of April. Draft rules are available from Charles Yeates (902) 443-0094 or George Dunbar (403) 255-7586.

SIGNIFICANT FLIGHT

Here are the details of Walter Weir's 1000 kilometre ridge flight last October 25 (his final flight of 1992) which was briefly described here in the last issue and, though a "failed" declared flight, at least earned him a Significant Flight Certificate from his peers at the SAC Awards banquet. Tony

Tom Knauff and I declared Whitten Cemetery which is a standard out-and-return 1000 km turnpoint just past Bluefield, West Virginia. We took off about 8 am — it was our third try in a week. I was attempting three Canadian citizen records: 1000 km O&R speed, O&R distance, and 500 km speed to goal. We were both attempting the new FAI world record (free distance) which became official 1 October 92 and allows up to three turnpoints with the stipulation that the first claim must be more than 1000 km.

The ridge wind quit at Covington so we were forced to give up. I took a picture there of a turnpoint called "Smith Bridge" which I intended to use some day for a 750 km O&R speed record. We returned to Keystone Gliderport (Julian, PA) where Tom landed. I decided to continue with a 1000 km zig-zag just for fun so flew the ridge NE to Williamsport (Race Track Island), then back past Keystone to Altoona (Kettle Dam) and back to land at Keystone. Total airtime 8 hours 36 minutes.

The coordinates are Keystone:	40 53 02N	77 54 27W	
to Smith Bridge	37 52 36	79 58 38	378.73 km
to Race Track Island	41 13 47	76 54 36	456.18
to Kettle Dam	40 30 24	78 21 00	145.34
to Keystone	40 53 02	77 54 27	56.13
		total	1036.38 km

If we had declared what I did we would have had a world record — at least for a few weeks!

Trading Post

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1-23G, C-FZDO, \$12,000 firm. Basic instruments, electric vario. Kurt Hertwig (519) 686-0332 or Andy Gill (519) 660-0532.

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LARK IS29D2, C-GBEQ, about 1000h, excellent condition, never spent a night outside, Radair 360, Cambridge elec. vario, O2, instruments, chute, metal encl trailer. \$17,000. Denis Gauvin (418) 842-6456.

LARK IS29D2, 1992 models, all aluminum, 37:1, fully aerobatic, +5.3/-2.65g limit. Howard Allmon (305) 472-5863, fax (305) 473-1234.

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NEW ZEALAND GLIDING KIWI - the official publication for the 1995 World Gliding Championships at Omarama and the bi-monthly journal of the N.Z. Gliding Association. Editor, John Roake. \$US25/year. N.Z. Gliding Kiwi, Private Bag, Tauranga, N.Z.

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AUSTRALIAN GLIDING - the journal of the Gliding Federation of Australia. Published monthly. \$A38.50 surface mail, \$A52 airmail per annum. Payable by international money order, Visa, Mastercard. Box 1650, GPO, Adelaide, South Australia 5001.

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Box 472
Edmonton, AB T5J 2K1

GRANDE PRAIRIE SOARING SOCIETY
Box 446
Grande Prairie, AB
T8V 3A7

PACIFIC ZONE

ALBERNI VALLEY SOARING ASSOCIATION
Box 201
Port Alberni, BC V9Y 7M7

BULKLEY VALLEY SOARING CLUB
Box 474
Smithers, BC V0J 2N0

MILE ZERO CADET SOARING ASSOCIATION
Box 603
Dawson Creek, BC
V1G 4H4

VANCOUVER SOARING ASSOCIATION
Box 3251
Vancouver, BC V6B 3X9

SAC SUPPLIES FOR CERTIFICATES AND BADGES

1	FAI 'A' badge, silver plate pin	\$ 5.00
2	FAI 'B' badge, silver plate pin	\$ 5.00
3	SAC BRONZE badge pin (<i>available from your club</i>)	\$ 5.00
4	FAI 'C' badge, cloth, 3" dia.	\$ 4.50
5	FAI SILVER badge, cloth 3" dia.	\$ 4.50
6	FAI GOLD badge, cloth 3" dia.	\$ 4.50
	<i>Items 7-12 ordered through FAI awards chairman</i>	
7	FAI 'C' badge, silver plate pin	\$ 5.00
8	FAI SILVER badge, pin	\$39.00
9	FAI GOLD badge, gold plate pin	\$35.00
	<i>Items 10, 11 not stocked - external purchase approval given</i>	
10	FAI GOLD badge 10k or 14k pin	
11	FAI DIAMOND badge, 10k or 14k pin and diamonds	
12	FAI Gliding Certificate (record of badge achievements)	\$10.00
	Processing fee for each FAI application form submitted	\$10.00
13	FAI badge application form (<i>also stocked by club</i>)	n/c
14	Official Observer application form (<i>also stocked by club</i>)	n/c
15	SAC Flight Trophies application form (<i>also stocked by club</i>)	n/c
16	FAI Records application form	n/c
17	SAC Flight Declaration form (<i>also stocked by club</i>) per sheet	\$ 0.15
18	SAC guide "Badge and Records Procedures", ed. 6	\$ 5.00
19	FAI Sporting Code, Sec 3, Gliders, 1992 (<i>payable to ACC</i>)	\$ 7.00

Please enclose payment with order; price includes postage. GST not required. Ontario residents, add 8% sales tax (items 15-18 tax exempt). Items 1-6 and 13-18 available from SAC National Office. Check with your club first if you are looking for forms.

ARTICLES ACVV POUR CERTIFICATS ET INSIGNES

\$ 5.00	Insigne FAI 'A', plaqué argent
\$ 5.00	Insigne FAI 'B', plaqué argent
\$ 5.00	Insigne ACVV BRONZE (<i>disponible au club</i>)
\$ 4.50	Insigne FAI 'C', écusson de tissu
\$ 4.50	Insigne FAI ARGENT, écusson de tissu
\$ 4.50	Insigne FAI OR, écusson de tissu
	<i>Les articles 7-12 sont disponibles au président des prix de la FAI</i>
\$ 5.00	Insigne FAI 'C', plaqué argent
\$39.00	Insigne FAI ARGENT
\$35.00	Insigne FAI OR, plaqué or
	<i>Les articles 10, 11 ne sont pas en stock - permis d'achat externe</i>
	Insigne FAI OR, 10k ou 14k
	Insigne FAI DIAMAND, 10k ou 14k et diamonds
	Certificat FAI de vol à voile (recueil des insignes)
	Frais de services pour chaque formulaire de demande soumis
	Formulaire de demande pour insignes (<i>disponible au club</i>)
	Formulaire de demande pour observateur officiel (<i>disponible au club</i>)
	Formulaire de demande pour trophées de vol de l'ACVV
	Formulaire de demande pour records FAI
	Formulaire de déclaration de vol de l'ACVV
	ACVV guide des procédures pour FAI certificats et insignes (éd.6)
	FAI Code Sportif, Planeurs, 1992 (<i>cheque payable à l'ACC</i>)

Notre paiement devrait accompagner la commande. La livraison est incluse dans le prix. TPS n'est pas requise. Les résidents de l'Ontario sont priés d'ajouter la taxe de 8% (les articles 15-17 exempts de taxe). Les articles 1-6 et 13-18 sont disponibles au bureau national de l'ACVV.