

**free flight**

4/84 Jul-Aug

**vol libre**



# MUSINGS

**Competition.** For many, especially over the past two years, this has been a dirty word. It should not be, it must not be. I continue to believe that competition is the soul of our sport.

Where would we be now if, in 1911, Berthold Fischer and Hans Gutermuth; and then in 1920, Oscar Ursinus and his band, had not gathered at the Wasserkuppe and started the quest for soaring longer, farther, higher and faster? If we had a sport at all, I expect we would still be flying Lilienthal hang gliders off windy hills. Competition on the slopes between the pilots, designers, Akaflieds and the sailplane companies has brought us a long way.

Why then has there been so much criticism, for so many years, of Canadian soaring pilots who aspire to test themselves against the best? The potential and direct impact on SAC finances has only been a factor for the past year or so. The antagonism goes beyond that. Surely the myth that international competitors have a “free holiday” is dead. And surely it isn't a result of the relatively non-competitive nature of the Canadian psyche, or a jealous resentment of those who enjoy competition. I don't have a neat answer – or even an untidy one. However, I do have a thought that I would like you to consider; it relates to my earlier “Musings” on goals. I believe that the source of the competition problem, and its solution, lies very often at the club level and not with the individual.

Next year your Association will be 40 years old. For many years, the purpose and struggle for every glider pilot or student was to buy or build, then fly a sailplane at some gliderport. Clubs developed because they made these tasks easier and possible. This struggle limited the time for flying; much less competition. Survival was the purpose and the key. For many clubs it still is. Along the way a few pilots did compete, here and overseas. There was little interest or notice from the majority of the widely scattered clubs. Consequently a tradition of extensive competition, especially between clubs or regions, never seems to have been started, or encouraged.

Now we have greater affluence and some clubs have reached the stage where the struggle to provide the basics is over. The energy once directed to growth can now start to look for things to do, and it should be directed to competition.

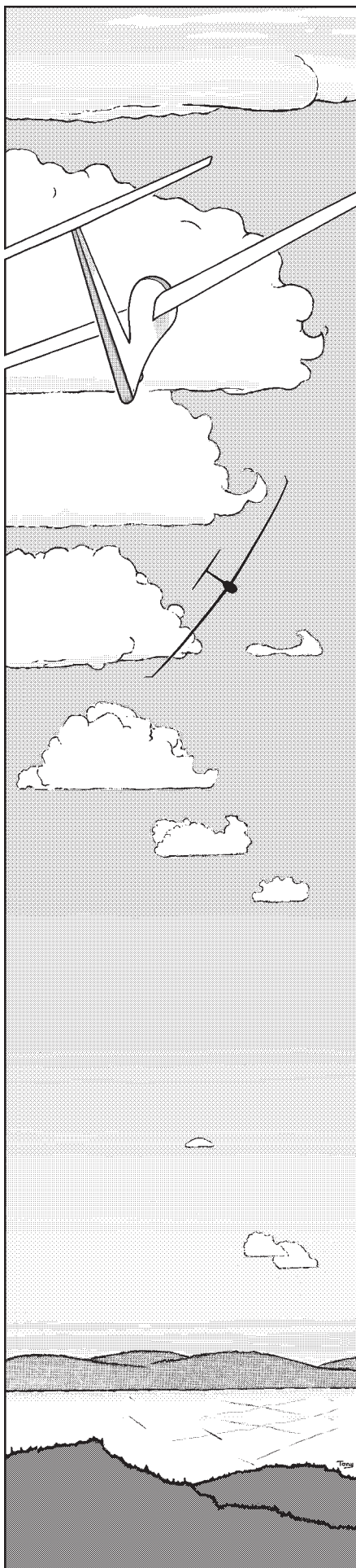
If my logic hasn't been too sparse, the point I'll restate is that the demands for survival and the need for growth to a self-sustaining level has given all clubs their historic purpose and attractiveness, to old and newcomers. It's fun to build. However, when a self-sustaining level is reached, it seems that club purpose shifts to amenities (swimming pools, tennis courts, trailer parks) and self-indulgence (“taxi-cab” flying of intros). The fire in our belly goes out. Our membership flags and our spirits sag. That is why we need competition – to rekindle the flame and stoke the fire.

Not everyone has to race. There are badges. There is proficiency. There are records. There is just being a good plain (sic) pilot. There is being the best instructor. We must recognize that we, individually and as a group, have to have purpose in our sport. Supporting and encouraging those who want to go fast and race, to compete in any and every way, is the least each must do. The joy of accomplishment is very infectious and helps, if not ensures, growth. Who wants to join dullards? Fire attracts. I'm trying to provide the spark. Will you fan the flame?

Fly safely, fly well, fly often.

A handwritten signature in black ink that reads "Bob". The script is fluid and cursive, with a large, stylized 'B' and a simple 'ob'.

PS If you have coveted the status and privileges of those sports that have lots of government funds and low member dues, together with Olympic or high profiles; consider that, thanks to the current Olympic mess, many of these now frightened sports envy your fee status and low government funding ratio. One Olympic sport is proposing to increase its fees 350% this year as a survival contingency. Any donations for the Pioneers Fund? It's your survival.



# free flight • vol libre

Trademark pending • Marque de commerce en instance

**4/84 Jul-Aug**

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

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Cover

The Hope Blanik is ready to go ridge soaring — when the wind turns around to the west. Photo by Heidi Myers.



# Come outside and say that...

*Here are some thoughts on the state of the sport that are à propos to the Canadian scene.*

**John Holland**

Sailplane & Gliding, Feb-Mar 84

Doing a stint on the National Executive began to broaden my thinking, and more recently as chairman of the BGA Development Committee, faced with a decline in club membership, I have had to give the subject much more thought.

I have been a member of a fairly well organized and (by national standards) efficient club. In this I have been lucky because, although frustrated and embarrassed at times, I have been able to remain in the sport. Had I joined many of the other clubs, I would have long since joined the ranks of the departed.

## **Amateur management**

Let's face it, the average gliding club organization is a prime example of the worst of amateur management. I have recently been told that the very word management frightens people away.

The net result of this is that gliding is a sport in stagnation and we would be kidding ourselves if we believed it will all come right when the recession is over. During the last war people had to be directed into Services other than the RAF as every young man's ambition was to be a pilot, or at least be involved with flying. Since then there has been an unprecedented explosion in leisure activities, and yet this air-minded population has passed the gliding movement by.

If we don't feed in new members at the bottom the top will wither and die. Not only that, if we become a small, minority interest we shall inevitably be buried in legislation by our bureaucratic brothers who will take no heed of our requirements, be they airspace, noise regulations, or any other petty legislation they may dream up.

The population of Germany and the UK are roughly the same – Germany has 40,000 glider pilots, we have 9000.

One of our troubles is we have a handful of myths that seem to be passed on from generation to generation. Things like ... if you can't spend all day around the gliding club we don't want you. Who wants a lot of people gliding, they'll spoil it for us. Who wants a lot of people gliding, it's exclusive. Gliding is a lifestyle, that's all there's room for etc, etc.

In other words, gliding is not for you if you are a busy professional person – your wife is not prepared to become a gliding widow – if you are a young person just starting married life – if you have a big house or a garden to look after – or just if you don't like standing around in a big field in your boots.

## **Have a go to the bottom**

Just to prove I'm not exaggerating, I know one very enthusiastic glider pilot who is now in a syndicate and going great guns. First year he went solo, second year he completed his Silver C and now he is starting his third year and going for his Gold. He happens to be a priest and joined his nearest club as an ab-initio. He presented himself at the crack of dawn on his first day and come the afternoon he didn't look like flying yet awhile and he had a wedding to perform. Not unreasonably he asked if they would excuse him whilst he nipped off to conduct these nuptials and was told, "You'll have to go to the bottom of the list if you do". Now he travels a long way to his present club, where he is an enthusiastic and much loved member, just because they take into consideration that he has a job of work to do on occasion.

If you think about the modern lifestyle with its hectic pressure, it's amazing we have anyone gliding.

One thing is for sure, if we're going to celebrate another 50 years of British gliding then the time has come for a new lifestyle. I don't mean so much in the few, semi-professional outfits we have. If they don't meet their customers' needs they go out of business (it is interesting though that their customers' needs don't seem to include hanging around airfields!). I'm getting at all those outfits in the country where the "ordinary" gliding takes place and forms the majority of our movement.

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## **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 Royal Canadian Flying Clubs Association (RCFCA), the Canadian national aero club which represents Canada in the Fédération Aéronautique Internationale (FAI, the world sport aviation governing body composed of national aero clubs). The ACC delegates to SAC the supervision of FAI related soaring activities such as competition sanctions, issuing FAI badges, record attempts, and the selection of a Canadian team for the biennial World soaring championships.

free flight is the Association's official journal.

Material published in *free flight* is contributed by individuals or clubs for the enjoyment of Canadian soaring enthusiasts. The accuracy of the material is the responsibility of the contributor. No payment is offered for submitted material. All individuals and clubs are invited to contribute articles, reports, club activities, and photos of soaring interest. Prints (B & W) are preferred, colour prints and slides are acceptable. Negatives can be used if accompanied by a print.

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

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

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<b>Corporate Secretary</b>	Jean Matheson
<b>Corporate Treasurer</b>	Don Dunn
<b>SAC Office Secretary</b>	Susan Gély
<b>SAC National Office</b>	
485 Bank Street, 2nd Floor	
Ottawa, ON K2P 1Z2	
(613) 232-1243	

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

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

vol libre est le journal officiel de l'ASSOCIATION.

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

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

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Toute correspondance faisant l'objet d'un sujet personnel devra être adressé au directeur régional dont le nom apparaît dans cette revue.

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

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

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### EDITOR

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

### COMMERCIAL ADVERTISING

National Office (613) 232-1243

### ASSISTANT LANGUE FRANÇAISE

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## OPINIONS

### A FAILURE OF COMMUNICATION

Canadian clubs had been invited in October '83 to send in their corrections or amendments for the first update of the SAC directory, "Canadian Soaring – sites, records, diamonds". The updates had been printed and were ready for insertion with 2/84 **free flight**! This never happened, and the update was never even advertised appropriately. That's why I write this letter to show SAC members how a potentially good service to SAC members has been spoiled by poor communication and poor distribution from the National Office.

I had carefully designed the update to be mailed with **free flight** at minimum weight and with minimum extra postage. In order to ensure that every actual soaring directory owner received an update, and to advertise the fact a good directory existed to those who did not have one yet, it was agreed at the January 1984 Board meeting that enough updates would be printed to be inserted in **free flight**.

There was no intention of getting a direct return to SAC, though one would expect that the advertising of the Directory by way of general distribution of the update would increase sales and therefore produce an income to SAC indirectly. As it turned out, the Ottawa printer quoted additional packaging expenses for these updates which began to raise the costs just to an unacceptable level. It is here that the communication between the National Office and myself broke down! A quick phone call to me would, I think, have solved a large portion of the problem, because the National Office started to "lose sight of the forest because of the trees." Obviously packaging and other nice features were not really relevant – the important point was that corrections to the Directory get to the members. Anything else was minor.

Given this decision to do the job with its consequent costs and I presume the consequent decision not to enclose the update in **free flight**, but to make them available from the National Office for a price, the second major error was then to print 1500 copies, three times more than the existing 500 of the Directory itself!

We now have expensive updates piled on the shelf of the National Office closet that almost no one knows anything about. Even if these were the most attractive publications in Canada, SAC would still have lost two-thirds of the costs. Given the history of SAC members' buying habits, and the historically poor advertising and distribution of SAC supplies, I think we will be lucky to recover 10% of these costs.

The \$1.25 price of the update sheets in no way represents their true cost recovery, even if every Directory holder bought a copy. A true cost recovery would put the few pages of the update at a higher cost than the entire Directory at \$3. That's how a lack of communication between the National Office and volunteers who plan such work as calendars, SAC brochures, etc. has caused these past disasters. Our administrators must remember to let the "workers" in on the policy decisions, if nothing else to remind them of the nature and objective of a project so a sound decision can be made. Otherwise these problems will continue.

So, what is now the most practical thing that can be done? The membership must know that the updates exist [*You certainly know it now*]. Therefore I would suggest that they be considered publicity material and should be handed out **now, before** they become obsolete. The Board will have to write off most of the cost in about a year anyway. The updates should be handed out to clubs in large measure in the hopes that this will generate further interest for the Directory, and generate amongst all SAC members more interest in increased interclub flying in all its competitive forms which SAC is now promoting, and increase awareness of the other club operations across the country. This was one of the objectives of the Directory in the first place! A perfect example is illustrated in this issue – Dave Marsden and Mike Apps would have known exactly where the new Winnipeg field is if the update (containing this map) had been distributed as intended.

Finally, let me say that I hope sincerely that our administrators (National Office and Board) will increase their sensitivity to the work we, outside the Board, do and respect the value of our contributions as much as their own, or SAC will continue to lose one volunteer after another.

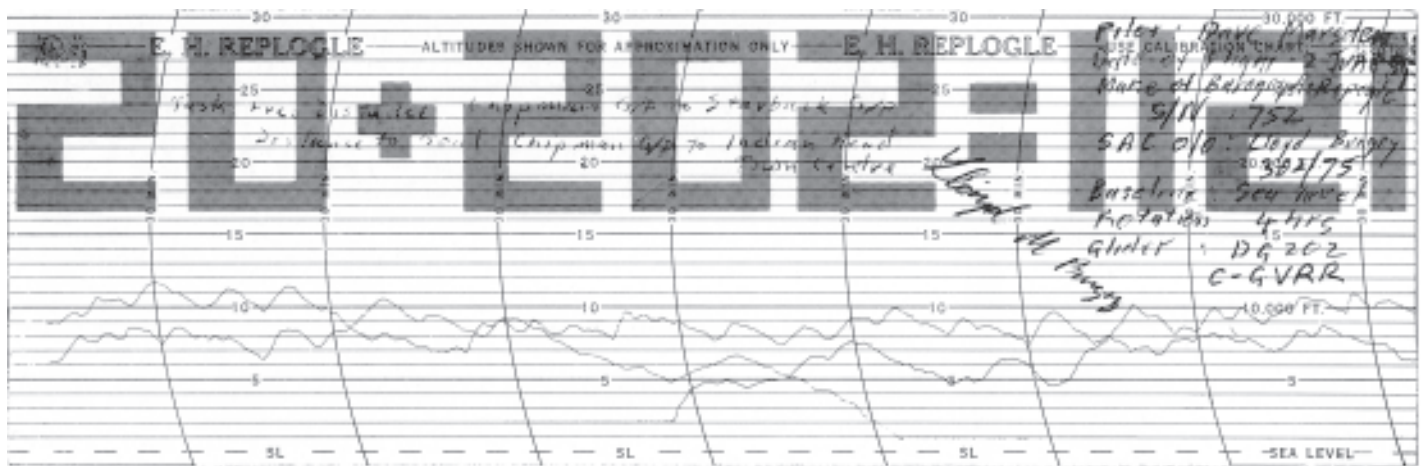
Ursula Wiese (Burton)  
Author, "Canadian Soaring — sites, records, diamonds"

### HAL RESPONDS TO KARL

The letter by Karl Doetsch on page 4 of the May-June issue of **free flight** deserves some comments.

After explaining the events which led up to the partial withdrawal of government funding to SAC in 1983, Karl proceeds to paint a picture of financial doom and gloom and the imminent collapse of SAC if the club delegates at the 1984 AGM had not voted in favour of his motion to abide by government policies regarding sports contacts with South Africa.

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Every soaring pilot dreams of making a great flight someday. The two pilots who now share the first 1000 km flight to be made in Canada showed that these dream flights are possible with a little planning. By seizing the opportunity presented by a low pressure system centred over the northern prairies, they exceeded their expectations, achieved a wild dream and found that had they dreamed even more wildly, even more would have been possible.

## Lloyd Bungey

Thursday and Friday at Chipman, Alberta were squally with winds up to 80 km/h, too blustery to even walk upright – let alone risk untying a glider. Saturday, June 2, was predicted to be less vigorous with clearing skies. Late on Friday night, Mike Apps was wondering if the weekend conditions might not be just what was needed for a long-discussed possibility of a flight to Manitoba.

After making a phone call to Dave Marsden suggesting a joint flight if conditions were suitable, Dave sought the latest weather information upon which to base the choice of day to go. The forecast was that a ridge in British Columbia would be feeding strong winds into a low pressure area in northern Manitoba resulting in strong winds (30 to 40 knots) from the northwest with unstable conditions creating thermal activity.

Mike decided to drive out to Chipman Gliderport and sleep overnight in order to be ready for an early start Saturday morning, while Dave would get the most current forecast in the morning and drive out to the gliderport with his DG-202 if conditions looked good.

With the ASW-20FP rigged and ready by 0915, Mike chewed his nails wondering if Dave would show. Finally, Dave showed at 0930 – the big trip was on!

A quick discussion resulted in a decision to declare Indian Head, Sask. as a goal – just far enough to break the existing goal record. If they made the goal, they would use the provision of the Sporting Code to photograph the finish point and then continue on in an attempt to fly the first 1000 kilometre soaring flight in Canada.

With winds of 20 kts gusting to 30 and the first signs of lift already present for over twenty minutes, Dave was first off, releas-

ing over the field at 1036. By the time Mike had released at 1050, Dave had already drifted out of sight. Shortly thereafter he radioed in that he was near Vegreville in a good thermal. Mike was not heard from. Shortly thereafter the retrieve crews hit the road, hoping to keep in touch by reports from the FSS. Back at the field, a cloud bank moved in, killing the soaring and leaving the main topic of interest, "I wonder how far Mike and Dave have got". It was to be a long wait before a call came – from Winnipeg.

The Great Circle distance from Chipman airfield to Starbuck gliderport is 1121 km. Because of the height penalties assessed, the distance claimed for the free distance will be 1097 km, and the distance to goal record claim will be 706 kilometres.

The story of this flight follows. It is edited by Tony Burton from an hour long taped conversation between Dave and Mike when they got back to Edmonton.

....

**Lloyd** Where do we start?

**Dave** Well, during my launch, the tow-pilot started to go off downwind which was the direction of the task. I didn't want to be towed away from the field, so I got off in some weak lift and began drifting off downwind, but I was staying airborne.

**Mike** By the time I launched nobody could see you. I asked where you were, and I wondered what was the problem because I couldn't contact you on the radio. As soon as I was off tow I looked for you and called you again. There was nothing. I didn't know if your radio was bad, or mine or what, I didn't hear a thing. I guess by this time you were probably half way to Vegreville wondering what was going on. *[Mike's antenna became disconnected, and he had a useful range of only about a mile.]*

I worked myself up slowly, looking for the DG, then turned and flew back towards the field. I could see a glider on the launch – and I was concerned. I thought that you had landed and were taking a relight. I had to fly back up against the wind for a bit, then I recognized it wasn't the DG. I had a few moments of trepidation. I wondered what to do now. Then I thought he was probably going to go for it, so I'll go for it too. I felt disappointment with no radio contact. If Dave was going for it, and I was going for it, we were in a kind of racing situation and that just didn't feel very nice, because that's not the way we set it up. I was feeling miserable, thinking, "If I make it, I'm going to feel like a heel, and if he makes it, I'm going to feel just as bad."

**Dave** I was feeling the same way.

**Mike** But, you know, I guess the old competitive urge comes up, and after I made that decision, I said to myself, "If my radio is playing up, how is my crew going to keep up, how am I going to call into the FSS stations?" I decided for this attempt it didn't matter anyway. Go for it: sort out the mess afterwards. It was the right decision as it turned out, everything worked. I didn't see you, Dave. I know I started to move along reasonably quickly; in fact I measured my time to Vegreville, and even with waffling around, I made the 50 km to Vegreville in one half hour. That isn't fast enough for the 1000, but it was still early. And then just beyond Vegreville I heard you call me, that you were just one thermal ahead. I was sure happy to hear you.

**Dave** And I was happy to see you.

**Mike** The lift was not good, and by the time we got down to north of Wainwright where we did our distance check, we had been on course one-and-a-half hours and had only gone 150 km. So we were only making 100 km/h.



**Dave** That's right, it was slow.

**Mike** The lift was only giving us 3 knots on the average. I was flying on MacCready and setting it on 2. We started to go a little faster just before Wainwright and we were starting to consider dolphin flying. One of the nice things is that we have often flown together before, so we have a great deal of confidence in each other. It's not necessary to say a lot on the radio when you have flown together a lot. You know what the other guy is thinking when he moves out. You'll say to me, "This thermal is not very good," when I'm just about to say, "Let's leave."

I think the real benefit in pair flying is you feel good. Because somebody is there to share the joys with, to share the cu with, and take some of the nerves away, and also to stimulate the highs, if there are any.

**Dave** Cloudbase was not very high to start, I guess 8500 feet, and we were probably operating between five to six thousand and cloudbase.

**Mike** We never got low. There was never any scary parts on the flight at all. There was the thing of getting separated. The only time it was a bit worrisome was northwest of Regina, where I led us needlessly to the south in a little jog down towards Moose Jaw. It looked to me that there was a solid bank of cloud ahead. It was not the bases I was looking at, it was the tops. It looked like solid CB were sitting there that we would have to go around. The low was to the north, so the logical direction to get around it was to the south. In addition there were some reasonably good looking cu down south. But we made

the jog which Dave didn't really want to do. Looking back I think we could really have gone straight ahead. I don't think it cost us very much, we were making pretty good time anyway by virtue of the wind.

**Dave** I could see you out ahead of me about a half mile. I wanted to go straight east but you were going south already and I knew if I didn't follow you we would get separated. I couldn't take a chance on losing radio contact.

**Mike** I had the better maps and also had frequencies for the Flight Service Stations, but I was unable to talk to them, so I gave the information to Dave and he would communicate with FSS, relaying to me their response.

**Lloyd** How often did you call them?

**Dave** We called them in Lloydminster, Regina, Brandon and Winnipeg, and got a good reception from all of them.

**Mike** The trick is you have to file a flight itinerary, not a flight plan. This itinerary is filed with your crew and they can check in with the FSS. This worked beautifully with Morvyn Patterson who was crewing for me. She didn't phone home or the glider field, and she showed up at Winnipeg club Sunday morning never having spoken to anybody except FSS. All through the night she knew exactly where we were. Of course, she had a small advantage, she used to work for them.

**Dave** When we were down around Unity, Saskatchewan, I could hear Hal Werneburg on the radio. I don't know where they were exactly, but after a while I heard

Hal say he was going by Arrowwood, but he was giving it up. So conditions were not as good down there in southern Alberta. [Hal had started on an O&R record attempt from Cu Nim. ed.]

**Mike** Well, I must confess if it hadn't been for the wind, I would not have set the task and I wouldn't have had the confidence. The flight started about 10:30 but that's too late to go for 1000 km under normal conditions. Without the wind you need at least ten hours and with thermals only 3 to 4 knots you just can't do it. But the winds gave us that little extra push.

We deliberately set a goal that just marginally increased the existing goal record. There were two reasons for doing that: we were not sure how the weather was going to be further east although we were fairly confident up to Regina, and we didn't want a retrieve for nothing... anyway, by the time it was 1330 we were south of North Battleford, and had 300 km in hand. On the horizon it looked like there were all sorts of grass fires ahead. I'd seen that a little bit earlier. It wasn't until we got a little closer that we realized the whole darn farmland was blowing away into the sky. No wonder Manitoba has such good soil – it all comes from Saskatchewan. There was a whole line of dust, it was almost like a roll cloud on a cold front. As we approached it, the lift increased fairly substantially from 3 knots to 5-6 knots average. The thermals were very easy to use. It was when we neared Saskatoon close to the dust that the lift really picked up. From that point on, dolphin flying was the order of the day. You only stopped to turn to verify your position and look at the landscape, and make sure that the other glider was in view.

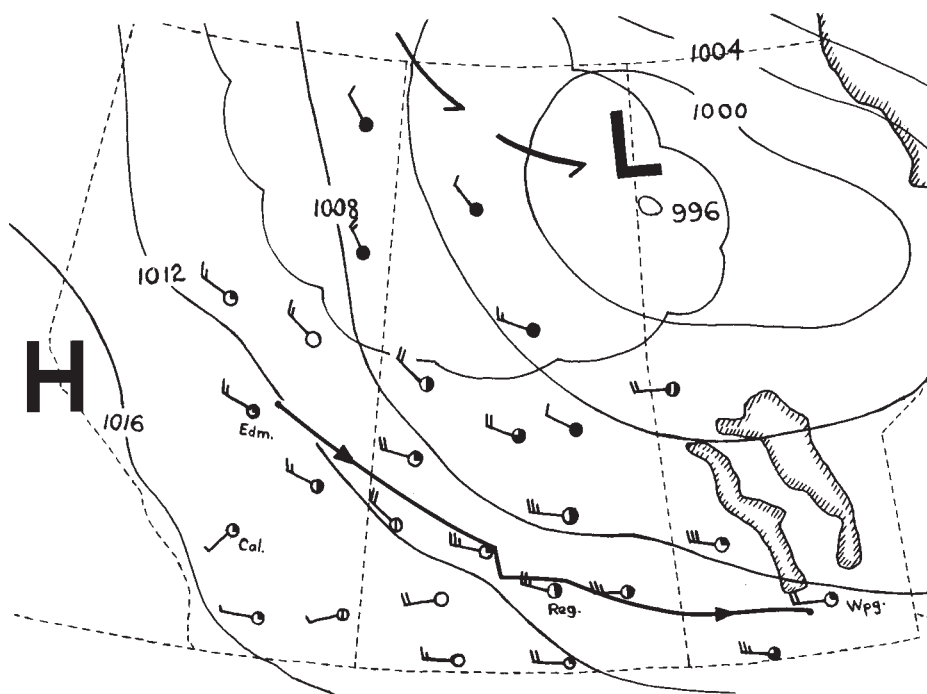
**Dave** Both of us went without water, which was probably a mistake. The thing was we didn't want to waste time throwing water on board that morning. And judging from what happened at Chipman shortly after our launch, it was probably a good job we went when we did.

**Mike** Anyway, we got to the edge of the dust storm, and at that point we didn't know exactly where we were.

**Dave** There was a big blank space where there was nothing [to navigate by].

**Mike** We got south and we were making rash statements like, "That's the North Saskatchewan River", when it's a hundred miles to the north. We were a little bit lost, but it was no problem, because just by heading south you hit the Trans-Canada.

We finally discovered our exact position a little north of Buffalo Pound Lake. If it had been a normal day, without the virga hanging down, and the heavy cloud cover all over the sky, we would have been able to see very clearly both Moose Jaw and Regina. We were at 10-12,000 feet, but the horizontal visibility was abysmal. You could see maybe 20-30 miles in a narrow cone downwards.



2 June Surface Analysis at 1200 MST. Cloud cover at reporting stations is indicated by the amount the circle is filled in. Wind direction is shown by the orientation of the "tail", and strength by the number of strokes on the tail (each full stroke represents 10 knots). The flight path is indicated by the thick line.

We got into the real strong convection as we approached Regina. In fact, 30 km beyond Regina, virga formed under the clouds, and the clouds were really well developed. At that time we did dolphin flying for 40-50 miles at a stretch.

Once we made Regina, we were back to the Trans-Canada and we had an easy landmark to follow. The navigation from then on was simply ticking off the towns as they went by, and they sure went by quickly from that point on. We must have been going well in excess of 150 km/h because our average speed over the whole flight was 137 km/h, and I don't think we had been averaging 100 up to Saskatchewan.

**Dave** We certainly started to move at that point. It seemed like you'd go 40-50 miles and the altimeter would still be showing the same. We were picking goals, we got to Regina – that was past the previous distance mark – then we went on a little further and we were at Indian Head, which was our declared goal, and then we were a little beyond Virden – a 1000 km – a real cause for celebration.

**Mike** There was some difficulty identifying Indian Head because of this navigation problem of not being able to see far enough. Dave got permission to go across Regina. It was a thrill to look down at Regina and see the airport and everything and wave bye, bye. It went very quickly behind us. Indian Head is quite a significant distance out from Regina. I was at first confusing it for Qu'Appelle which is about 20 miles closer. At this point, very little sun was reaching the ground, but the lift conditions were still phenomenally good. We were flying a speed ring setting 6 and just zipping along. We stopped and turned just beyond the goal which enabled us to take the photographs in thermals which is the right way to do it. I shot about five photographs, three of them had Dave's DG and Indian Head framed by my winglet.

The next milestone was the Manitoba border. Certainly the towns were just clicking by. There goes another one, there goes another one, just rolling under the wing.

**Dave** There was a gap in my maps, I had a good sectional to Regina only, then I only had a road map for Manitoba, so I was a little anxious about where the Manitoba border was.

**Mike** I knew we were coming up on it, but I wanted to be sure. Because if we reached the Manitoba border and we could still see thermal activity ahead, we had the 1000 km in the bag. I didn't want to ease up on the pressure on either of us by making a premature announcement. When we crossed the border, when I was very sure we were there, I remarked on the radio, "Dave, did you see the dotted line?" He didn't know what was going on. I said, that line that runs north-south there on the ground." At that point he twigged what I was talking about. We were there, we were

in Manitoba! I guess the only really dramatic part of the flight after that was when we got separated at Virden.

I hit a great thermal 10 miles out of Virden, the averager read 8-1/2 knots, and both variometers were pegged right up to the cloud-base. At Virden there was this long curtain of virga north and south, which meant a significant deviation to go around. I saw a cloud on the far side through the virga. I announced on the radio I would head there, but I didn't hear anything from Dave at that point. We were having these problems of reduced communication and clarity when we moved too far away from each other. So I announced that I would simply circle on this side of the virga, so Dave could find me. But he couldn't see me and I couldn't see him because he was on the other side of the virga, not knowing how to regroup because it was sort of a grey sky. There were patches of sun, the cloud cover had to be greater than 8/10. Don't you agree?

**Dave** I think there was significantly more cloud. We were about 12,000 at that point.

**Mike** We had lost contact and this was the moment of trauma for me, and probably for you too. We know we have 1000 km, we know we have the Canadian record for distance, and now one of us is going to leave the other one behind. We have flown this distance together, pair flying, sharing all the thrills and all the experiences, and now suddenly when we were right on the threshold, we lose contact. There is no way to be sure that we could land together and be able to claim the record together. I was feeling very disappointed.

**Dave** I guess you felt the same way, not knowing quite what to do. That was the low point of the flight – 12,000 feet above the ground.

Then I heard, "crackle, crackle, hiss, hiss, I'm pushing on." I thought, "Dave, that's the right decision." I pushed through the virga and could see the course again, and saw a cloud. This proves Dave and I have flown together and know each other, because we both headed to the same point of the same cloud, and we were back in communication.

Within a matter of five minutes of the anxiety we had regrouped. We could have gone in different directions, but I guess we think alike in our decision points like that.

**Dave** That was the low point apart from the one that started the flight, which only lasted for 50 miles.

**Mike** After Virden, things were really a piece of cake. The whole flight was. This was one of the easiest cross-country flights that I have made. Except that all through the flight we had to keep the pressure up. We couldn't dawdle. We were conscious that we were setting a very good Canadian record; we were really going for it. But there were no technical difficulties. Nearing Brandon, we called FSS because we had to cross over restricted areas.

**Dave** When Brandon answered me he asked if we were aware of the restricted zone of Camp Shiloh. I replied I wasn't because I was using a road map. So he told me where it was.

**Mike** From Brandon I don't remember stopping for any thermals. We were conscious of having made our goal of 1000 kilometre. I remember asking you if we should land at Portage because I didn't have any idea where the gliding field was at Winnipeg.

**Dave** The thermals weren't as strong by now as they had been.

**Mike** I was very conscious of easing up. We could see Portage ahead, and on my map there was a restricted zone over the military base, ceiling 7000 feet. You asked whether I had enough height to clear it. There was a good well-developed cloud right over the base which I thought we would get to at about 7500 and suggested that Dave contact the tower and get permission to cross right over the zone. I arrived at that cloud at 7100 feet and it wasn't working much at all. I had visions of these F-18s, scrambling and blowing us out of the sky for violating their airspace, because I have these winglets and look like an alien aircraft. I maintained altitude and even gained a little. By this time Dave was back on the frequency; the base flying training was off during the weekend.

We then set off and tried to figure what we should do. I said, what the hell, let's go to Winnipeg. We can make it there with a final glide without any problems. We set course for some well-defined clouds by the Trans-Canada and sure enough when we got to them, they were two knots if you worked at it. However at this time we were just trying to maintain and sort ourselves out while Dave talked to that tower. At this point we made a strategic error for "Canadian Soaring", the tower asked us if we intended to land at the International – we should have said yes, but we didn't. It would have been great publicity for the sport; but we were fatigued and neither of us felt confident about landing at the airport and possibly making bad decisions. But can you picture these two fibreglass sailplanes – mine with the winglets, Dave's with the long wings, parked between a 747 and 767. Dave asked for directions on how to get to the Winnipeg Gliding Club instead.

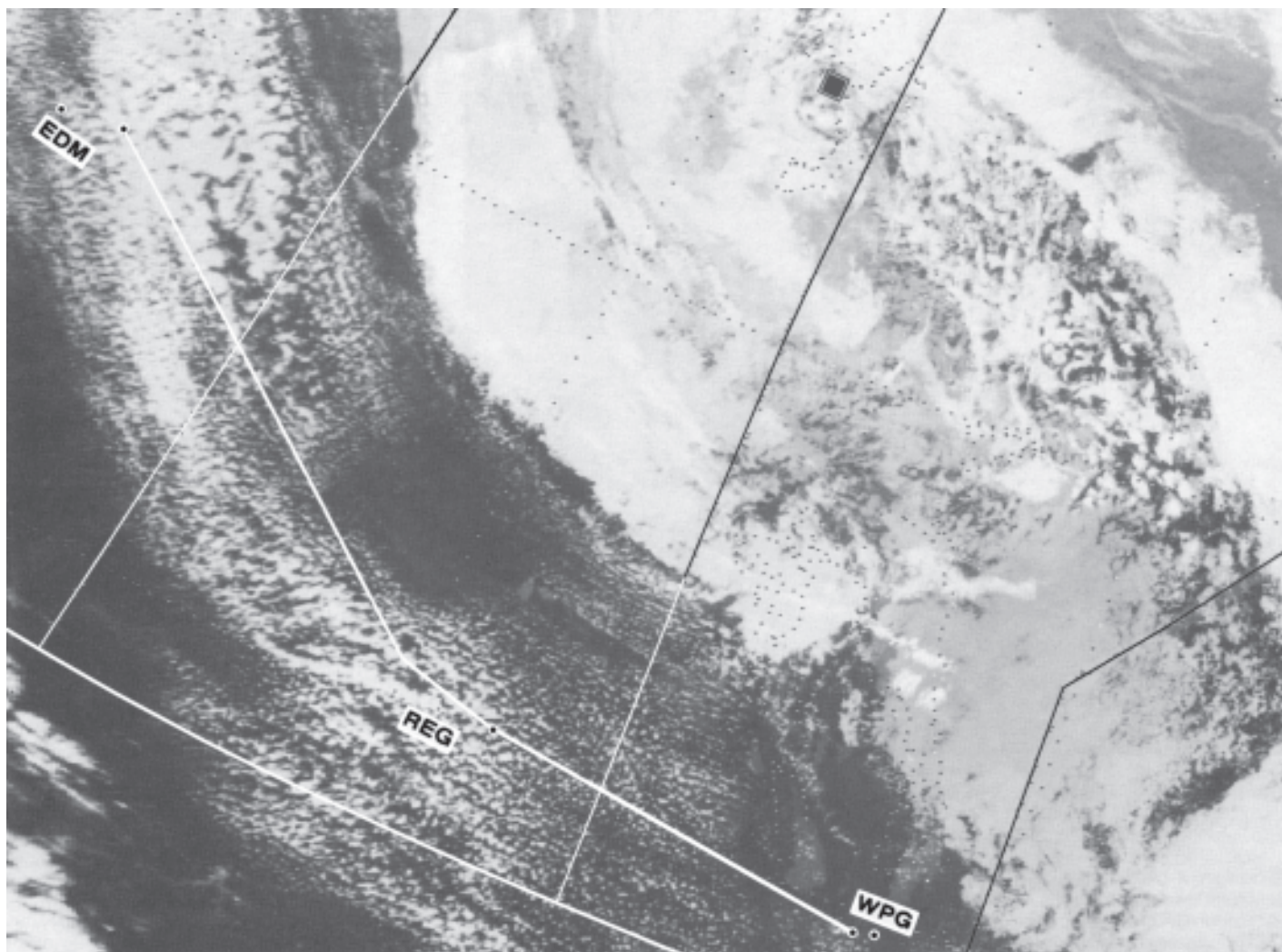
**Dave** I said I didn't know where the club was and they gave me a heading. They had us on radar.

**Lloyd** Do you think you could have gone another 200 km if you had complete maps and knew what was up ahead?

**Mike** Speculation is cheap. But even given the day from our point there, I would have said at least a 100 km without any problems at all, even with the decaying thermals of the day. We still had that tail wind, you know.

**Lloyd** You lost time by not carrying water.





Satellite photo of cloud conditions on the afternoon of the flight. Thanks to Alex Aldunate of the AES Satellite Data Lab in Toronto and to Dave Hennigar for providing the photo. The extent and density of the cumulus field on the flight path is evident. The flight from Chipman to Starbuck followed the circulation around the low centered on Reindeer Lake in NE Saskatchewan [square]. Time: 2053Z (1453MST). Scale is about 1:8,000,000 on this page.

**Mike** You're right. So I think 200 km is a nice round number. I think we might have done 200 even from the point where we were at; we were 7000 feet above the ground and there were still usable thermals. We stogged around for another 45 minutes quite apart from the time we lost not having water. So I think 200 km was really reasonable, and I think another 100 km during the overall flight would have been possible. I think that if had we really gone for it with water and better preparation, we could have made an assault on the world record [1461 km].

**Dave** We would have had to continue straight southeast into the States. From Regina we were going due east and would have been stopped east of Winnipeg by the poor country. [A larger scale satellite photo shows good cumulus extending as far southeast as St. Paul–Minneapolis. Editor]

**Lloyd** Now I understand when you got to the Winnipeg Gliding Club there was an almighty reception.

**Mike** Dave Baker of VSA wrote about that when he made his extraordinary flight

in a Grunau Baby from Chipman to North Battleford: you land and you think the mayor and the band is going to be there, the dancing girls are going to be there, with hundreds of people cheering and applauding and saying, "well done". What an anticlimax! Three people were there to witness our arrival.

**Dave** When we came across the field, it looked like there was nobody around. What surprised me were the triangular runways, all nicely laid out, and the club has been there less than a year. It turned out they hadn't been operating all day, the winds were very strong with dust storms, so there was only Jeff and Helen Tinkler and Jim Oke present, and Jim came out with a bottle of beer for us each...

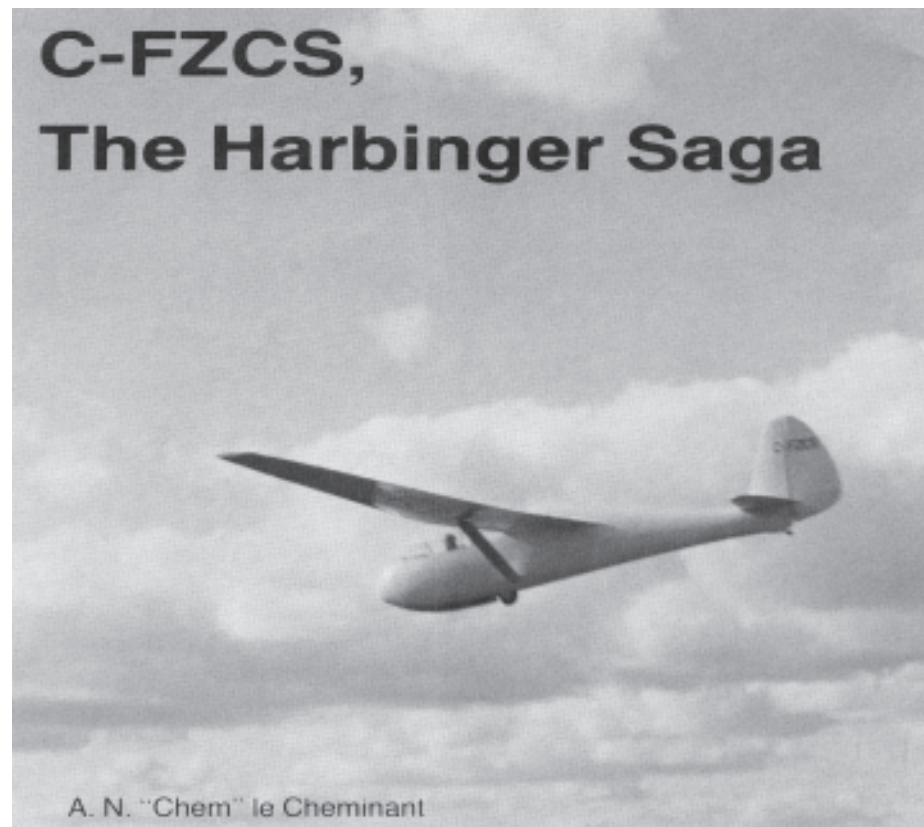
**Mike** There are a couple of things we should finish off with. We should consider writing an article on the pleasures and techniques we are evolving in pair flying; and we should recommend to the FAI that all distance records should have the crew listed first, not the pilots. That would make the records more meaningful for the hardest workers in this effort.

In my case it was Morvyn Patterson, a young lady who I am sure will take some records of her own. She drove all day and night to get me, as did Dave's wife Kathy.

"The retrieve was something else. It sure goes by under the wings fast, but under the wheels it takes forever."

I guess to put the flight in perspective in round terms, it took us 8 hours to fly it: we can easily forget that our crews drove 16 hours to get to us, and then immediately 16 hours back. □

*What's left for the straight-out distance hopefuls if they want to stay in Canada? Well, Steinbach airport, 50 km southeast of Winnipeg is the last decent airstrip before you start running into bush and swamp out there, although there are landable fields for another 40 km or so towards Lake-of-the-Woods. So: Chipman–Steinbach is 1192 km, Cu Nim–Steinbach is 1252, and Grande Prairie–Steinbach is 1616. Passing the current world record is possible within Canada. Editor.*



Elvie Smith

In 1956, I was posted to Gimli as Chief Technical Officer after a three year tour in a similar capacity in France, and started some enquiries as to what had happened to the machine. The upshot was an agreement between Dick Noonan, then President of SAC, and myself to buy the parts in the hope I would be able to finish the job while at Gimli, a two year tour which would end with my retirement from the RCAF. Dick and I purchased the Harbinger bits for \$1000 from Jack and Henry, and later in early 1957 I arranged for its first airborne experience tucked in the back end of a DC-3 on a convenient training flight from London to Gimli. By the time I left Gimli in June '58 the fuselage was skinned except for one panel, main spars complete except for the outer booms, wing struts and fittings welded, main wheel in place, but completion a very long way off.

By this time we knew that a British prototype was also under construction. Contact was made with the builder, Fred Colman of Rugby and with Bev Shenstone, who was now in England as Chief Engineer for British European Airways. Early in '58 I heard from Shenstone and Czerwinski that a problem had arisen with the British Aircraft respecting a very aft C of G. Their solution was to move the front seat forward some 15 inches by lengthening the fuselage between the two seats. Czerwinski thought the same result could be obtained by moving the wings "back" by reducing their forward sweep. I also favoured this idea, and at the state of the machine's construction we were able to bend the wing fitting attachments enough to reduce the sweep 2.5 degrees – enough to make an acceptable difference when the mathematics were worked out.

In June '58 I trailed the fuselage from Gimli to Ottawa. The spars and other pieces travelled with our furniture in the moving van, and I started my new job with the DoT Accident Investigation Division in October. Between establishing ourselves and getting the new job underway (it had never been filled before), the Harbinger once again took a long rest in the garage with only minor work going ahead and thoughts of how to do more recurring between increasing spells of job 'busyness'. I enlisted help from many good friends and managed to get some components completed in sundry local shops. However it was not until 1967 when we built a new house in Manotick with a generous basement and workshop that serious work became a possibility. Even at that it was not until my second retirement in '72 that efforts began to show tangible results.

When it came to skinning the wing leading edges, the 2 mm birch ply called up for the inboard section was unobtainable. I asked Czerwinski if 1.5 would do. Yes, if I made a test sample consisting of a 9 inch diameter drum 12 inches long for the proposed ply with a rib at 6 inches, similar in construction and spacing to the ribs of the aircraft, and then obtained a torque test figure of not less than 530 ft-lbs. This was duly done and the test sample refused to fail until 2100 ft-lbs was applied, at which point the 3/4 inch pine ply end piece tore out. Needless to say the leading edges are covered with 1.5 mm ply.

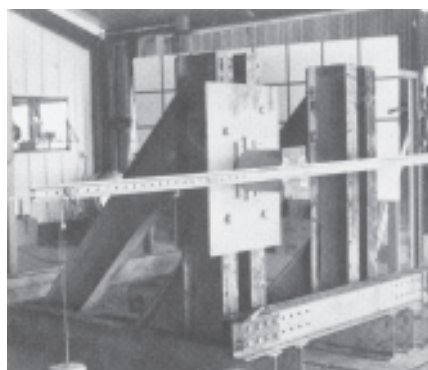
## How a post-war glider design finally transformed itself into the real thing a quarter century later.

The design of this Canadian two seat training sailplane came about as a result of the 1947 British Gliding Association's competition for two seat sailplanes for club and contest use. Beverley Shenstone (then Government Representative at AVRO in Malton) and Wacław Czerwinski (an aeronautical engineer at the same company), with some help from Dick Hiscocks of de Havilland, submitted what became the 5th place machine of 6 designs entered in the competition. Oddly enough, despite its apparent low standing (it should be remembered the entries were from a highly placed league), it was the only type to be built and flown.

Jack Ames in his article in the 1949 SAC yearbook (p61) attributes the name to a poem by Thomas Fuller who sent pious thoughts as "harbingers" to heaven. It was hoped the design would result in both a good and much needed aircraft and possibly an industry for Canada.

Essentially, the Harbinger is a relatively simple tandem configuration with some features which put its appearance and performance as high as anything then conceived. As a parallel, one has only to compare it with the German Ka-2 "Rhönschwalbe", the first of the two seat series by Rudolf Kaiser which had a very similar plywood fuselage and slightly swept forward wings. The Ka-2 first flew in 1953. This would make a much more interesting story for Canadians if the Harbinger had flown about the same time and effectively developed. The Ka series ended with the K-13, hundreds of which were built and many are still flying.

Construction of the Harbinger prototype was commenced by Jack Ames and Henry Dow in Toronto during 1948-49. Their work resulted in a partially completed fuselage, all the wing ribs and some portions of the empennage. About 500 of the estimated 2300 man-hours to build the machine were expended, when about 1951 Jack and Henry ceased work because Jack's new job took him to the Maritimes. The parts were eventually moved to Albie Pow's woodworking shop in London, Ontario. Here he fitted the fin to the fuselage, did some skinning and some work on the fin, rudder and horizontal stabilizer. Work seems to have stopped about 1953 and the pieces started to gather copious dust from the wood shop.



Chem le Cheminant

Test cylinder of 1.5mm ply being twisted at the National Research Council in May 1972. The load was 2100 ft-lbs.





Chem le Cheminant

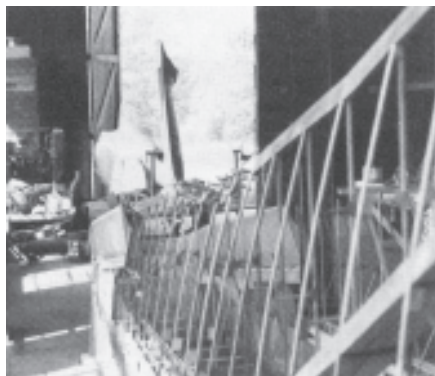
Elevator trim tab and other details of the tail feathers.

Final assembly took place at Pendleton (the home of the Gatineau Gliding Club) during the summer of 1975.

Now test flights began. On tow during the third test flight I ran out of forward elevator control and decided to make a check of the angle of incidence between the main and tail planes, as opposed to checking against the fuselage datum. We discovered that the fin and deck to which the tailplane is attached, had been assembled with a forward tilt such that instead of a minus one degree difference I had minus four degrees. No wonder the machine took off like a scalded duck! It also accounted for a ground looping tendency which occurred on the first car and aerotows but disappeared as soon as the tail incidence was reduced. However, fouling between the vertical fin spar and the horizontal tube connecting, the two halves of the elevator prevented obtaining the full reduction.

During some 30-odd flights, continual improvements in flying characteristics were made. However, ground handling was heavy because of the load on the tail wheel (about 85 lbs), and many more things needed to be improved to make the machine enjoyable to fly. Some of these were: new front canopy because of distortion, larger tail wheel, some rework on wings and spoilers, and improved trim controls. A desire to spend more time on other things induced a decision to finally discontinue the project.

We had achieved our intention to complete and fly the machine, albeit very late. I felt it would take almost a complete rebuild to



Chem le Cheminant

The trailing edge is assembled onto the wing ribs in GGC's carpenter's workshop in 1973.

come up with a satisfying aircraft, and I then thought that it could perhaps provide an excellent example for future budding aero-engineers to study and see for themselves what is involved in producing an acceptable flying machine. Despite good design work, beautiful drawings and good workmanship, there is rarely a bird that does not in the end take an undeterminable amount of flying and operation time to become a nice flying and successful aircraft.

The Harbinger was truly a dream, ahead of state of the art when designed, and way ahead yet of a still non-existent Canadian manufacturing capability in the soaring field.

#### Harbinger Technical Data

Span	60 feet
Length	25 feet
Aspect ratio	15
Empty weight	670 lbs
Gross weight	1100 lbs
Min sink	2.3 ft/sec @37.5 mph
Best L/D	25.9/1 @ 46 mph

One other pilot flew the machine, Doug Laurie-Lean of The National Research Council. His comments were: "Big aircraft feeling, lots of inertia in roll and longitudinal control, airbrakes not powerful but effective at low speeds, trim helpful but not very effective." These comments echo my own findings. It flew very slowly and I never did get a satisfying stall, but until speed reached 45 knots it had a tendency to wallow and at higher speeds the sink increased considerably, as did the "Olympia", against which its performance had been patterned. The longest flight was 3 hours in Oct '76; the machine flew a total of 26 hours in 32 flights. The Canadian machine came out much nearer the design weight of 303 kg (660.6 lbs) at 670 lbs. The English machine was much heavier at 800 plus and it never flew at less than 1100 lbs. There is a comprehensive flight test report by the BGA on the English model, but I no longer have a copy.

Incorporated in the Canadian machine during construction, but not called for originally were:

- an elevator trim tab.
- mass balance of elevator and ailerons (the latter was probably not worth anything and may have contributed considerably to the inertia effect in roll. That of the elevator was helpful in overcoming heavy forward stick forces at takeoff and low airspeeds).
- a spoiler control system which enabled the spoilers to be set and locked in any position but could be moved at will. This arrangement would have been very useful in pilot training.

In July 1976 the Harbinger was donated to the National Aeronautical Collection and awaits the building of a new facility (the sod-turning ceremony which took place in May 1983 at Rockcliffe, Ottawa) before it will be on public display, possibly in 1986 or 1987.



Chem le Cheminant

Nearing completion at Gatineau. Note the cut-back leading edge on the first 7 feet of the wing root — it's not a gull wing.

Before ending I have to give heartfelt thanks to my wife Phyllis, whose patience was often sorely tried but did not break, and who with my daughter-in-law Gina, helped handle and sew the wing coverings; to Dick Noonan for making the restart possible and who kept in touch although our paths widened considerably, to Ed Laenan, old time GGC member, for help in fairing the struts; to the late George Lace, a DoT colleague and often an extra pair of hands, and the many GGC members who lent a hand during the initial assembly and flight testing; and to Fred Coleman of Rugby, England for the design of the segmented spoiler system, photos, drawings and information on the English machine. In round figures the cost was about \$3800 for materials, and the labour was something like 4000 manhours (not always most efficiently expended). I learned a lot about glueing and there were many types used. Initially *URAC 185* by North American Cyanamid, *Aerolite* and *Aerodux* by Ciba, *Epoxy 815* from Shell, *Epibond* by Furane Plastics. If at some future date the machine is scrapped, it might be worthwhile instituting a test problem to evaluate the ageing of the various glues. From the first to the last glue joint, more than 25 years elapsed and another decade is on the way?

The registration letters reflect a little history too, 'Z' for the time when it was policy to prefix all gliders with that letter, 'C' for Wacław Czerwinski, 'S' for the late Bev Shenstone. For the rest of the players:

Dick Noonan retired as VP of Pacific Pioneer in New Jersey and lives in Parry Sound and St. Petersburg, Florida; Dick Hiscocks retired as a VP of NRC and is living in White Rock, BC; Jack Ames is retired in Kingston, Ont; Henry Dow is deceased, and yours truly shuttles between Brockville and Port Charlotte, Florida. □

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"Two-seat Sailplanes", by Czerwinski and Shenstone, *Aero Digest*, May 1948.

"Harbingers to Heaven", by Jack Ames, *SAC Yearbook* 1949, pp 6-66 [photocopies available from free flight editor, \$1.00].

"All the World's Sailplanes", Vol. 1 OSTIV 1948, and Vol. 2 OSTIV 1949.



# A CLOSE ONE AT FOSTER'S FARM

## ... AND OTHER ADVENTURE STORIES

**Eric Durance**

Windsor Gliding Club

Saturday, 29 October, 1983, dawned wild and stormy. I had been anticipating this day for some time ...

Many people had left the Mt. Washington wave camp in Vermont after a week of flying plagued by mediocre weather and a lack of towplanes. I felt lonely and pondered whether to stay the extra week, but the conversation and hospitality I enjoyed at the home of Jean Morris in Jackson made it easier for me to stay on.

Sunday and Monday of the new week were overcast and rainy. Tuesday and Wednesday were good thermal days with a wave late in the afternoon on Wednesday. When I landed at 4 o'clock, tired, after three hours of ridge and thermal flying, I noticed the wind had veered to the northwest and increased in velocity, and a wave window was developing just upwind of Cranmore mountain. I watched with chagrin as I walked the wingtip of my glider back to its trailer, and I cursed my ill fortune in not recognizing the changing weather pattern while still in the air.

While I was derigging the glider, my eyes were drawn back again and again to the sky and the classic cloud formations, swiftly organizing there like soldiers on a parade square. Fifteen miles up the valley and oriented across the wind I could see the slit-like aperture in the clouds that was the primary window, and just upwind of the airport by Cranmore was the secondary and, sure enough, a couple miles downwind of the field was a tertiary window.

The rotor cloud separating the windows stretched across the sky in giant windrows that remained stationary in space while continuously dissipating along their downwind edges and reforming along their upwind edges. They were lined up in succession, parallel to the Presidential Mountain Range that shelters the Saco River Valley and North Conway from the northwest.

Over the entire valley, the sky was a panorama of invisible mountain waves that were delineated by the pattern of clouds. The sun, low in the west, completed the picture. To a glider pilot bent on wave flying it was – breathtaking.

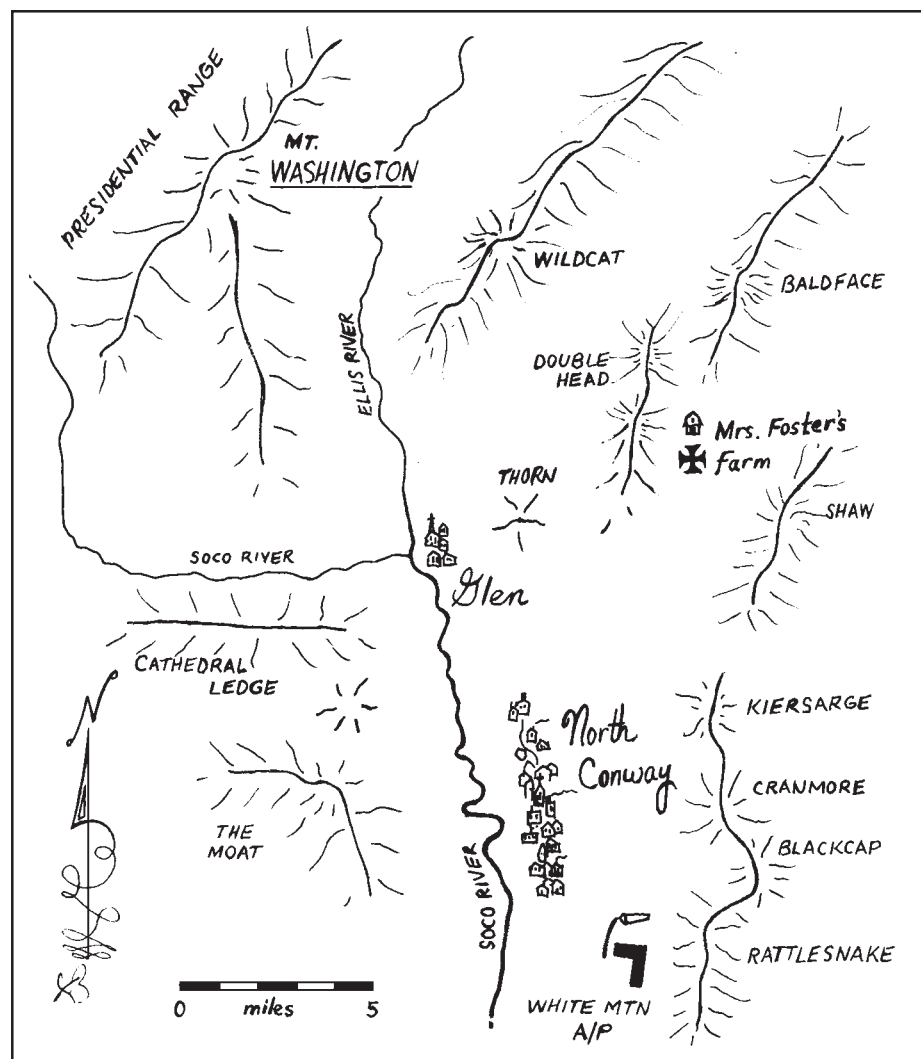
The ship was partly dismantled, yet the gnawing in my gut finally forced me to ask Bill Dowd, the younger of the two towpilots, if he would make a late tow. With his usual paucity of words for which I was grateful, he replied, "Sure," and I quickly reassembled the glider. At 5 o'clock we

were airborne again, heading into the secondary window from the end. I released at 3000 feet, turned into the wind, and continued climbing past the clouds in moderate lift.

I reached 12,000 feet, in weaker lift now, and was aware that a Gold altitude gain of 3000 metres was possible; but it was almost 6 o'clock and I remembered how quickly it gets dark in the valley. At that altitude the sun was shining brightly across the cloud tops and I had to be careful not to be misled about conditions on the ground. A try for an additional eighteen hundred feet necessary for the Gold gain was tempting but it might mean an after-dark landing. I decided not to risk it. I advised ground base of my decision and descended in a spiral dive, begrudging every foot of lost altitude but confident that I had made the right choice.

When I broke through the window just north of North Conway, I was alarmed by the sudden twilight and began preparing my mind for a landing quite different from any other I had experienced. My eyes adjusted to the gathering darkness but it was strange and, yes, exhilarating to see the twinkling lights of North Conway slip past my wing as I flew the pattern. Even though it was nearly dark, I wanted to fly a proper circuit because I knew all eyes on the ground would be watching and a good landing nearly always follows a good circuit. The landing went well on the familiar White Mountain airport strip. On a strange field or in full darkness it might have been different.

Thursday's flying started with light easterly winds. Frank Robinson and Mark Gluck of the Erin club were off first and reported



weak wave over Blackcap mountain. Releasing at 3000 feet, I climbed slowly to 5300. For more than half an hour, the three of us were able to stay about three hundred feet above the cloud tops. Shortly afterward, when the east wind was dying and we were back on the ground, each of us had a different word picture of what had really happened up there, but we all agreed that it had been fun to fly even a mini-wave successfully in such unlikely conditions.

Later that day, great excitement and distress was created by a young pilot from New England when he landed his 1-34 in the trees on top of Rattlesnake mountain within full view of the airport. He was not injured, but the glider's wing was broken. Because of the forbidding terrain, it will probably remain there as a silent reminder to the dangers of mountain flying.

Friday was supposed to be another thermal day while we waited for the good wave conditions due Saturday. There was nothing to warn me of impending peril. At 11 o'clock as I was preparing for takeoff, Paul Pukey, in his quiet way, pointed to the cloud formation over the shopping mall southwest of the airport. "It's been standing there for twenty minutes," he said.

I directed the tow pilot to maneuver under it and was rewarded for this indiscretion by being tossed about in the rough air and finally getting so far out of position that I had to release prematurely. My ship, a Pik-3c, is not equipped with a nose hook and has a high wing position. When it is towed by its centre-of-gravity hook, the elevator is biased down in level flight and insufficient elevator movement is left for the major nose-down corrections sometimes necessary to maintain tow position in rough air. I flew upwind until I encountered weak wave which was apparently coming off The Moat mountain. I nursed it up, past the clouds, to 9000 feet and then to 10,000 as I slid further up the valley toward Mt. Kiersarge. Approaching Kiersarge I allowed myself to be shouldered out of the wave window by the wind and had to speed up dramatically to escape being sucked down into the rotor cloud which appeared so serene and harmless from the top side.

The lift petered out so I started looking for other possibilities. I noticed promising cloud way up the valley toward Mt. Washington and decided to go for it. I was not aware then of the danger, nor had I properly gauged the wind speed and direction or its effect on my flight path. The clouds looked better the closer I came and were beckoning me on with the promise of lift. But I was paying the price in lost altitude as I flew through a body of air that was sinking like there was no tomorrow. In an astonishingly short time I was down to 2500 feet, west of Shaw and east of Doublehead mountains and I finally knew those siren clouds were out of reach – and so was the airport!

Nothing but trees and mountains in all directions and only chopped-up lift to work with. I spotted some rights-of-way cut through the bush and I instinctively knew they were sucker strips – too dangerous for landing. Then, as my eyes flicked over the terrain, I saw the spot of colour that did



Evidence of the close one at Foster's farm. Note the pushed-over post against the rear fuselage.

not seem to belong in that sea of forest greens and browns. I flew closer and saw a blue-roofed house, a barn, a pond, a tiny garden, and two meadows nestled together against the slope of Doublehead Mountain.

I knew that Glen landing field was around the south end of Thorn mountain about five miles away but decided against trying for it. Promising myself to stay within gliding distance of the farm, I continued searching for a thermal that would put Glen field or even White Mountain airport safely within range. Alas, it was not to be. I was slowly losing altitude and now, at eighteen hundred feet, I decided to concentrate on the possibilities of landing on one of the two meadows. "Both too short," I thought. One had three horses grazing on it, was relatively level and oriented into the wind; the other was sloping in a direction that would require a downwind landing, undulating slightly, and had a row of trees cutting through. Both fields had the odd bare rock showing and I guessed their surfaces would not be smooth.

I remembered the discussion about off-field landings I had had while travelling back and forth from Windsor to our home field near Dresden, Ontario. It seemed advisable to risk the downwind landing simply to take advantage of the short run-out I could expect on uphill terrain. A side slip approach would allow me to touch down sooner and provide added distance to stop in, I thought, but I was not proficient in the technique. "No," I would have to make the kind of approach normally avoided – low and slow – but I must be careful to stay out of the tree tops.

Once decided, I flew the circuit and downwind approach. I glided safely in over the trees that split the field and touched down about 50 yards from the top of the slightly skewed uphill slope. With the control stick fully forward and the landing skid firmly on the ground, the aircraft skidded up the

incline and to my horror continued down the other side into a small gully. During the final ten feet of runout the fuselage was rubbing alongside a small, loosely positioned, two foot high post. The wing cleared it and the glider came to rest with the post just ahead of the stabilizer.

The post was part of a one-strand electric fence, inconspicuous from the air. I climbed warily out of the cockpit, glanced at the fence post and ruefully considered for a moment whether I would have avoided it with a side slip approach. I went to look for the owner of the farm house. Mrs. Foster, a spry lady of about eighty years, answered my knock and expressed great surprise and excitement when I pointed out my means of arrival. She packed me into her Volkswagen Beetle and drove down to White Mountain airport about sixteen miles away.

Grayson Brown of Nutmeg Soaring Club, Jim Findlay of the Erin club, and Bob Farrington from Lawrence, Mass. volunteered to help retrieve. I watched their faces out of the corner of my eye as I drove my rig back along the southeast side of Doublehead further and further into the bush. I saw the disbelief in their eyes that an aircraft could land safely anywhere in that mess and their amazed expressions when my glider came abruptly into view, parked so saucily askew on the side of the small gully. "How in the hell did you ever do that?" said Grayson.

Well, after the usual photographs to record the event, we took the ship apart and packed it away. Grayson Brown paced off the distance from touchdown as 200 feet; the glider had stopped 30 feet short of the stones and fence separating the pasture from the small garden. In the meantime, Mrs. Foster had returned to watch. When we were ready to leave, I asked if I could pay for resetting the fence post. "Absolutely not," she said, "I'll look after

continued on next page

that." "Mrs. Foster," I added, "I am so happy that this farm of yours was here for me to land on." I put my arms around her and gave her a heartfelt kiss. She seemed very pleased! Later I sent her a photograph of my glider parked in her meadow.

Back at the airport we inspected the ship closely and found that, where the fuselage had rubbed past the post, a small break in the plywood skin had occurred at three of the bulkheads. I analyzed each one carefully with the help of Grayson and we both agreed that no structural damage had resulted.

...And those were the events that led up to Saturday, 29 October. I arrived at the field by 7 o'clock and met Grayson Brown. We sat in his car watching the weather and talked mountain wave flying. It was an opportunity for me to learn and I made good use of it. We discussed wave orientation, characteristics of the window and rotor, wave inclination upwind with altitude, wind speed differences in the wave, aerotow techniques, misuse of oxygen, and other dangers of high altitude flying. All the time a strong northwest wind was blowing patches of snow and rain down the runway. The clouds, now helter-skelter, were at 800 feet and boiling furiously. "If this keeps up, we won't be flying any wave today," said Grayson darkly. I was dejected, for this was my last day at North Conway. My instincts told me that there should be a super wave; the problem would be to get airborne with these weather conditions on the ground.

We decided to let the towpilots sleep and went for coffee and doughnuts. By 10 o'clock there occurred a slight lull in the weather, so we roused the towpilots to enquire if they would consider flying. "Yeah", said Ziggy Fuersanger with a Brooklyn accent I found fascinating. "We'll give it a try." In real life Ziggy is the Chief Flying Instructor for Mid-Island Air Services on Long Island, NY. Four glider pilots asked for high tows to 3000 feet. I put duct tape over the cracks in my ship's skin and also took off. Surprise! Surprise! At one thousand feet I released over the ridge and was back on the ground in no time. The ridge was not working for me and the air seemed to be sinking everywhere. I was relieved, however, to make that first flight after Friday's off-field landing.

The weather worsened making towing dangerous, and those of us on the ground huddled under my glider's wings for protection from the wind and occasional squalls of light snow and rain. We watched the two gliders remaining in the air struggle to stay up above the ridge. By one o'clock I noticed that the clouds were beginning to organize in a desirable pattern. A secondary window was forming just north of the runway and I fearlessly announced my wish for a tow. "You got it," said Bill. We made it to only eight hundred feet before encountering extremely rough air that forced me to release and land. Harvey Howell in the LS-4 took off, and undaunted, I went back on the tow line but this time with Ziggy piloting the more powerful towplane. Flying in the low-tow position helped, but at eighteen hundred feet the air became

wickedly turbulent and there was no way for me to stay behind the tug; but this time, at least, I was at an altitude that provided a chance to maneuver.

Realizing that the level of turbulence could only be produced by rotor action, I pushed upwind, standing the ship on its nose to force her forward. I was holding my own in the rough air of the rotor and even gaining a little altitude when I felt a jolt and heard a bang that struck terror in my heart. I thought for sure the wings were coming off, but the pain in my head assured me that I had only hit the canopy. Grimly tugging at my seat belts, I pressed forward and the lift improved perceptively, then magically, it became silky smooth and an unreal quietness settled into the cockpit. I was too far from the field to glide back through that tremendous rotor but I didn't care - I had contacted the wave!

Up I went, the variometer at two knots, then four. As I approached cloudbase at 5000 feet, the vario pegged out at ten knots and I concentrated on staying in the best lift. The window appeared to be a thousand feet wide and extended from Cathedral Ledge northeast toward the Carter range as far as I could see. I was being elevated through a high corridor lined with clouds. How tremendously exciting it was, the clouds were awesome. Six! Eight! then ten thousand feet on the clock in the blink of an eye and I frantically started thinking about oxygen. "Take it easy", I told myself, "you rehearsed this a thousand times last winter while sitting in your favourite chair." Easier said than done. I could remember two years ago that in a similar situation I had fumbled the oxygen so badly that I had fallen out of the wave and couldn't get back in. This time, however, I got the mask on and the oxygen flowing without a hitch.

I cleared the clouds at 12,000 feet. Fluffy white cloud tops stretched out forever, except, as I looked to the northeast along the window, I saw a stack of lennies sitting on top of the other clouds like giant pancakes. These observations and the thoughts of "having already accomplished a Gold altitude gain, and would a 5000 metre Diamond gain be possible," must have broken my concentration for I drifted into sink. "Not Again", I thought as I reacted quickly to fly upward and was gratified to see the vario edge upscale.

I decided that the lennie clouds must be over Wildcat mountain where the wave would be strongest, so I slid gingerly along the window toward them. By the time I arrived I was at 17,000 feet. Polished smooth by the wind, those beautiful lenticular clouds left a lasting impression. The secondary window was downwind of the lennies and for an instant I thought of flying over the top to get to the primary wave about five miles upwind. I had experienced the terrible sink between wave crests on Friday and knew the feeling of helplessness it generated. To be sucked down into those clouds would be disaster, and I discarded the idea immediately. I maneuvered my ship in the window behind the lennies instead, and concentrated on flying as cleanly as possible.

The flight now was like being in a world of slow motion. The only sensation of speed was that produced by vertical lift; about 2 knots were showing on the variometer. I was above Baldface mountain now and stationary relative to the ground, but my airspeed indicator was reading 40 knots. "It's surprising how slow I'm flying", I thought, considering the wind speed on the runway and the increases expected with altitude. As the altimeter moved slowly up the scale ... 18,19, and then 20,000 feet - I became aware of the problem. Frost was forming on the inside of the canopy faster than I could remove it. By 21,000, I was hunched over peering forward through the small spot I was able to clear. Fortunately there was some visibility through the sides of the canopy, otherwise, I would have been hard pressed to maintain level flight.

Concern about reduced visibility through the frosted canopy and the memory of Wednesday's near-dark landing started me thinking about an early descent. It was now 4 o'clock. I pulled the air brakes, they would not move! My heart skipped a beat and my mind raced wildly for an instant over exaggerated reasons and consequences. "They're iced up", I thought finally and I tugged repeatedly at the handle. Several anxious moments later, in response to my efforts the air brakes reluctantly extended and I started my descent in a slow spiral dive. I went down through the same window I used on the way up and tried to retrace my flight path to prevent coming out the bottom over unfamiliar territory. In radio contact with ground base all the time, I was finally spotted and the reassuring message was transmitted that if I looked straight down I'd see the runway.

What a super wave day it had turned out to be! All told, five Diamond altitude gains were made that day. Harvey Howell in his LS-4 reached 20,000 feet before realizing he had not notched his barograph after releasing from tow; he went back down to 4000 feet and up again to 22,000. When he opened his barograph later that evening he found that even this notch didn't count because, for some reason, the barograph drum had failed to rotate. Mark Gluck in his M-100 accomplished his first Diamond; Grayson Brown in a Schweizer 1-26 did it for the umpteenth time.

Everyone congregated at the Smuggler's Cove in the evening to celebrate and to say good-bye. Sunday morning I was on the road by 6 am and I arrived in Windsor at 9 o'clock at night, a 15 hour solo driving stint with stops only for gasoline. The return trips of three previous years with shared driving had been more tiring. What a difference a Diamond makes!

As I sit here reminiscing, I remember Tom Foote from Nova Scotia and wish he had stayed for the second week. I remember Eb Geyer and Hal Bruning, and the other guys from Michigan. I hope to see them all next fall. And, of course, always the dreamer ... I'm dreaming of a flight from Dresden to Niagara Falls and back this summer. My poor little Pik-3c is in the basement now with shiny new patches on her fuselage. I hope she is as anxious as I am to get started again. □



# EASTERN INSTRUCTORS COURSE



Ian Oldaker

Fifteen enthusiastic pilots with Course Director Ian Oldaker, trying to keep warm during the May Eastern Instructors Course.

## John Wiseman Gatineau Gliding Club

It was Sunday, May 13, 0900, and amid the smell of frying bacon, the Gatineau Gliding Club clubhouse was alive with the chatter of the sixteen would-be gliding instructors who had gathered to attend the SAC 1984 Eastern Basic Instructors Course. The lively chatter reduced to a somnolent buzz when it became generally known that, due to an error in the joining instructions, the entire course had assembled 24 hours early. But, possessed of both the thirst for knowledge, and more important, a desire to get airborne, our heroes beat a path to the flight line where Wolfgang Weichert and Doug Laurie-Lean (CFI and deputy CFI of GGC) were giving check flights in the 2-33, K-13 and Blanik.

At 0900 on Monday morning, the unheated classroom in the "Carpenter's Shed" on the airfield was alive with the chatter of teeth as the inside temperature was about 5°C. This time Ian Oldaker, our instructor for the week, was there to greet us.

As in previous years, the format of the course was to be lectures in the morning and flying exercises in the afternoon. During the flying exercises we would fly in pairs, giving in turn the day's lesson to our partner who would play the part of the student. Ian and Wolfgang also flew with as many of us as possible each day so that they could assess our progress. For flights with other course members we would carry a tape recorder so that our technique could be faithfully reproduced at the evening debriefing for our edification and amusement.

The first exercise was the primary effects of controls. Several of us were surprised when we realized that Ian expected us to duplicate the demonstration tape (which he had sent us in advance of the course)

verbatim. However, although it is unlikely that any of us will use that exact patter during actual instructional flights, the close attention paid to each word highlighted the pitfalls which a new (or indeed, old) instructor should avoid: "We never tell the student to move the stick forward, we tell him to lower the nose", and so forth.

On this first day, people tended to be hesitant and very conscious of the microphone around their neck, but the evening still produced some notable tapes. Everyone's favourite was Richard Benoit's lesson. Having been initially struck dumb by the microphone, he produced a very fluent patter during which he congratulated his 'student' (Alex Diakiw) on his astonishing progress on this, his second lesson. Then exhorted him to lower the nose and noticed how much ground he could see over the horizon. Unfortunately, Richard had to withdraw from the course due to pressure of business; we hope he will be trying again next year.

On the second day, we talked about flight safety and had an excellent lecture from Bob Richard of Transport Canada on the "7 laws of learning", and the construction of a lesson plan. The exercise for the day was aileron drag and coordinated turns. The demonstration tape for this exercise placed much emphasis on the three stages of a turn: going in, staying in, and coming out. The writer spent this portion of the flight explaining the similarities between sex and turning a glider (purely as an aide-memoire you understand!) to Guy Debroux who was busy using the coordinated turn exercise to gain as much height as possible in the twenty minutes allotted to each flight.

The weather during this time had been getting even colder and, in order to prevent our skulls getting even more numb than usual, Wednesday found us enjoying the

morning lecture before a roaring fire in the clubhouse.

The morning was filled with the delights of rating student performance, developmental teachings and emotional escape mechanisms. The exercise for the day was slow flight, stalls, incipient and full spins, and medium turns; and during the briefing, Ian emphasized the problem of negative g sensations giving a student a false impression of being stalled. We did not carry tape recorders for the spins so there was little to debrief in the evening. However, we contented ourselves with a debate amongst those who had tried to spin the 2-33 as to who had been the most successful. Serge Morin and Michel Perrault seemed to have had more success than the rest of us.

On Thursday, we covered flight instructions, and the causes of accidents and incidents. The exercises for the day involved sideslips, circuit planning and an interesting maneuver designed to demonstrate the hazards of cable breaks on winches. This consisted of diving to 70 kts, pulling up to a 45° attitude to simulate a winch launch and assuming a cable break as the speed reduced through 50 kts. The nose was lowered to the normal gliding attitude, and as soon as this was established, a steep turn was then entered to simulate a cable break procedure. It was demonstrated that this would normally result in an incipient spin. The reason for this became obvious when the maneuver was repeated without the turn at the end. The normal gliding attitude was held and the time from the simulated break to regaining 50 kts IAS was measured. This turned out to be 6-8 seconds which showed that the turn had been carried out at much too low an airspeed. Winch pilots beware!

This time we were back with the tapes which were generally improving in quality. We also listened (with varying degrees of comprehension) to Yves Tremblant who was working entirely in French with Nick Bonnière. About a third of those on the course will be instructing in French on their return to their own clubs. There appeared to be strong grassroots support for an instructors course in French and it would certainly make sense to practise the 'patter' in the language in which the instruction is eventually going to be carried out.

On the last day we talked about aerotows and off-field landings and spent the second part of the morning on a written test which was similar to the licence exam, but with more emphasis on instructional technique and aerodynamics. The flying exercise was a fairly relaxed combination of aerotow, field spotting and circuit planning.

In conclusion, our thanks to Ian for a valuable and interesting course, to Wolfgang Weichert for his support during the week, and to all the tug pilots who turned up on some not so wonderful afternoons to get us airborne. In spite of the cold, which we traded later in the week for swarms of black flies, it was an enjoyable six days. And to our visitors: Pendleton really is a very pleasant place for most of the summer. Happy instructing. □

# SAFETY

*Getting these two particular stories for this issue is another example of serendipity, but I don't know who had the lousy timing: John or George.*

## HOW TO TRAILER

John Firth

Rideau Valley Soaring

Welcome dear readers, to a column on that boring old topic, "Safety". Really it should be called "ACCIDENTS" since these are what I'll be bringing to your attention. I decided that the first edition should be something more than one line.

Many of us will have already done our annual maintenance on our gliders, so now let's spend a little time inspecting the trailer. This is often a sadly neglected item, especially with pilots who never fly cross-country. The trailer is regarded merely as a storage shed, of which no more is required than it be weatherproof. When the rare occasion arises that this structure is required to move somewhere, even if it does not actually fall apart itself after a few miles, it may well be that the fixtures holding the glider are less than adequate for even normal transport, let alone in the event of an accident. Even some experienced pilots neglect to use their imagination on what could happen in a road accident. G forces are as large as in a landing crash and restraints should be designed to hold the components in place for 10g fore and aft upwards and 5g downwards! Rollovers are not entirely unknown. A recent accident involved a glider shipped half way across the country with the tail end held down only by a couple of modest bungee cords hooked over the fuselage, with no chocks or hole for the wheel or tail skid. The bungees gave up the unequal struggle, and the tail end of the glider started battering its way out of the back of the trailer, and the pitching up and down

drove the canopy against the roof; it was yet another illustration of the fact that most of our claims are entirely due to neglect of simple precautions. Will I be writing next month of a blow-over due to poor handling in a strong wind?

Now for a few tips on safe towing, which I have learned over the years of driving various interesting combinations. It started with several hundred miles of guiding a short Land Rover, dominated by an enormous and heavy trailer containing a large two-seater. After a learning period in which the recalcitrance of the combination was clearly impressed on the driver, I eventually worked up to maintaining control (more or less) at the breathtaking speed of 45 mph. On English country roads, this could be considered exciting. However, it served to impress on me the imminence of disaster for any vehicle combination driven close to its limit of inherent stability. For those raised in Canada, and accustomed to small gliders in a light trailer, pulled behind a full-sized wagon, the unnerving sensation of tail-wagging-dog has probably never been experienced.

For those who are too timid, or prudent, to want to experience this thrill, I offer the following tips.

- A download on the hitch helps, probably by increasing the lateral stability of the car. About 50 to 80 lbs is good. If the tongue load is too light, then move the trailer's axle back if possible. This will also improve the inherent stability of the trailer.
- Raise the trailer and car rear tire pressure as high as allowable; this stiffens the side walls and resists swaying.

- If the trailer is still uncomfortably tail happy at your desired cruising speed, lower the car front tire pressures by as much as 6 lbs.

- When driving a heavy trailer, don't expect it to steer like a car alone; enter bends smoothly, and expect a delay in steering response, so that you do not oversteer and excite an oscillation.

- I strongly recommend fitting brakes to your trailer. However good your car brakes, they cannot provide more braking than the car weight will allow. You may be quite unable to prevent a rear end collision with the car in front if it brakes hard. In any case, **always** drive with more than normal spacing from the vehicle in front.

Finally, after all that lecture stuff, a retrieve story to top them all, which I have every reason to believe is true.

The biology department of a celebrated English university was offered the corpse of a whale for research purposes, on condition that it transport the carcass from the beach where it was lying. A faculty member, being a gliding type, instantly realized that the ideal transport existed in the form of a club two-seater trailer, which was therefore dispatched with an eager undergraduate crew to retrieve the prize from the other side of the country. I will pass over the fascinating but lengthy details of the struggle to move the by now stinking whale into the trailer. Sometime in the early hours of the following morning on the return journey, the expedition fell afoul of the law for some minor infringement of traffic regulations, such as blocking the high street of the town completely for several tens of minutes, while they struggled to recover from a missed turn. The usual demand of "Watcher got in there now?" followed by a truthful reply, followed by, "don't gimme that rubbish, open it up", resulted in the stolid constable nearly fainting of surprise and the noxious stench. He then bade them depart without further delay, and the cargo reached goal without further mishap. History does not relate whether any research was performed on the beast. However, there was a marked drop in the enthusiasm for going cross-country in the two-seater for the rest of the season. □

## HOW NOT TO TRAILER

George Eckschmiedt

Vancouver Soaring Association

The Alberta collision report form simply states that: "On Hwy 1, 100 metres west of Hwy 68, vehicle was eastbound on Hwy 1. He was towing a trailer, licence number 535596, which began to fishtail and caused the vehicle to enter the median. The trailer contained a glider and rolled onto its side. Weather clear, sundown, light west wind."

This describes the actual event but, as in everything else, there is a lot more to it. Another pilot and I decided early in the season to put in a formal request to the VSA directors to take the club Jantar to the flying week in Innisfail, Alberta, following the Victoria Day meet. We decided to leave the 19th day of May and we hoped to be in Innisfail the same day. The preparation for the trip was extensive. I had a sunroof installed on the car, transmission serviced, oil cooler installed, radiator hoses replaced

and the cooling system flushed, the front end checked, new tires were installed on the front and the whole brake system was completely redone. We had a tiedown set for the trailer, new tiedown screws were purchased for the Jantar, 20 rolls of white tape, the freshest rolls of Plus X film in town, two barographs, emergency lights, tools, block and tackle, ropes, double set of road maps, locks for the trailer, a sign on the back saying "Caution, wide turns", wheel bearings checked, and God knows what else. There was a spare for almost everything, except the trailer and the glider.

On the 19th, I arrived at Hope at 7:20 am. I rechecked the trailer, taped the aileron and the elevator pushrods so they wouldn't bash around during the trip, connected the trailer and left in pouring rain at 8:10. The winds were really blowing in the Fraser Canyon but I experienced no problems whatever. I had food, coffee in the Thermos, water in the canteen, and was in very high spirits. I stopped only for fuel, during which time I had a sandwich and a cup of coffee and stretched my legs. I passed Banff at around 6:30, and after Canmore, the road turned into a four-lane freeway with maximum speed of 110 km/h. Frankly, I wanted nothing to do with that speed. I had travelled with this trailer at just over 100, but at 95 I noticed a slight shimmying of the trailer – so it had to be either 100 or less than 90, nothing between.

I was doing around 90 when I caught up with a tow truck, towing a car on a dolly. We were in an area called Morely Flats. The tow truck was weaving off the pavement, its tires picking up rocks which hit my windshield twice. I decided to pass him. I pulled over to the passing lane, watching my speed, then the tow truck driver decided to drive parallel with me. I glanced over and caught the grin on his face as he kept beside me. I was doing just over 95. We were on top of a hill now and going downward. I did not know whether to accelerate or to brake! I removed my foot from the gas and thought that it may be safer to slow down, then I felt a shudder and my car lurched forward and things began to happen. I never saw the tow truck after that. He must have taken off like a rocket. My car was not going where I wanted it to go – it did not matter what I did, it had a mind of its own. Everything seemed in slow motion

but I am sure it was not. The next thing I knew, the front end of my car was pushed into the median and I saw the trailer on my left hand side, swinging across the highway. I saw a tire fly by, and then I saw the trailer lying on its side in the median, pointing 180° to the direction of my intended travel, my car pushed 270° around.

I sat there in total shock and disbelief of what had just occurred. I simply did not want to believe it happened to me: 27 years of accident-free driving and 34 years of gliding without any harm to a glider had ended in a few seconds.

Cars passed without even a look. I reached for the microphone of my ham radio and requested assistance, RCMP, and a tow truck. Fortunately, I was not injured physically. I got out of the car and saw that the trailer's hitch was supporting my car on the gas tank and my car hitch was bent down 90 degrees. The ball was severely distorted, but the safety chain was still secure.

I was in such a state of shock that it took days to piece the events together and figure out what really happened. The RCMP wanted a statement from me, while another officer filled out the official collision report form. In the meantime, a real good Samaritan, Stan Mehler from Banff, stopped and identified himself as a fellow pilot and offered his help. He left for Canmore to try and get materials to make the trailer road-worthy enough to limp to Springbank airport near Calgary. The tow truck arrived and lifted my car off the trailer hitch.

The rear door of the trailer had been torn off, it was observable that all rubber bungees were holding, the elevator fixture had jumped out of its track, the Jantar suffered some obvious surface damage but appeared more or less in one piece, which was amazing considering the devastation heaped upon the trailer. The canopy must have received a side load because it was broken in longitudinal pieces.

I made contact with a Calgary ham (VE6ARM) who called Monty Williams (VSA president) who was already in Innisfail. Monty provided quite a bit of moral support which was absolutely necessary at the time. It was late, dark, I was alone in distress, not having a clue what I was going to do. I was just about to make room in the car to spend the night on the road when Stan came back telling me he had no success. The RCMP arrived back also, and they reassured me that it should be all right to leave the trailer where it was as they patrol that section of the road all night long. Stan offered me his couch for the night in Banff. I rested but I did not sleep a wink.

The next morning, Sunday the 20th, a Tilden agent helped with his torch to straighten out the car hitch. The wrecker was called again and the trailer and glider was loaded onto dollies and moved to Springbank airport in the afternoon. I drove Stan back to Banff and myself to Calgary to a hotel. I kept informing Monty who did a lot of ground work in Innisfail, then fatigue took its toll and I slept.

Monday morning my partner met me, and Jerry Vesely of Sunaero Ltd. of Claresholm flew to Springbank to appraise the damage and see what could be done. From here on, things were easier....

What did I learn from this accident? Got a couple of days to listen? I will list a few items:

- Consider equipping the trailer with some sort of brakes or anti-sway devices. With the cars getting smaller and trailers larger, this may become mandatory in some areas. When you consider the investment involved, it may pay off one day.

- Avoid a long tow if you are alone in a car. Fatigue creeps up on you even when you don't think it does; and a friendly warning that you have an alternative action is always appropriate. You can't do everything alone. You would be quite helpless if you were also injured.

- Do not exceed 90 km/h (55 mph), no matter what the speed limits are or what you think your car-trailer combination can do. When downhill, go slower. Slowing down may not be a solution for a critical condition, and braking when the trailer is swinging will almost guarantee jack-knifing it. I still don't know (will never know) if speeding up would have prevented the accident. Maybe – maybe not.

- When slowing down, release the pressure from the accelerator very gently. I still don't remember if I was using the brake or not.

- Carry a fire extinguisher. I doubt if it would have helped if my gas tank was punctured but at the time I wished I had one with me, just in case during the salvaging operation something happens.

- Have communication equipment. I don't know if CB would have helped, but the hams of Calgary deserve a great deal of thanks from me.

- Consider the value of your trailer. Most people I talked to since said that they don't have collision insurance on their trailers. Your choice. Sure, you may have built your trailer, but have you considered its replacement cost in material and in labour? Considering that the season in which we haul the thing around is relatively short, the insurance cost would pay for the peace of mind it purchases. Certainly, no club-owned trailer (and other equipment) should be without either purchased or self-administered insurance. If you tow someone else's trailer, check its insurance coverage.

Have a plan for emergencies. The effects of an accident can be devastating, paralyzing, frightening and demoralizing. Think ahead, think what you, or your wife who is chasing you with the trailer, would and should do in the event of a trailering mishap. I was lucky. I was not hurt, and I was on a main highway. But what if it happened on an obscure back road? Please don't say it won't happen to you; that is what I said, also. □

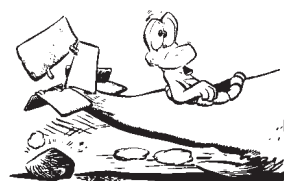
## CROCODILE CORNER

**ASW-20FP**, Chipman, April. Glider sustained damage to underside of fuselage from heavy landing induced by PIOs. No injury. Est. \$5000.

**L-19**, Hawkesbury, date unknown. Towplane rolled into ditch during squall. No injury. Est. \$2500.

**Citabria**, Innisfail, May 21. Towplane nosed over while taxiing in strong winds. Bent prop. No injury. Est. \$1500.

**Std Jantar**, near Banff, May 19. Glider sustained multiple minor damage and broken canopy when trailer jack-knifed and turned over on highway. Trailer destroyed. Est. \$7000.

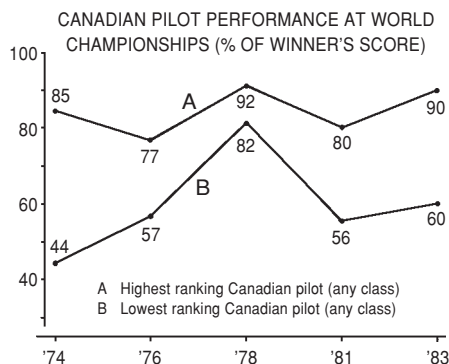




## OPINIONS .....

As accurate as Karl's statistics and forecasts may be, he neglects to examine the real problems which SAC is facing today, namely total dependence on government handouts for SAC's very existence. This situation became obvious several years ago, but despite repeated warnings to the Board of directors, they chose to ignore the matter and find themselves now in a position of having to abide by any edict the government may issue just to ensure SAC's survival. As the saying goes, "He who pays the piper, calls the tune." Let us hope that current SAC efforts are successful in reversing this situation so that once again we are masters in our own house.

Karl then looks at the results of Canadian participation in the past three world contests and presents some statistical conclusions of the standings achieved by the "team". It should be pointed out that we are not being scored as a "team", as you would in soccer or hockey, instead we are being treated as a group of individual pilots. The "team performance" Karl refers to seems somewhat unclear. Using a slightly different analysis (percentage of points achieved vs total points achieved by the winner of the contest, see table) we find that there indeed has been a slight but steady increase in performance by our pilots. Please note: The foregoing discussion does not include the Canadian entry in the Open class in Hobbs '83. The decision to enter the Open class was made by the directors of SAC, even though they knew that the pilot chosen was underqualified and was flying a noncompetitive sailplane, and the results proved this out.



Karl then looks at ways for SAC to send a topnotch team to future contests (government permitting). Perhaps a look at past efforts by SAC in this area might be illuminating. For many years, SAC has never spent one cent of its members' money to help defray the cost of sending pilots to world contests or other training competitions. SAC's only involvement has been in obtaining and administering government grants for world contests which only partially covered the expenses of pilots and crews. Instead it was left to individuals to make it possible for Canadians to attend world competitions. Many people have contributed heavily in the multitude of things which are necessary to send our pilots to these competitions. Some pilots have spent

tens of thousands of dollars in attending world contests in the past years, crews have given their time (in many cases money and aircraft), while others have assisted in many ways to have Canada represented at these events. The SAC official policy has been somewhat less than fully supportive of these efforts and only time will tell if there will be major changes of SAC policy. To emphasize this point, it may be of interest to relate what our current SAC president had to say after he returned from his visit to the SSA convention in Hartford. He was amazed, he said, at the amount of support the US competition pilots received from both the SSA and their membership in general.

Competition, especially at world class level, may not be of interest or be attainable by everyone but it is, like in most sporting activities, the major force behind keeping the sport alive and well.

Relying on government funding to reach the goals which Karl mentions in his letter appears to be a very dangerous and uncertain undertaking. Let us hope that the SAC Board of directors will make wise decisions in these matters.

The Canadian competition scene has received several setbacks, both on the national and international level, in the past couple of years. Limiting our activities in any of these areas will not only hurt the people who are directly involved, but will also damage our sport as a whole. Ways must be found to send pilots to all top competitions. This is practically the only way new knowledge and equipment will find its way into the mainstream of Canadian soaring.

Hal Werneburg

Hal's graph of Canadian placing in World competition got me curious, so I dug out all my old *free flights* to study the results. The below chart extends his "top Canadian pilot" rating back to 1958 (graph A). In recent years, our best pilot has been able to earn roughly 85% of the champion's score in whatever competition class we did best in. However, the year-to-year variation

is considerable, and I would hesitate to say the results show any trend.

One might think that 85% is fairly respectable; true if "fairly" is emphasized. As in every sport, breaking into the last 5% requires much natural ability and training.

What does one have to score to transcend the "also-ran" category? Graph B shows the percent score of the third place pilot in the class in which our top pilot competed that year. Since the era of fibreglass ships began (1968/70), the average score of the third place finisher in every class since then has been just about 96% of the winner's score. The fight to be best is very, very hot!

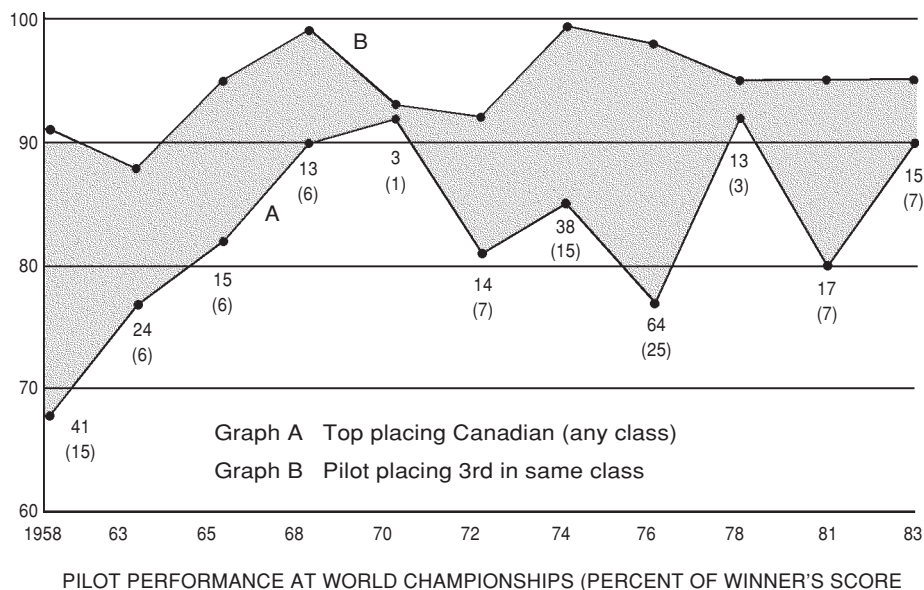
To show how much *more* effort was required for our best pilot to get into the top-3 category, I have added pairs of figures under each placing: the upper number represents the percentage of the field our pilot would have to surpass, and the lower number [in brackets] is number of competitors that this percentage represents. For example, in 1976 our best had 77% of the winner's score, in order to get third place with 98% of the winner's score, he would have had to best 25 other pilots or almost two-thirds (64%) of the field ...a tough contest.

What can be said about these results?

- Our best pilots in 'pre-fibreglass' days showed an increasing level of international competitive skill. In the four contests we had entered from 1958 to 1968, Charlie Yeates was our best, and he seemed to benefit from the world-class exposure as his scores kept improving.

- Since 1970, our best has been erratic, while the top scorers have been getting consistently close to the winner. In the same period, equipment and soaring techniques have been refined, and the availability of contests elsewhere has increased. Costs have shot up.

In conclusion, it is obvious we are stagnating. We do have pilots with the innate ability to place *very* well internationally. That



# PROVINCIAL ASSN NEWS

## ONTARIO SOARING SOCIETY REACTIVATED

On April 28th representatives from fifteen of the sixteen Ontario soaring clubs met in Toronto to take steps to re-activate the Ontario Soaring Society. The Society was formed in 1969 and one of the founding members, Glenn Lockhard of Rideau Valley Soaring, was in attendance. In recent years the Society has not been very active beyond maintaining contact with the Ontario government's Ministry of Tourism and Recreation.

Several weeks prior to the meeting several interested soaring pilots had met to discuss what could be done to allow the Society to make a more significant contribution to the Ontario clubs and to the soaring movement generally. Harry Thomson from the Erin club had attended the meeting of provincial councils held in Ottawa in conjunction with the SAC AGM and presented a list of 29 possible objectives to stimulate the thinking of what may be done by the Society.

The chairman and Society president, Al Schreiter from SOSA, introduced Ed Mulvihill, a consultant with the Ontario government Sport & Fitness branch. Mr. Mulvihill outlined the role of government in supporting amateur sport and generally encouraged the Society to play a more active role in representing the Ontario soaring clubs with a view to taking advantage of the limited funding available from the government. Al led a discussion on the role of competition in our sport and the importance

*we only place fairly well (we're good bland, average, tapioca Canadians) is surely the result of our lack of will to give excellence a much greater priority. To succeed in the long run, we need a change of attitudes: in this sport of soaring we should not be telling ourselves why we can't do this or that, but how we can.*

*I think we are on the right track; provincial associations are getting good things done (thank God, all the Ontario clubs are now talking again); there is a burgeoning interest in record flights and badge work; and there is talk now (not quite action yet) on finding ways to get better equipment into club fleets. It should become standard practice, part of the club regimen, to shoe-horn the first year pilot into the 1-26 and warn him not to land back at the field. This really is done, in other lands, far, far away.*

*When the urge to always improve becomes part of each club's psyche, competition will no longer be a four syllable word. Bob has shown the benefits which filter down to everyone. It's a gradual evolution which the National Team, in its own self-interest, would be wise to vigorously support. In the meantime, do we have the faith to presume that we will get there, and make some good decisions to advance the day? Tony.*

of competitive involvement to establish soaring (in the eyes of the government funding agencies) as a sport and not a recreational activity. There is a need for additional competition at the club, regional and provincial level in order to produce the competition pilots of the future, and there is government funding to work in this direction. There will be an Ontario championships contest held in 1984, even if it is an abbreviated contest held over a long weekend.

A provincial coaching program for soaring was outlined by Ian Oldaker of the Erin club. Ian stressed that there is a need to stimulate the growth of soaring pilots instead of gliding pilots. This type of effort could well be the solution to some of the membership losses many of the clubs are experiencing, as the challenge of soaring could be what is missing for many pilots.

A number of working committees were discussed and chairmen appointed from the usual eager volunteers. These are the people that will be making the contributions during the balance of 1984 to make Ontario Soaring Society an effective organization:

### Executive Committee

Al Schreiter, SOSA  
Walter Chmela, York Soaring  
Bob Nancarrow, Erin Soaring

### Constitution & By-Laws

Dixon More, SOSA

### Competition

Brian Milner, Kawartha Soaring

### Publicity & Awards

Frank Thompson, Rideau Gliding

### Membership

Peter Joshua, Toronto Soaring

### Finance

Bryce Stout, SOSA

### Coaching

Ian Oldaker, Erin Soaring

The various committee chairmen will be adding to their groups in order to formulate plans to meet the various objectives agreed to at the meeting which may be within the Society's budget. One of the first activities that we expect is support for Ontario pilots going to Virden for the Nationals.

There is an optimistic outlook for the future of the Ontario Soaring Society as all of the delegates to the meeting agreed that there is much that we can do for ourselves to promote our sport and make it grow.

Bob Nancarrow

*Congratulations to the Ontario clubs in starting to work together again! With the majority of the pilots in SAC, an active Ontario provincial association should be able to do much for inter-club events, club growth, and the general upgrading of all levels of soaring skills. Editor*

## INNISFAIL MAY MEET 1984

This year's get-together and Alberta Provincial Soaring Contest took place as in many previous years, at the Innisfail, Alberta Municipal airport from May 19 to 21. Innisfail is located about 25 km SSW of Red Deer, approximately halfway between Calgary and Edmonton. The airport boasts three paved runways and large tiedown and camping areas, plus a pleasant clubhouse/office building which was made available to the competitors.

Our thanks must go to the local people who helped to make our weekend possible, and especially to Mr. Fred Libby, a local aircraft owner, and Mr. Roy Ferguson, the airport custodian, both of whom did their utmost to make our stay enjoyable.

The Alberta Soaring Council, as sponsor of the event, had appointed the Cu Nim Gliding Club of Calgary as the organizer of the contest with the writer acting as contest director. Thirty sailplanes with about fifty pilots from Calgary, Edmonton and Vancouver had assembled by Saturday morning when the weather gods decided to add some spice to the proceedings. The contest area came under the influence of a very strong and unstable arctic airflow which gave us heavy cloud, high winds, and some thunder and lightning for the next three days.

On Saturday, a few local flights were made in the day when the heavy cloud began breaking up somewhat. Sunday brought more thunderstorms and high winds and the pilots voted to cancel the task. Pilots flew locally in varying weather conditions and all landed in time for the highlight of the day, a very successful BBQ in front of the clubhouse to which ASC had made some financial contribution. After a highly satisfying meal, partially catered by the multi-talented Fred Libby and family, pilots, crews and friends continued to occupy the clubhouse until the early hours of the morning.

Monday, Victoria Day, dawned clear and windy, but by launch time a high overcast moved in again from the north with active cu developing under it. The task was a 171 km triangle and most pilots took to the air in an attempt at it, but in the end only Mike Apps (ASW-20FP) and Garnet Thomas (Std. Jantar) completed the course. Gerhard Schaefer of ESC achieved his "Silver C" distance in a 1-23 with a flight to near Drumheller, a distance of 110 km.

Although the amount of competition flying was less than in other years, the meet was successful in many other ways. It is always gratifying to see the many old hands as well as plenty of newcomers who come to these friendly get-togethers.

Many thanks to all who attended, the ASC, the Cu Nim Gliding Club, and everyone who helped to run the event. See you next year.

Hal Werneburg  
Cu Nim

# HANGAR FLYING

## DAFT DEFINITIONS

### Controlled Airport

There is no such thing as a controlled airport.

### Forced Landing

There is no such thing as a forced landing. All gliders will eventually come down, and do not need to be forced.

### Ground Loop

A precautionary 360° scan of the glider-port after landing.

from York Soaring "Soar Tales"

## CIVV MEETING

Regulation changes for FAI badges, scoring system and weight limits at Internationals, qualifications of a world champion for the next internationals, preparation for European and World contests were the topics of the CIVV meeting which was held in Paris on 29 March.

### New definition of a triangle

The leg of the 300 km Gold C, 500 km diamond distance, and 1000 km distance can be flown in any desired direction with no more than three turnpoints. The turnpoints must be declared before the flight; however, they do not need to be followed in the order of the declaration. The actual distance flown will be calculated, regardless whether the declared task has been finished or not. **This change will come into effect in 1985 at the earliest.**

### New scoring systems

It is mentioned that CIVV is very conservative and rigid; however, new ideas seem to filter through. Nationally and internationally proven scoring systems can be claimed as a trial system and could later be accepted as an official FAI scoring method.

### Weight limits

Weight limits at Internationals remain a controversy. A proposal by Tor Johannesen that all type approvals for sailplanes flying in Internationals have to be finalized twelve months before the beginning of the contest, had been rejected by the CIVV President and the plenary meeting. The majority finally agreed that a type approval has to be finalized three months prior to an Internationals. This regulation will be added to Annex A of the Sporting Code.

### Current Champion Pilots

The current champion pilot will be able to participate in Internationals in addition to the full team of his country, under the condition that the national aero club registers the champion together with the official team.

### 1985 Internationals at Rieti, Italy

Preparations are underway. At present no more than 90 participants can be admitted. For now, each country has to be limited to three pilots. Depending on the number of registrations, this limit can be changed. Provisional registration up to four pilots are invited till end of 1984. Whether the fourth pilot can participate will be announced in early 1985.

Preparations for the 1987 Internationals at Benalla, Australia are underway as planned. The next CIVV meeting will decide on the site for the 1989 Internationals. Austria submitted a proposal. Further applications, also for 1991, are invited for the next meeting.

### Start with ground clock

Following the conventional start gate procedure and the ground clock system, Piero Morelli introduced two new procedures based on good experience in regional contests in Italy:

- Release time is the start time, where the pilot chooses his own starting time;
- A simultaneous start, which seemed to function well with 30 contestants.

CIVV did not accept these two systems for Internationals and decided in favour of the ground clock. The dangers of the unlimited height start (crowding at cloud base before the start) were noted.

### Turnpoint photography

Rieti will experiment with turnpoint photography. Similar to Hobbs, a goal must be photographed from a pre-determined area. This area is a 45° sector between two arcs of circles with radii of 500 to 2000 metres. The goal is the common centre of the two arcs and the turnpoint lies in the photo sector. It should be noted that only high buildings will be used as turnpoints in order to determine the directions without doubt.

### Lilienthal Medal

The Lilienthal Medal has not been awarded this year as the written proposals (Dick Johnson, Wally Wallington) reached FAI in Paris too late.

### Elections

President Bill Ivans, Secretary Heinz Schwing, six VPs (Per Weishaupt, Piero Morelli, Edward Makula, Tor Johannesen, Hans Nietlispach, Peter Ryder) were re-elected unanimously.

### New Business

1. Possible change to the FAI classes (introduction of a 17/18 m class). A special meeting with CIVV Board, OSTIV and manufacturers planned for fall 1984.

2. Should soaring apply for an Olympic sport? FAI and IOC conducted an unofficial talk. Sport parachuting is pushing as they have a great interest in the Olympic Games. Soaring pilots remained reserved for various important reasons.

Both subjects were tabled.

*What is CIVV? The definition was printed in free flight 5/81 p17 and can also be found in the SAC Procedures Manual which should be in the hands of your club president.*

*Canada did not send a delegate to the CIVV meeting this time. If funds are available, Ian Oldaker was favoured to attend the international coaches meeting in Holland later this year. This decision was reached at the AGM in Ottawa 1984.*

## A NEW WING FLIES

Schempp-Hirth has formally announced the arrival of its latest sailplane, the "Discus". Rumours of a "Standard class Ventus" appeared in a few gliding journals recently. The maiden flight of the prototype took place on 21 April with designer Klaus Holighaus at the controls. A second Discus is under construction, and both reproduction ships will fly in the German Nationals to prove the design. Serial production is expected to begin in the fall after type approval has been granted. First comparison flights have tended to confirm the performance expected from the new wing planform, giving docile handling qualities and very good circling flight stability to the new sailplane.

The Discus features:

- A wing planform incorporating latest aerodynamic knowledge, specifically a sweptback leading edge.
- A new thin airfoil section using carbon fibre which incorporates boundary layer control and which has the lowest possible bug and dirt sensitivity.

Advertised technical data:

Wing span	15 m
Wing area	114 ft <sup>2</sup>
Aspect ratio	21.3
Empty weight	503 lbs
Max. weight	1100 lbs
Min. wing loading	5.9 lb/ft <sup>2</sup>
Max. wing loading	9.6 lb/ft <sup>2</sup>
Max. cockpit load	265 lb
Rough air redline	97 kts
Calm air redline	146 kts
Min. stall speed	37 kts
Min. sink rate	116 ft/min
Best L/D ratio	41:1

Why the straight trailing edge? An extensive (and readable) analysis of the airflow over a wing was done by Wil Schuermann which was printed in the February 1983 issue of SOARING magazine. Particular emphasis was placed on what happens to the airflow near the trailing edge of the conventional sailplane wing having a swept-forward trailing edge.

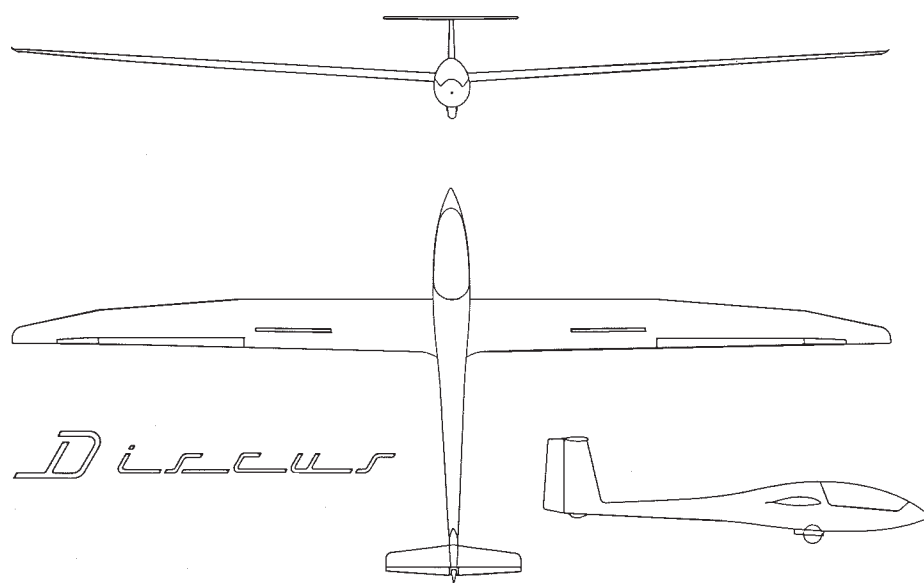


At high angles of attack (low airspeed) there is a strong tendency for separation of airflow to begin at the wingtip trailing edge, and for the air in the boundary layer to flow **nearly parallel** to the trailing edge towards the wing root. This triggers further separation of the airflow spreading inwards with consequent increased drag and reduced lift.

This lateral motion of air within the separation region can be prevented by adjusting the wing sweep, wing taper, and wing tip chord; and Schuemann suggested that the optimum wing planform would have a straight trailing edge with no sweep and increasing taper towards the tip – precisely what Schempp-Hirth is doing with the Discus. This idea was also tried at Hobbs, with Moffat flying a Nimbus 3 with new out-board wing panels having a marked sweepback.


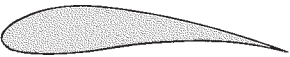
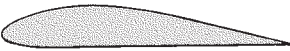

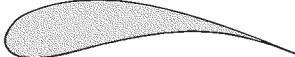
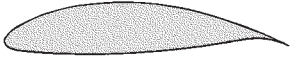
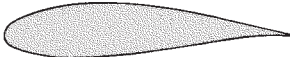
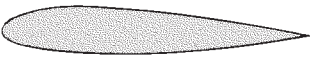
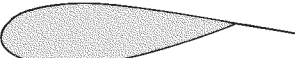




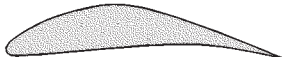

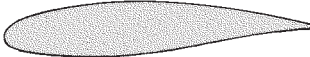
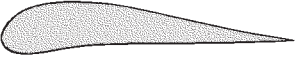
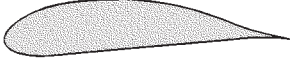
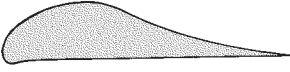
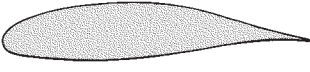

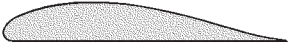
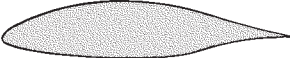
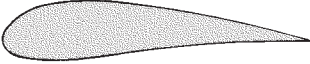
The Discus should be able to fly more efficiently near the stall and exhibit much improved climb performance.

Tony Burton



## REPRESENTATIVE LOW-SPEED AIRFOIL SECTIONS

from "Technical Soaring", VOL 6, NO. 2, 1980

HANG GLIDERS	MANPOWERED AIRCRAFT	SAILPLANES	GENERAL AVIATION
 Lilienthal	 Gö 535	 Gö 549	 NACA 2412
 Gö 652	 NACA 65-818	 NACA 63-618	 NACA 23015
 Culver / Jensen	 FX 63-137	 FX 66-S-196	 NACA 622-415
 Lovejoy 670x15	 FX-150B	 FX 67-K-150	 NASA GA(W)-1
 Kiceniuk TK 7315	 FX 76-MP-180	 Liebeck L1003M	 FX 76-GA-20/170
 High AR Rogallo	 Lissaman/MacCready	 Eppler E603	 Eppler 1211

# CLUB NEWS

## EDMONTON SOARING CLUB

We started flying this year on 31 March at Camrose, our earliest start for many years. The paved strip at Camrose let us launch when Chipman was still a quagmire from melting snow. Our thanks go to the Camrose Soaring Club who made us very welcome, and especially to their towpilots who turned out to launch us when our own towplane was sitting in the workshop waiting on parts being delivered from the USA. We moved back to Chipman in late April and had some good flying before the rains came. In that time we had one 500 km flight, two 300s, and several shorter cross-countries and we had two first solos.

After a considerable publicity campaign, including a mall display, an open house night and television and radio coverage, we have attracted quite a few keen new members. If they continue to progress at their present rate, we will have no students left by the middle of summer and will need another membership drive to fill up the vacancies!

The non-flying highlight of the year so far was a visit to the new Edmonton Space

Sciences centre. We held our monthly meeting in one of their meeting rooms, then watched the film "Silent Sky" on their IMAX screen. This is a 15 minute film of an ASW-15 doing the things we all dream of doing but never get the chance to do. The film is unique in two ways. The first is the subtle manner in which the cameraman manages to avoid filming the field which the '15' is often only a few minutes from landing in and the second is the decidedly odd effect the film has on the semi-circular canals (due to the size and proximity of the IMAX screen).

We have two new aircraft on site this year: a Standard Austria and a Standard Jantar. We now have enough Jantars on site to form an aerobatic team.

Our chronic shortage of towpilots has this year become acute. In an effort to overcome this problem we have introduced a new membership for power pilots who wish to fly our towplane but not our gliders. The membership is non-voting, costs enough to cover SAC insurance and membership, and entitles the member to fly only the towplane, though as part of his checkout, he gets a glider ride to absorb

an appreciation of what goes on behind the towplane. Whether this will provide a long-term solution to our problems remains to be seen but initial response has been encouraging.

Simon MacKintosh

## SOSA NEWS

The season was very slow to start due to terrible spring weather. Meanwhile, the club was active otherwise, and at long last we dug a rebuilt BBQ – it looks great, and even has a roof!

Some club members went down to the States competing: Ed Hollestelle, Wilf Krueger, Peter Masak and Ian Spence went to the Region 5 South contest at Chester, South Carolina. Andy Gough went to the Region 2 contest at Ridge Soaring, Pennsylvania.

We also have now a new multi-coloured windsock, designed by an "eye doctor" and a "material man". Hopefully it will be visible forever, and never blow to pieces. We had an open house weekend over the Victoria Day weekend, lots of intros ... will they translate into new members? Answer: yes – ten already from that weekend!

Colin Tootill

## SOARING AT OMEMEE

### Perry Ryan

Kawartha Soaring

During the summer of 1977 my brother Jack noticed the construction of a glider field and six hangars between the east side of Victoria County Road No. 7 and the Pigeon River immediately north of the Village of Omemee. This field is only three miles south of our summer land on the south end of Pigeon Lake in the Kawartha Lakes area of Central Ontario. He introduced himself to some of the founders of this new gliderport and was asked to join the club. He was soon a glider pilot, instructor and towpilot. In 1978 my son Michael (then 14) and I watched, took an introductory flight each and both experienced an immediate surge of the urge to soar. We too joined the club.

....

To the west of our field there is a ridge of glacial till that in places attains heights about 100 feet and gives a bit of ridge lift when the wind is right. To the south and about 15 miles away we have part of the Great Pine Ridge with its associated drumlins and eskers. This ridge forms a watershed or divide between the Kawartha Lakes and Lake Ontario to the south, and was left by the retreating ice cap of 30,000 years ago. It rises about 300 feet above our field elevation.

The Kawartha Lakes nestle in rolling hills, woods, farmlands and swamps. Much of the farmland is flat, probably due to sediments deposited in the great glacial lake

that once covered a good part of the area, and of which the Kawartha Lakes are remnants.

Locally most of our thermals rise over fields, gravel pits, asphalt roads, towns and villages. We avoid crossing the lakes where they widen for fear of rapid rates of sink. We regard a day with the cloudbase at 5000-5500 feet agl as a good day, when the cumuli are building.

We seldom have outlandings and I can recall only one that resulted in any damage. One of our Blaniks hit a small rock landing in a field about 15 miles to the north of our gliderport. It is quite usual to fly within a 10 mile radius of our base if conditions are good and further afield if they are excellent.

There is no prohibition at our field against using club ships for cross-country flying as there are so many licensed airports, private flying strips and good farm fields until you get to the north of the Kawartha Lakes and hit the hard rock country of the Precambrian Shield.

Our club has recently appointed a member to take charge of cross-country flying, and he may initiate more encouragement to club members in this important aspect of soaring. In the meantime, unless you own a glider, any cross-country attempts in club ships must be made during the week. There are penalties for keeping

them up for more than an hour on weekends and holidays.

....

I was issued the Glider Pilot Licence on September 27, 1979, when I was 61 years old, and a power licence followed almost a year later. In December 1980 I obtained both glider and power licences from the USA as well, with surprisingly little difficulty at St. Petersburg, Florida which enabled me to fly at Arcadia, Florida.

But gliding is my first and better love.

Monday, July 25, 1983 was the best day I've seen of the usual 5 or 6 really good days we get in July and August in our area, but on that day when I succeeded on my third attempt at the duration flight, no barograph was available to me. So I still lack altitude and distance for my Silver.

It was an unbelievable day for a novice cross-country pilot; thermals were 8 to 10 knots and cloudbase was 8500 feet agl – the best cloud height I had heard of before was 7200 feet agl. My flight in the Blanik lasted six hours and 9 minutes! I was able to fly little cross-country legs all over "home" territory, southwest to Uxbridge and north to Bobcageon in the lakes country with great confidence. I landed with a cramp in my left buttock, feeling a little punchy, and was greeted with congratulations and a cold beer. Kawartha is good soaring country. □

# Campbell

Printer ad,  
Ottawa

Just because my old mum out in the wilds of Cheshire used to serve me a tomato with salt and vinegar for my tea is no reason for my children not to anticipate an occasional steak and chips. Just because your dad flew a Grunau Baby once every three weeks when his turn came up, is no reason for you to do the same.

COME OUTSIDE  
AND SAY  
THAT

Gliding is about flying, not talking about it. The aim of every gliding club should be to provide its members with the best value for money and to allow them to fly as often as they can, as cheaply as they can for as long (or as far) as they can.

If you accept these principles then you cannot tolerate a situation where members are asked to spend all day on a site and then get one seven-minute flight. I hope by now you are asking yourself what we are going to do about it.

#### Tidy up gliding

Well, we are going to try to start a national campaign to tidy up gliding. We are aiming to persuade clubs they need to operate efficiently and must look at their management with a capital M (good management can also mean cheaper gliding!). Members must look for more from their committees – membership of a committee is acceptance of a management task, not an ego trip so that you can show how important you are.

The important thing is for you ordinary glider pilots to raise your sights and demand that your own club be the best in the west. And don't let your club pundits persuade you that you have already got it. □

## FLIGHT

White wings, blue sky,  
You and me, love to fly.

Dark trees, shining snow,  
Rippled lake, way below.

Fluffy clouds, bright sun,  
Happy pilots, smooth run.

My turn now, I have control,  
Into turn with gentle roll.

Happy heart, feeling gay,  
Soaring winds, lovely day.

Spirit free, heaven high,  
In the blue sparkling sky.

All to soon must descend,  
Too short flight has to end.

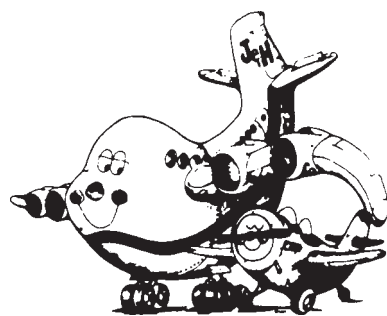
Circle round, back to earth,  
To the land which gave us birth.

Men of earth made wings to fly,  
Like the eagle soaring high.

Flying sets the spirit free,  
Ecstasy for you and me.

Margaret Gosling

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and small  
in aviation.



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# FAI RECORDS

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

## Notification of record claims

100 km Speed to Goal 156 km/h, Apr 1984, joint record by Ed Hol-estelle, Pik-20B, and Peter Masak, ASW-20, flown from Williams-burg A/P to Hwy intersection 322/20, Pennsylvania.

Speed 400 km triangle, 99 km/h, 17 May 1984, John Firth, Kestrel C-GFGR, flown from Pendleton, Ont. to Rawdon, Que. to St-Jean-du-Lac, Que.

Speed 500 km O&R, 115 km/h, 12 May 1984, Hal Werneburg, Mini-Nimbus C-GSXA, flown from Black Diamond to Medicine Hat, Alberta.

Distance to Goal, 707 km, 2 June 1984, joint record by Mike Apps (ASW-20FP) and Dave Marsden (DG-202/17), flown from Chipman G/P Alta. to remote finish at Indian Head, Sask.

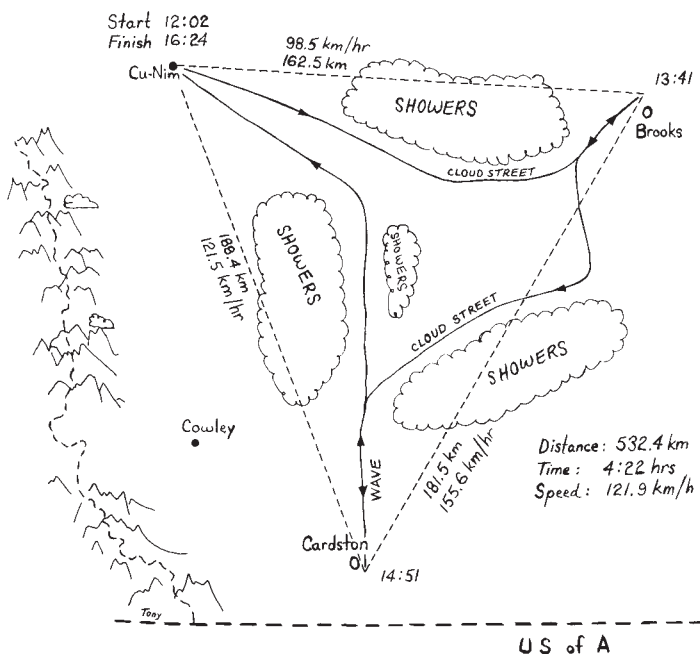
Free Distance, 1097 km, 2 June 1984, joint record by Mike Apps and Dave Marsden, flown from Chipman G/P, Alta. to Starbuck G/P, Manitoba.

Out & Return Distance, Feminine 328 km, 3 June 1984, Ursula Wiese, Ka6CR, flown from Black Diamond to Vauxhall, Alta.

Speed 300 km O&R Feminine 59.6 km/h, 3 June 1984, Ursula Wiese (details above).

## GOOD FLIGHTS

532 km triangle, 11 May Kevin Bennett, Open Cirrus, GORT, Cu Nim / Brooks / Cardston in record time of 122 km/h (existing record is 102 km/h). Carry a barograph next time, Kevin! Kevin says the second leg (see sketch) was remarkable and that he only stopped twice to thermal.



# FAI BADGES

Boris Karpoff  
24-1/2 Deloraine Avenue  
Toronto, Ont. M5M 2A7 (416) 481-0010

The following badges and badge legs were recorded in the Canadian Soaring Register during the period March 25, 1984 and June 1, 1984.

### DIAMOND BADGE

53 Gilles Boily Quebec

### GOLD BADGE

205 Kenneth Langland Vancouver

### SILVER BADGE

674 Paul Gilbert Moggach York  
675 Kenneth Langland Vancouver

### DIAMOND ALTITUDE

Bruce Anderson	Cu Nim	5610 m	Ventus b	Cowley, AB
Gilles Boily	Quebec	5364 m	Jantar Std	Grant Co. W Va.
Denis Pepin	Quebec	5121 m	Jantar Std	Grant Co. W Va.
Jean-Yves Germain	Quebec	5471 m	ASW-19	Grant Co. W Va.

### GOLD DISTANCE

Kenneth Langland	Vancouver	332.6 km	Lark IS29D2	Innisfail, AB
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### GOLD ALTITUDE

Volkmar Helmenstein	Air Sailing	4023 m	Lark IS28B2	Calif. City, CA
Jean-Yves Germain	Quebec		see Diamond altitude	

### SILVER DISTANCE

Paul Gilbert Moggach	York	71.0 km	1-23	Arthur, ON
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### SILVER DURATION

Volkmar Helmenstein	Air Sailing	5:37	Ka6E	Belwood, ON
Kenneth Langland	Vancouver	5:11	Lark IS29D2	Innisfail, AB

### SILVER ALTITUDE

Jean-Louis Racine	Quebec	1788 m	Grob 102	Williamston, GA
Volkmar Helmenstein	Air Sailing	see Gold altitude		
Paul Gilbert Moggach	York	1798 m	1-23	Arthur, ON

### C BADGES

Robert Thibeault	Quebec	1:00	2-33	St. Raymond, PQ
Barbara St. Cyr	York	1:08	1-26	Arthur, ON
James Bambrick	Cu Nim	1:06	2-33	Black Diamond, AB
Michael Bradley	Erin	1:05	2-33	Grand Valley, ON
Lee Miersma	Erin	1:44	2-33	Grand Valley, ON

Boris is on holidays in Europe and will be back on July 17 to work on your claims.

The note about a new Revision 5 of the FAI Badge Application form in 2/84 was somewhat premature. The Revision 4 forms are still current. Earlier ones still show up, please throw them away and get the latest. SOOs or CFIs, please note.

**SOOs** – have you made yourself heard at a recent club gathering to explain the essentials of badge flying? A recent 50 km hopeful at a soaring meet was completely ignorant of release certificates, height penalties, remote starts or finishes; etc. He did not know about the FAI Procedures Booklet, which he was given to read from cover to cover, and of course he was most successful the next day. Your work and encouragement is a season-long responsibility, and you are the person who can make the system work.

518 km O&R, Chipman to Carstairs, 29 May, Kerry Bissell in his Libelle. The flight would have completed his Diamond badge, but the barograph died.

509 km O&R, 3 June, Kevin Bennett in GORT and Hans König, in Mini-Nimbus, GSXA, Cu Nim to Kipp Lake Dam in Montana.

481 km of a 601 km triangle, Cu Nim / Hespero A/P / Brooks, 2 June, Rick Matthews, ASW 20. Task abandoned going south on 2nd leg. Course turned blue (see satellite photo on page 7).

405 km of a 510 km O&R attempt, Claresholm to Delburne, 13 June, Ursula Wiese, Ka6CR. The day quit too early on the longest feminine flight in Canada to date.

# NEW FACES



**Susan Gély**

National Secretary

After two and a half months with the Soaring Association of Canada I am eager to learn more about soaring. A single flight in early May has me almost hooked on the sport. Incidentally, I enjoy "secretarying" with the Association as well!!

Soaring is a new world to me and I am enjoying reading past issues of the magazine. I am sure that this reading, as well as being enjoyable, will help me in my position as secretary to SAC.

Coming from a background of other sports, I have worked on a volunteer basis for a National Association. I look forward to meeting members of the Soaring Association of Canada in the future.



**Al Poldaa**

Chairman  
Sporting Committee

Alar Poldaa of Calgary has been appointed Chairman of SAC'S Sporting committee, succeeding Dave Marsden of Edmonton. Al was born in Estonia and grew up in Northern Ontario. He studied Civil Engineering at Queen's University and makes his living as a general contractor.

Al joined SOSA in 1972 and became a member of the Cu Nim club upon moving to Calgary in 1978. He served on the Board at both clubs and co-managed the 1980 Nationals at Claresholm. Al has about 500 hours in sailplanes and currently flies a Jantar Standard 2. He claims to have flown over 30 types, "mostly through the generosity of friends who got tired of seeing me mope around the airfield when I was between sailplanes."

Al writes, "I considered myself an unlikely candidate for this job but accepted the appointment because of my strong concerns about the apparently growing attitude in Canada that competition soaring is somehow removed from the mainstream of our sport. I am not a particularly zealous contest pilot and get great enjoyment out of sharing a few thermals with friends and cruising around, admiring the local scenery. But I have also experienced the exhilaration of 25,000 feet over Mt. Washington and Cowley, winning a day at a National contest, mountain soaring over the Bugaboos, and flying 300 km in 3 hours; and I am acutely aware that the equipment and techniques required to do such things would be non-existent were it not for the advancement by competitive soaring. If Canadian soaring pilots are to be seen as contributors to the sport as opposed to mere "users", we need to strengthen our competition programs and make them a more integral part of our general activities. This means that grass-roots contests have to be promoted and made more accessible, and that top-echelon pilots who should receive support for training and world-class competition must become more visible to the general membership through increased feedback of their skills back to the grass-roots level.

I look forward to working with the other committee members on this challenge, as well as continuing Dave Marsden's excellent work on contest rules, team selection procedure, contest sites and contest organization.

Al invites comments/suggestions/opinions from clubs and individuals with respect to Sporting Committee interests. Write to him at 36 Lake Crimson Close S.E., Calgary, Alta. T2J 3K7.

## SAC DIRECTORS & OFFICERS

**PRESIDENT & DIRECTOR-AT-LARGE**  
Bob Carlson  
57 Anglesey Boulevard  
Islington, ON M9A 3B6  
(416) 239-4735 (H)  
(416) 365-3558 (B)

**VICE-PRESIDENT & PACIFIC ZONE**  
Harald Tilgner  
90 Warrick Street  
Coquitlam, BC V3K 5L4  
(604) 521-4321 (H)  
(604) 263-3630 (VSA)

**ALBERTA ZONE**  
Ton Dening  
Box 2569  
Medley, AB T0A 2M0  
(403) 594-2583 (H)  
(403) 594-8369 (B)

**PRAIRIE ZONE**  
Dave Hennigar  
404 Moray Street  
Winnipeg, MB R3J 3A5  
(204) 837-1585 (H)

**ONTARIO ZONE**  
Al Schreiter  
3298 Lone Feather Cres.  
Mississauga, ON L4Y3G5  
(416) 625-0400 (H)  
(416) 926-1225 (B)

**QUEBEC ZONE**  
Alexandre W. Krieger  
1450 Oak Avenue  
Quebec, PQ G1T 1Z9  
(418) 681-3638 (H)  
(418) 656-2207 (B)

**MARITIME ZONE**  
Dick Vine  
11 Garnett Street  
Dartmouth, NS B2W 2N9  
(902) 434-1573 (H)  
(902) 426-3476 (B)

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

**EXEC SECRETARY**  
Jean Matheson  
485 Bank St.  
Ottawa, ON K2P 1Z2  
(613) 232-1243

**TREASURER**  
Don Dunn  
28 Glenmanor Drive  
Nepean, ON K2G 3G1  
(613) 224-1110 (H)  
(613) 996-9033 (B)

## COMMITTEES

**AIRSPACE**  
Dave Tustin  
581 Lodge Avenue  
Winnipeg, MB R3J 0S7

**FLIGHT TRAINING & SAFETY**  
Ian Oldaker  
135 Mountainview Road N  
Georgetown, ON L7G 3P8

Mbrs: G. Eckschmidt  
John Firth  
Bob Gage  
Alex Krieger  
Chris Purcell  
Manfred Radius  
Ed Sliwinski  
Al Sunley

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

**FINANCIAL**  
Gordon Bruce  
Bob Carlson  
Jean Matheson

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

**INSURANCE**  
Al Schreiter  
3298 Lone Feather Cres.  
Mississauga, ON L4Y 3G5  
Mbr: Bryce Stout  
Bill Mather

**MEDICAL**  
Dr. Wolf Leers  
4-4889 Dundas Street W  
Islington, ON M9A 1B2

**METEOROLOGY**  
Sepp Froeschl  
1845 Brookdale Avenue  
Dorval, PQ H9P 1X5

**PUBLICITY**  
vacant

**SPORTING**  
Al Poldaa  
36 Lake Crimson Cl. SE  
Calgary, AB T2J 3K7  
Mbrs: Jim Carpenter  
Karl Doetsch  
Jim Oke  
Al Sunley

**FAI AWARDS**  
Boris Karpoff  
24-1/2 Deloraine Avenue  
Toronto, ON M5M 2A7

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

**TECHNICAL**  
George Adams  
12 Hiawatha Parkway  
Mississauga, ON L5G 3R8

**TROPHIES & CLAIMS**  
George Dunbar  
1419 Chardie Place SW  
Calgary, AB T2V 2T7

**WORLD CONTEST**  
Al Schreiter  
3298 Lone Feather Cres.  
Mississauga, ON L4Y3G5