free flight • vol libre

Only twenty metres per hour!

4/99
Aug/Sep

Liaison

Visitors at the SAC website Absolutely amazing. The public relation function of our website is impressive. In a period from 25 March to 21 April, we recorded 17,785 hits. When you consider the cost to performance ratio, it is even better.

The office communications have also changed. Phone, fax and conventional mail have gone down in volume. Email, however, has grown in volume enormously and alone exceeds the number of communications we previously had with the conventional media.

***National Post*, 9 June 1999** Soaring also got a significant amount of public relation and awareness from Conrad Black. Canada's newest national daily, the *National Post* published a feature article on Brian Milner on the back page of the B section. Brian is claiming the world speed record for a 1000 kilometre out and return flight. Congratulations, Brian.

Membership shenanigans We often get calls at the office from people who believe that they have been SAC members for a number of years. The strange thing is that we have never heard of them. Their club collected the membership but never passed it on. Would you call this thievery? Other clubs wait until year-end to send the membership dues to the office. This causes interruptions in *free flight* distribution, and creates phone inquiries to the office — useless costs for all. Would you call this abuse? We even had a call from a glider pilot from a major Toronto area club who was told by the administrator of that club that his membership dues would only be passed to SAC after he did his Silver badge. Would you call this BS?

I really get upset when I witness such abuse of SAC services. I get mad because SAC is all of us. We have noticed that some clubs are the habitual abusers. I will not point fingers this time, but if push comes to shove, I just might do this. Got that?

Lost friends June was a painful month. Two of our members, like Icarus millennia ago, broke their wings and dropped from the sky. After Daniel Chêvrefils from MSC, we lost Bryce Stout. Bryce worked on the SAC insurance program as a member of the Insurance committee for many years. Daniel, as MSC's president Peter Trent told me, was the type of person whose contribution makes a good club a great one. To their families, friends and fellow club members, my most sincere condolences.

Les Nationales 1999 Il y a eu des visiteurs à Champlain. Beaucoup de visiteurs. Les compétiteurs sont venus d'Ontario, du Michigan et du Connecticut. Mais, j'ai eu le plaisir de rencontrer quelques uns des plus anciens membres du club de Québec. Durant les quatre jours que j'ai passé à la compétition, j'ai eu le plaisir de discuter avec des copains de MSC et Gatineau. Herb Lach nous a apporté des bouteilles de sa bière maison. On a eu beaucoup d'aide. MSC a envoyé un L-19 avec une équipe de pilotes.

Je ne peux passer sous silence la contribution de Claude Rousseau, venu de Québec avec le Pawnee. Les Nationales, c'est plus qu'une compétition, c'est surtout une célébration de la camaraderie. C'est un participant comme Colin Bantin qui nous a aidé avec le logiciel de pointage. C'est Bob Mercer qui aide Alain Orfila à réparer sa verrière. C'est Andrée Dallaire, Sylvie Arcand et Gilles St. Germain qui ont cuisiné trois délicieux repas du soir. Ça été aussi le dynamisme de Denis Trudel, directeur de compétition durant les premiers huit jours. Mais ça été aussi la détermination farouche d'André Pepin qui a mené ce projet à terme contre vents et marées. À tous ces gens et surtout à tous ceux qui de façon généreuse et anonyme ont contribué, je dis MERCI. La force et l'avenir du sport, c'est vous.

Pierre Pepin president

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Le journal de l'Association Canadienne de Vol à Voile

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Cover

A pleased Brian Milner after the record flight in his Nimbus 3, Golf Juliet.

the WORLD DISTANCE AWARD

Tony Burton

IN THE LAST YEAR OF THE 80s, it became obvious that soaring pilots were exceeding the maximum goals established for them by the FAI. By the end of 1989 there were 4623 pilots in the world (USA – 712, Canada – 76) who had completed all legs of the Diamond Badge; and 111 pilots in the USA and 4 in Canada had earned the *1000 km Diplome*. The Diamond Badge had been created in 1949 and the *1000 km Diplome* in 1973. It was time for new goals.

Discussions with pilots worldwide seemed to indicate a desire for a cumulative distance award. Pilots in Russia suggested recognition of accumulated distance totaling the circumference of the earth. Other members of the world community were concerned about the paperwork associated with recording these accomplishments. The United States decided to go ahead alone to establish and experiment with this new task which would be administered on the honour system.

Thus, early in the decade of the nineties, the World Distance Award was established and the associated rules published (*SOARING*, December 1991). Kathleen Winters, a soaring pilot from Minnesota, agreed to take over management of the award on a volunteer basis. To qualify, the pilot must achieve a cumulative flight total of 40,000 kilometres with the minimum distance for each flight determined by the sailplane's L/D (the distance is not handicapped, however). There is certificate recognition for the intermediate distances of 5, 10, and 20,000 kilometres). Complete rules are available from Kathleen at 5940 Pioneer Road, St. Paul Park, MN, 55071, USA email <*Kcwinmn@aol.com*>.

As we approach the end of the nineties, there are six pilots (all from California) who have officially qualified for the World Distance Award. They are entitled to wear a ring around their FAI Badge symbolizing the distance around the world. Watch for this symbol of achievement being worn proudly by soaring pilots who have shown lasting love for and continuing dedication to cross-country soaring.

This award has been a bit of a state secret, not widely known due to a minimum of advertising on its existence or progress. When the May issue of SOARING magazine printed much of the above, I was intrigued and emailed Kathleen for more information. In particular, I wanted to know how retroactive one could be in logging flights towards the award, and if it was open to non-US citizens. She wrote that one's cross-country flights may be counted from the beginning of 1992 and that Canadians are welcome to apply.

The FAI awards are important because they are a means of measuring yourself against other pilots, both in your club and around the world, but most importantly they are a way of competing against yourself. Setting goals brings many rewards and keeps the spirit of soaring alive — since I built my RS-15 in 1977, I have flown it over one and a half times around the world. Let the World Distance Award be *your* continuous inducement to a life of cross-country flying. ❖

The SOARING ASSOCIATION of CANADA

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

free flight is the official journal of SAC.

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

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

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

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

Deadline for contributions:

**5th January, March
May, July
September, November**

L'ASSOCIATION CANADIENNE DE VOL À VOILE

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

vol libre est le journal officiel de l'ACVV.

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

Des photos en couleurs ou noir et blanc seront appréciées, mais s'il vous plaît, pas de négatifs ni de diapositives.

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

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

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

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Twenty metres per hour!

Brian Milner, COSA

THE 1999 US Open Class Nationals were held in Mifflin, Pennsylvania this year, together with the new 18m class Nationals. Mifflin is in central Pennsylvania, about twenty miles from the university town of State College (the home of Penn State). It is also close to Keystone (now Ridge Soaring) Gliderport. Many Canadians have flown here and made many long distance flights.

I normally fly in the US Open class, there being no Canadian Open class contests. This year, there were only 12 Open class ships flying, as most of the Westerners apparently didn't want to travel to Pennsylvania for the contest, but all the top guns were there. My flying was inconsistent this year; from first on the second practice day, through third, fifth, tenth and last. I pulled off the grid on Day 4 with electrical problems and decided that as I was stressed out, I would not fly that day. This placed me firmly in last place.

Suppose your last flight was just twenty *metres* per hour faster – would it have made the slightest, tiniest, difference?

An intense low pressure system established itself over northern Ontario on 23 May and brought rain and high winds to the contest area for three days. The low was supposed to move east after the second day and bring in very strong northwesterly winds — just what was needed for my planned 2200 kilometre World Free Distance record attempt. The winds were actually forecast to be too strong for contest flying, which was fine with me as it would theoretically allow me to attempt the world record distance flight without losing a contest day.

My wife Cheri and I filled the Nimbus 3 to the brim with water in the evening (and in the rain) and tied it down on the ramp right next to the runway. Karl Striedieck offered to tow me off at first light (0515) — all I had to do was wake him up (in his van) when I was sure of the weather. We were up at 4 checking the weather and found that not only had the low not moved, it had actually gone backwards (to the west) and the winds were now south of west, not north of west. So back to bed we went.

After three days, the low finally started to move off to the east and Thursday the 27th looked like a good (but not great) ridge day. I had decided before the contest that if a really good ridge day came along, I was going to try to get back my Canadian Out and Return record from Walter Weir (a fellow club member).

This looked like the day! The winds were forecast to be 310/25 at 6000 feet. The south end of the ridge, around Tri-Cities was forecast to have light and variable winds all day. This meant that only the northern section of the ridges could be expected to work. This was okay, as I didn't need to go much past Bluefield, VA in order to beat Walter's record. I had been there before in light winds and there were usually good thermals after noon.

The planned task was from Lock Haven Airport in Pennsylvania to the end of the ridge near Whitten Cemetery and then return. This turnpoint is right next to Tazewell, VA. The flight would take me through about half of Pennsylvania, a piece of Maryland, a good chunk of West Virginia and a little piece of Virginia.

At 0600, the winds reported at Altoona were 290 at eight knots, very light and not a good direction for the section of ridge near my start point. I entered the declaration in the Cambridge GPS and John Good agreed to be the OO for the flight. The glider was topped off with water (bringing me way over contest weight, by the way) and cleaned. The pilot was scrubbed, dumped and topped off with food and drink, the cockpit loaded with pee bags, water and granola bars (my staple food for flying). The towpilot was shaken out of his house trailer and everything set up for the tow. "Kisses and hugs" from Cheri and a "go-gettem" from my wing runner Ron Tabery, and off we went at 0830.

The plan was to tow part way towards Lock Haven, then release when I was sure of getting to the main ridge high enough for a proper start.

Record flights allow a 1000 metre height difference between the start and finish without penalty. The plan was to arrive at about 1000 metres over the *top* of the ridge and then float gently south for about twenty miles. At that point the ridge takes a turn to the south and could be expected to give better lift than at Lock Haven. This was mistake num-ber one! I completely miscalculated the height needed to get to Lock Haven and actually arrived about 2000 feet lower than planned.

Just after I released from tow, and committed to the ridge, a 1-26 radioed to me that the ridge where he was (by Mifflin County) was *not* working and he was landing. Just great, I thought, get out the cell phone ready for a retrieve! I made the start at 0908 by my watch, but was only about 1000 feet above the ridge.

Between Lock Haven and Keystone Gliderport, there are two major obstacles to get past. The first is Howard Dam. This water body fills most of the valley floor for about five miles and there are few places to land near it. After this comes the infamous Milesburg Gap. This small gap in the ridge has claimed many pilots over the years. It looks insig-nificant, but when going southbound you fly from a low ridge to a much higher section. You are usually penetrating upwind as well. This combination calls for very conservative flying and usually a couple of turns in a thermal before crossing.

As I left Lock Haven, the ridge was quiet, without the usual turbulence that indicates good ridge lift. The sky was blue and there were no signs of early thermals. I flew at about 70 to 80 knots, conserving altitude and slowed down as I neared Milesburg. The ridge was working very weakly going past Howard, but I was still very concerned about getting past Milesburg. There were no signs of thermal activity so I took the plunge and went straight across. I reached the south side about 300 feet below ridge top and was prepared to land at Ridge Soaring (if I could get that far).

Bump, bump! The ridge was working! Floating past Ridge Soaring, I gained altitude slowly. Past Karl Striedieck's Eagle Field and it still worked. I flew slowly going past Port Matilda, as the ridge gets quite low at this point. However the further south I went, the better it got.

At Altoona, there is the first large gap. This one about five miles across. Usually there are good thermals at this point and one can do a couple of turns, gain a 1000 and strike out across the gap. Not today! After a few turns in what felt to be rotor, I was lower than the ridge top. Not a good place to be! I decided to bite the bullet and picked a field on the far side (at the base of the ridge) that I thought I could make and headed out across the gap. Halfway across I hit sink and thought that was it. I sped up (per the book) and flew out of it into zero sink. This kept me airborne until I hit the ridge on the far side. Halfway down it mind you, but across.

Trying to fly these ridges halfway down is *not* a very good idea; most of the time they do not work that low. Today was my lucky day! They were working. The next section, from Altoona to Bedford is steep and I speeded up to about ninety knots, maintaining me about a hundred feet above the ridge.

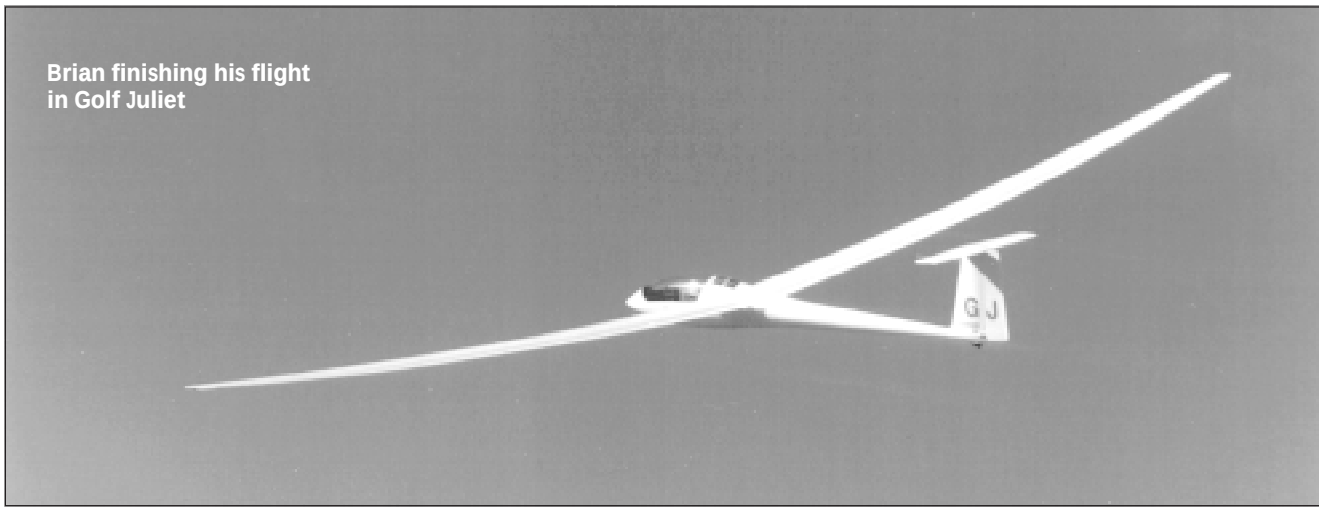
The Bedford Gap is about twelve miles across and thermals are needed to cross. There were some cloud wisps about halfway across, but nothing was working at the north end of this gap. There is a good airport in the middle, so I headed out and bumped some broken rotor-like thermals part way across. It wasn't possible to centre anything, so I did what you are supposed to do in an Open class ship and kept going. Wow, it worked! I got across with hardly any problem. The ridge south of Bedford has a lower section upwind and a higher section downwind. Both usually work, but the high ridge is faster. I made it to the high part.

The next obstacle is the section south of Cumberland, MD. The ridge here deteriorates into small bumps about 300 feet high, called the Keyser Knobblies. Trying to ridge soar these is very stimulating for the heart; the fields that do exist are *very* small. The one time I did ridge soar them years ago, my feet were still dancing on the rudder pedals two hours later! This bad section is about thirty miles long. Cumberland, however, is usually where the wave starts and, on a good day, you can literally fly off the ridge into wave and cross this section at 10,000 or higher. Today the wave was not working — there was a lot of rotor around, but nothing that could be centred and thermalled properly.

After wasting about ten minutes trying to climb into non-existent wave, I kept moving south slowly in weak rotor lift. I passed Keyser and hit the next short high section of ridge. As I passed the highest point, I took a half-decent thermal for a couple of thousand feet. This was enough to get me past the next very low section and I made it to the high ridge at Petersburg, West Virginia. This area at Petersburg is one of the most spectacular pieces of landscape I have ever seen. The ridge here is high, steep and has rock shelves that you fly past only feet away. It's like flying in a Disney movie!

My speed was increasing and I was now cruising at close to 120 knots. Thermals were getting strong, so was the turbulence. I passed Seneca Rock (a 500 foot high vertical outcrop) and slowed down as I neared Snowy Mountain. Snowy is a large separate mountain upwind of the main ridge that sometimes completely surpresses the ridge lift. Cautious pilots slow down here and gain some altitude, just in case. There is absolutely no place to land at Snowy — just trees and rocks! Apart from some severe turbulence, Snowy gave no problem this morning.

Sunrise Dam is the next major landmark and soon after this I reached Mountain Grove, where the ridge ends and runs into a lake. On my first 1000 kilometre flight in my old Jantar, I almost landed in this lake and I'm still very nervous about this area. There are two ways past this next section, called the Covington Gap. It is about thirty miles across and the safe way to cross is to drop downwind to another ridge, go past Covington, then penetrate back into wind at the south end. I decided to try to go straight across. There is a small hill in the middle of the gap and I intended to use that for a save if I found no lift. In fact there was good lift in the gap and I was able to cross it in good shape without much delay.



Brian finishing his flight in Golf Juliet

The wind was forecast to get very light south of here, however it stayed strong and so did the thermals. I had thought that I may have to do the last fifty miles or so in thermals only, it was not to be.

The ridge lift stayed good and the turnpoint was made at 1315 local. Looking to the south, I could see good cu as far as I could see. Very unusual, as it is normally blue this far south after a front goes through. I started kicking myself, as I could have declared a much longer task. At the turn, I called to base and let them know that I was on the way back (great relief at the other end) ... and it was pretty much the same as going south, except faster.

At Covington, I did the same as before and went for the hill in the middle of the gap, found broken lift and made the north end with no problems. I cruised northbound past Sunrise Dam, past Snowy with no problems, and reached Petersburg hoping for wave. Not to be — back into the rotor I went. At Keyser I hit the highest point in the flight, just under 6000 msl. From there I could make the main ridge at Cumberland.

I had planned to use the back ridge from Cumberland. This ridge is downwind of the main ridge, running from north of Cumberland, downwind of Bedford, Altoona and State College. It is sometimes much faster than flying the main ridge and there is only one gap to contend with at State College. From State College, Nittany Mountain runs north and meets the main ridge just downwind of Lock Haven. I couldn't reach the back ridge north of Cumberland and was forced to go back on to the main ridge. Halfway to Bedford, I hit a good thermal, slowed down to gain altitude and peeled off to the right for the downwind ridge three miles away. Of course as soon as I was committed, I hit sink. I still had enough height and energy however to make the ridge.

After passing downwind of Altoona, the ridges start to bend more to the east. The ridge lift started to weaken and the further north I went the weaker it became. Still, I was able to cruise at over ninety knots. At State College I made a few turns in broken three knots and crossed with no problems. Nittany Mountain worked well and as I reached the north end, I could see through the gap in the ridge to the finish point.

It was going blue now (it was almost 5 pm) and thermals were getting few and far between. Downwind of Lock Haven, I slowed down and gained about 500 feet in two knots, then headed directly into wind through the gap in the ridge. I actually gained altitude bumping some thermals and made the main ridge above the ridge top. I finished over Lock Haven Airport at 1650 local time at ridge top height.

Now all I had to do was get the fifty kilometres back to Mifflin. I went back to the ridge and headed downwind for Nittany. The wind was blowing more west than northwest and I guessed that the bowl at the north end of Nittany would be working. It was and I gained enough altitude, without circling to get me back on to Nittany Mountain.

The plan was to ridge soar back to State College, then climb in thermals high enough to get me back downwind over the Seven Sisters Mountains to Mifflin. There was a significant headwind component now and not much sign of good thermals. About halfway back to State College I hit a broken two knotter and decided to stay with this until I could get high. I was still 30 kilometres from home, but knew if I could get over the first few mountains, I could probably ridge soar back to Mifflin. I climbed to 4000 and headed home over the mountains, bumping thermals as I ran into them. Soon I had enough altitude to make Mifflin.

Everyone else in the contest was back and de-rigging, so it gave me great pleasure to make a low pass and dump my ballast water on the line of gliders and trailers. I landed at 1726, tired but very happy.

At this point all I thought I had done was regain a Canadian record. When we arrived home I sent messages off to Dave Hennigar and started the paperwork for the records: distance 1,128.92 km, average speed 147.02 km/h (first leg – 137.0 km/h, second leg – 157.0 km/h).

I checked the Internet for possible US records and discovered that you have to be a US resident to claim them. I then checked the FAI site and printed out the world record list. Right at the bottom were two unclaimed blank spots; one was for the Open class 1000 kilometre Out and Return Speed. The minimum speed claim was 147.0 km/h. I quickly dug out my stuff and found that I had beaten the minimum by 0.02 km/h — HOORAY ... ❖

Performance Perspectives

Godfrey Wenness
from *AG/Skysailor*

The new combined Australian soaring and hang gliding magazine has effectively given their readers the opportunity to gain insights into the other sides of soaring flight. One of the more interesting aspects is the performance differences one reads about ...

PUTTING PERFORMANCE FIGURES into perspective provides some numbers for us to work with and gives us all the chance to see how we are flying compared to each other. The results from simple L/D based calculations are very interesting indeed when comparing how we go on cross-country flights.

Starting from the steep end of the glide angle scale we have an average beginner paraglider, then a high performance paraglider which also equates roughly to the new 'floater' style basic hang gliders. Next along there is a current high performance hang glider with kingpost (note that the new kingpost-less hang gliders generally have 10% better speed and glide performance). In the sailplanes there is an average club style aircraft and the top of the range the Open class 'curvature of the earth' glide angle cross-country machine. I have used metric units to avoid complications (paragliders generally use metric as they originated in France and are certified in metric units; hang gliders often use imperial measurements, showing their early Aussie and USA heritage, while sailplanes use the more traditional general aviation mixed units of feet/metres/knots.

	Speed range km/h	*Min sink m/s*	*$V_{L/Dmax}$ km/h*	*L/D_{max}*	*Cost new approx $Cdn*
novice paraglider	*22-45*	*1.2*	*36*	*7:1*	*4000*
hi perf paraglider	*22-50*	*1.0*	*38*	*8:1*	*4500*
floater hang glider	*22-70*	*1.0*	*38*	*8:1*	*4500*
hi perf hang glider	*30-85*	*0.9*	*45*	*12:1*	*5500*
club sailplane	*60-250*	*0.7*	*90*	*35:1*	*70,000*
Open sailplane	*75-260*	*0.5*	*120*	*60:1*	*200,000*

Some interesting basic L/D statistics about the top gliders in each category become evident from this table. Hang gliders have 50% or 1.5 times better L/D than paragliders (8:12). The best sailplanes have 500% or 5 times the L/D of hang gliders (12:60) and 750% or 7.5 times that of paragliders (8:60). The differences on a nil wind glide from 2000 metres agl (7000 feet agl) are obvious and pretty amazing from a paraglider's and hang glider's perspective (imagine flying 120 kilometres from cloudbase!).

As far as cross-country flying goes, glide angle and speed are the two cardinal performance figures when it comes to making distance and staying aloft. These are the factors, apart from the all-important decision-making and pilot skill factors, that determine whether or not you will make it to the next thermal, with what height you will get there, how much height you need to gain to get to the next one and thus how quickly you will complete the sequence over again and so forth. Things like staying above inversions, glide speed under cloud streets, avoiding bad weather or overdevelopment and the like come into play here too.

Although L/D is clearly the most noticeable performance difference between our gliders, the minimum sink rate figures are also significant (eg. 100% between a paraglider and sailplane – 0.5 to1.0 m/s). Yet when combined with the speed flown at the minimum sink rate, turn radius and bank angle efficiency, most top pilots in the best gliders are achieving similar climb rates given that the thermal core is rising faster than its margins. This makes up for the minimum sink losses of the slower gliders. Naturally pilot skill is important too, but we are comparing the best pilots in each class here so we assume they are all respectively equal in thermalling ability in their own glider.

The above figures also lead to some interesting extrapolations when comparing something basic and simple like the thermalling cross-country world records in straight distance and FAI triangles for the three types:

Current FAI Straight distance records (Open)

Paragliders	*335 km*	*Godfrey Wenness, Aust*	*1998*
Hang gliders	*495 km*	*Larry Tudor, USA*	*1994*
Sailplanes	*1460 km*	*HW Grosse, Germany*	*1972*

Current FAI Triangle distance records (Open)

Paragliders	*181 km*	*Pierre Bouilloux, France*	*1997*
Hang gliders	*205 km*	*Jo Bathmann, Germany*	*1996*
Sailplanes	*1400 km*	*Klaus Holighaus, Germany*	*1972*

First we shall look at the L/D statistics for straight distance. The paragliding and hang gliding ones compare roughly on L/D figures, that is the hang gliding record is about 50% further than the paragliding one, but the sailplane one set 28(!) years ago doesn't come close. Put another way, it makes for an eye-opening comparison for sailplane pilots — paragliding and hang gliding world records would be the approximate equivalent of a 2500 kilometre distance flight in a sailplane! I think the most likely reason is that no one is bothering to do straight distance in sailplanes anymore due to the retrieve dramas — triangles and O&R flights being the preferred option. Trying to fly over 2000 kilometres straight line is a pretty serious business and any such records need good planning and logistical support — which all unfortunately come at a cost. Attempting 4–500 kilometres in a paraglider or hang glider is less of a hassle in this respect, but I think that sailplanes have come a long way in the last 28 years and the time might be right for another shot at this record. I would love to see an article in *AG/Skysailor* about the potential (or lack thereof) for 2000+ kilometre sailplane cross-country flights in Australia — what's needed weather-wise, location, etc. or indeed if anyone is even thinking about it.

On the triangle side (favoured by sailplane pilots) we again see an interesting set of numbers, but this time between the paragliders and sailplanes. The ratio is

very similar — 1400 kilometres to 181 is 7.7 or very close to the 7.5 L/D ratio difference. In fact, in distance terms it's only 43 kilometres (the paragliding calculated equivalent is 1357)! In this case it's the hang gliders that are dragging their feet.

So are there any other issues, apart from pure performance, relating to the cross-country ability of each type? The obvious one might be a weather related issue — some will instantly say that conditions change over time and distance so the difficulty factor increases for those trying longer flights, the sailplanes. This is true, but I think only within the boundaries of each discipline and not in an absolute distance sense. Take the situation at the steep end of the glide angle scale — one example is that even minor wind changes in speed and direction (less than 10 km/h or 5 knots) can completely blow a potentially big paragliding or hang gliding cross-country flight. The effect of these changes on low speed gliders is far larger proportionately than for faster ones — a 10 km/h wind change is over 25% of your glide speed in a paraglider but only 8% for a sailplane which has a much broader speed range and flatter polar curve.

To put this into perspective for a similar effect on a sailplane, the wind change would need to be in the order of 30 km/h (16 knots). The likelihood of a 10 km/h change is also higher than 30 km/h, as they can be more easily seen in the forecasts and planned for, whilst the former can result from unpredictable regional and local effects. Another example is the ability that better glide angles offer to fly around bad weather, thermally dead areas, or unlandable country.

From this I surmise that, logically (without putting numbers into the equation) the overall 'average km/h' figure for a cross-country and the likelihood of staying aloft on a given day, is proportionately higher for every L/D, sink rate and speed improvement there is. That is, the probability to do a cross-country increases with glider performance (and pilot performance — but remember we are assuming equally gifted pilots here). Therefore sailplanes have a distinct advantage in cross-country flying. Of course we all already know this — sailplanes fly further, faster, and for longer periods (being able to utilize the widely spaced thermals early and late in the day too). I eagerly await a number-cruncher to reply with some figures on the probability advantage that performance increases give.

No matter what glider we choose to soar our great Aussie skies with, our motivation and desires are the same. The only things different are the performance levels of our machines and the distance to those far away horizons we fly to. I hope this article has got pilots thinking, opened up a few doors and paved the way for some shared gliding experiences between the big boys with their white toys and the little fellas floating around with cloth, cables and lines.

I heard a classic comment by one of our best glider pilots, Harry Medlicott (Lake Keepit Gliding Club), concerning a 120 strong gaggle he saw from the air during our Paragliding Nationals at Manilla. He said, "You guys looked like little bits of confetti floating up to the clouds — it made for a great thermal marker". What a great opportunity it was for a photo of a real 'live' thermal! ❖

Filling in the blanks

Charles Yeates, *Bluenose*

LAST JANUARY, Kris and I flew a modest, previously unclaimed, Free Out & Return two-place Citizen's record from Waikerie, South Australia. Summer weather systems are different in the southern hemisphere. While the winds around highs and lows are the reverse of ours, it is more remarkable that the best soaring conditions come just before a frontal change rather than just after. A typical cycle begins as a front passes — the following airmass is cool to great heights and winds blow from the south. Thermals start early but only go up to about 3000 feet because the sun's warming is not enough to break a higher strong inversion. Ideally the high is to the south and as it passes eastward over a few days, the winds swing through east to northeast. Gradually the whole airmass heats up, thermal trigger temperatures rise into the thirties and midafternoon starts are routine.

Rather than generating mediocre soaring, massive heat from the northern desert raises maximum daily temps to 40°C+ and clouds form with bases that rise rapidly. I recall experiencing one day in an earlier summer when cloudbase reached 15,500 feet agl — without an oxygen system it was only possible to make a quick climb and a fast run to lower levels — leading to some frustration! Generally the bases range between 8 and 12,000 feet on such good days and they occur five or six days a month.

Our record attempt involved a start at 3 pm and a 6:30 finish. The first climb to 8000 was encouraging and a desirable path to the east was waiting. For the next hour and a half, we pushed the Twin Astir at a ground speed averaging 52 mi/h, while cloudbase rose to 10,000 and thermal strength reached seven knots average. Heavier cu and rain showers ahead gradually turned us south to parallel what was an unpredicted, strong and almost stationary trough line. The return trip started when we observed that the airmass to the south was changing, becoming misty, and the clouds were dissipating. The likeliest cause was a northerly flow of sea air that could wedge itself between us and Waikerie. (This proved the case but the effect was compounded by lightning-sparked fires in Mallee bush parklands that raged for the next seven days).

We ran back north along the sunny side of the heavy trough line, enjoying the bubbling brilliantly white cumulus that contrasted with dark rain showers falling onto shadowed lands, until we had to brave the clear sea air to the west or give up hope of returning to Waikerie. A long twenty-five minute run used up half our height and confirmed that we could not return without help from dry thermals. Previous experience reminded us that we had to take a narrow path next to the Murray River for best chances. Delicately nibbling, we picked up a few hundred feet a time and edged forward across extensive grape growing areas until we had the goal in hand for a 6:30 landing.

It was an enjoyable flight — sharing it was a bonus. ❖

Why am I here?!

Joe Gegenbauer

from *Vancouver Soaring Scene*

YOU KNOW WHEN the sport of soaring falls apart? When there is no lift. That's when it all starts to unravel. Then you realize what a pathetic life it is being a glider pilot. When there is no lift you see full-grown men running around a small airport in the middle of nowhere anxious and tense for no reason. You see hordes of odd-looking people cramped in crappy cafes looking at the sky all the time. You see wives, who could be somewhere cool or interesting, not at a dinky little airport, bored to tears from endless weekends of waiting for 'soarable days'. That's when you realize how lame the glider pilot's lifestyle is. You realize how being a glider pilot is no more interesting than lawn bowling.

When there is no lift you can't help realize how pitiful and sleepy the town of Hope is. Most normal people dread the mere thought of driving through Hope on the way to the Okanagan valley. You realize how boring the East Kootenay's are. It is a land of tourists, cheap motels, golf courses, and the locals hate everybody, and everything is desolate. People from Alberta flock there only because if they knew any better they'd be going down to the States to soar. Think about it — have you ever tried to find a decent town to go to that has good soaring? It's an absolute impossibility. I mean a city or town that's an interesting place on its own that doesn't have an airport that you have to go to.

When there is no lift you start to realize the airport is a den of losers and there's not a damn thing to do except complain about the weather and wonder what's happening in the real world. When there is no lift, flying gliders sucks and glider pilots are just losers like everybody else, wasting away their lives in boredom and obscurity.

You see, all my life growing up I've been told about the "beauty" of soaring, and the "oneness" with nature and the sky, and I'm calling it all a hoax. When I'm not soaring, I'm a schmoe just like the guy in the next car over, stuck in traffic, flipping through stations and thinking about falling stocks, home run records, and presidential sex scandals.

During no lift spells you see glider pilots yelling at each other about who had the right of way on the local ridge five years ago while drinking warm beers in a forty year old clubhouse that has violated every single building code and health standard. Despite what you want to believe, the whole lifestyle is just as lame and loser-ish as any other — just as lame as dedicating yourself to cheerleading or football games or to in-line skating or water skiing or model figurines or shopping at Eaton's. Face it, soaring sucks. It's a waste of time, it's useless, it's pansy, it's weak, dude.

Glider pilots seem to think they are special because they fly airplanes, but the thing is, nobody cares except them. If you play golf you think it's hot to break 80, or if you ski it's cool to "conquer the mountain." Normal people think it's wonderful to go to a concert or an opera on the weekend. You see, in the whole world, flying gliders is no big deal. Everyone on the planet thinks that whatever they do is the best thing to do and wherever they live is better than where you do. Especially glider pilots.

Have you ever tried to explain to someone who doesn't fly gliders why you do what you do on the weekends? To you it seems so obvious that you are cool; but no one has the slightest idea about what you're talking about. To non-glider-pilots, it just seems like you're insane. They just sort of smile and chuckle and say they can't imagine wasting money like that, at your age.

You see, gliding sucks. And when there's no lift you'd rather be in the city, where people are moving, doing things, where projects are developed, money is earned and spent, guys are hip and girls are good looking. Where parties are 24-7, movies are being made, records cut, deals getting done, clubs hopping, traffic snarling, people are protesting, breaking the law, staying up all night, out in the streets, dancing, living.

UNTIL the soaring conditions kick off.

Until the morning comes when the sky is clear as a bell and a huge cold air mass moved through exactly two days ago, the lapse rates are the best you've seen in two years, the cu are starting to pop at 10 am exactly, your glider of choice is washed without a speck of dust and it's loaded to the hilt with water but it doesn't matter because there is no chance of sinking out, when the wife and kids are content because you shipped them to Hawaii, when the effortless tow is done and its straight to cloudbase at 1000+ ft/min and the sky is full of beautifully crafted cu, when the cloud streets go forever and the Vne seems like its too low, and the lift never stops and the sun is our god.

Then soaring is the best thing in the entire world. Then everything else is a waste of time and soaring rules. Then I wouldn't want to be anyone else, or anything else but a glider pilot in the middle of the perfect day. ❖

Bring a micrometer with you please

Eric Gillespie, SOSA

AS AN ENTHUSIASTIC new cross-country pilot this season, I began the year looking forward to breaking the ties to the home field. More experienced pilots had assured me that one of the greatest thrills in soaring would be my first Silver distance badge leg. It was only later that they mentioned it might be the (many) attempts required to complete this task in a 1-26, and the resulting off-field landings, that would provide the *really* interesting moments. If you're willing to try on those "non-nuclear" days when small animals and picnic tables aren't joining you in your thermals, anything can happen in a 1-26, and often seems to.

In any case, after two excursions of under thirty kilometres in less than optimum conditions (fortunately, the corn and soya beans aren't too high early in the year), I was at the club on another iffy Sunday when a highly respected pilot together with an optimistic OO decided without prior notice that a fifty kilometre downwind dash under a newly-formed cloudstreet looked "possible". Timing being everything, with the generosity of another aspiring pilot who gave up his place on the flightline, I was airborne and headed north twelve minutes later.

All went well in the initial stages of the quest for the final leg of my Silver Badge. The towpilot deposited me in lift, which I abandoned to notch the barograph but was able to reacquire before returning to earth. The radio was alive with talk of the "5 and 6 knotters" that the pilots in fibreglass were getting. Soon, I was working along under a beautiful street of cumulus headed directly to my destination. Everything looked great!

However, this is where I learned one of the most important lessons of this flight, and about soaring in general. EVERYTHING CAN CHANGE. Quickly! Less than half an hour after departing, my Highway to Heaven disintegrated. Within 10 minutes, I was facing a blue hole that stretched as far as the eye could see, with a band of high cirrus moving in over the area. Quickly! The talk on the radio became "Boy, it really looks BAD up north. We'd better go south, and quickly!" Even senior pilots at our field were heard to say "Did we send someone new cross-country today ... hmmm ... I'm not quite sure what we were thinking??" Yes, everything can certainly change in a hurry.

In actual fact, those who had encouraged me on my way had been very wise. By the time things fell apart, I was so far downwind in a 1-26 that I had no hope of turning around and running for home. Now, there was simply no choice but to try to complete the task. Many times the best way to learn is to be required to work beyond your previous limits. Those with far greater knowledge than I had definitely discovered a way to create that situation.

One of the most significant benefits of being part of a very active cross-country club is the amount of information and technique that a novice pilot can acquire without ever leaving the ground, and before taking one's own initial steps beyond final glide. The next hour and a half was spent trying to put all of those "how to save yourself when you're really in trouble" methods to work in real life. Alone, out in the blue, staying clear of three nearby ATC zones but still looking out for fast moving power traffic, struggling in half a knot up / half a knot down and trying to locate the best ground sources available, while always keeping landout options in mind, is a wonderful way to quickly expand one's horizons.

Over thirty kilometres after the day had apparently ended for me, I was still airborne. This was a surprise. If someone would have asked before the flight, I would not have wanted to wager a lot on even being able to stay aloft, let alone making progress in these conditions. Eventually though, I was brought back to earth when the last two prospective thermal sources within range proved to be lifeless at the critical moment. It is always amazing to see just how fast a 1-26 can plummet from the sky when the lift runs out for more than a short period of time.

Following a safe landing in yet another corn field, a brief review of the map showed that my progress had ceased right on the fifty kilometre radius arc from home. In my call back to the club for assistance, I suggested that the retrieve crew (who you are always indebted to, especially on a Sunday evening) should bring a micrometer with them, as it appeared that the final result of this flight was going to be "that close".

Eventually, the GPS that arrived showed that I was precisely ... 49.7 kilometres away from my launch point. Had I known this before, the possibility of physically dragging the plane the remaining 300 metres might have occurred, although the large herd of cows in the next field that I got to know while starting to de-rig would likely have prevented such a misguided attempt in any event.

The best flight of that day from our club turned out to be a 140 kilometre O & R in an LS-4 — not exactly a great day. Despite my best efforts, my own task was not completed. Three hundred metres have never seemed quite so short, or quite so far, all in the same thought. Each landout, at least for me, has also proven to be a sobering experience that could never be taken lightly, despite being highly educational. At the same time, I truly felt that I had become a "junior member" of a very special fraternity of men and women. To be sent by experienced pilots on a challenging task in a 1-26, on a less than perfect day, to struggle, and to substantially surpass one's own previous limits, brings with it very tangible rewards beyond those recognized by the FAI. To fly a plane without a motor across miles and miles of new, wide open country and land safely, to return home to and in the company of friends, and then tomorrow to fly again — each is also a great reward. ❖

Postscript: Three days after the flight described above, and one year after taking up the sport, Eric completed his distance and Silver Badge with a 62 kilometre flight, once again in marginal conditions in a 1-26. Three weeks later, he did his Diamond Goal in a borrowed Std Cirrus.

So you want to instruct

or, on downwind for Carnegie Hall

the Bald Eagle SOSA

LAST YEAR I had a couple of articles in *free flight* and shared my experiences as a novice cross-country pilot. They were well enough received that I can continue writing, and I have decided to emulate that renowned contributor to Sailplane & Gliding, *Platypus*. Henceforth, when the muse strikes, to protect the identities of myself and co-conspirators, I think I will sign on as *the Bald Eagle*. I hope you will be amused. To use a breakfast analogy, I'm a ham, and if this lays an egg, I'm toast.

This year I was privileged to attend the SAC Eastern Instructor Course, given at SOSA by Ian Oldaker and Tom Coulson. To quote Ian, "The aim of the program is to ensure that flying instruction shall be of a uniformly high standard within a club and within the soaring movement in Canada." To prepare us for this, the course focussed us on practising to raise our own skills to the appropriate levels to be able to teach properly. There were ten of us, with varied backgrounds and experience levels, ranging from Alex Rudy, who will get his rating on his 18th birthday this summer, becoming the youngest instructor in Canada, to people in their 60s.

I spent twenty years as a power pilot, and had developed some bad habits before learning to soar a few years ago. Going back to the basics as a glider student really improved my flying, and the Instructor Course would be an excellent refresher. This was my main motive in attending. An example of corrections required would be that my circuits had become, shall we say, creative, and now I'm trying to set up properly, and be able to explain the process logically to a student. Another example came when a certain underage instructor candidate sat behind me and noted my inadequate lookouts before turning.

Now, I have been flying since before he was born, yet there was no point in disputing it; he had a perfect vantage point and I had gotten complacent. Might save my life one day. However, humility is harder to learn than the actual maneuver. I found it expedient to tell him that I knew better and that I was simply role-playing a low time student in order to help him to practise flaw correction. I stress the need for perfect practice because of one of the Laws of Learning, Primacy, which states, "Students will learn new knowledge and skills best by having them correctly demonstrated, and then by practising them the first time correctly and without any errors."

I didn't realize how serious Ian was about this primacy thing until the time came for our group photo. I wrote last year about how some people think the standard issue glider hats look silly, and, in spite of Jörg Stieber's award-winning article on collision avoidance, I often fly with a ball cap. Ian insisted that in our photo it was glider hats or nothing, leaving my eagle-like resemblance in plain view. It was clear that as newly-minted instructors, we had to be setting proper examples in everything we do. We had to keep practising.

I was reminded of the famous violinist who was to give a concert at Carnegie Hall, and who decided to walk to the hall since it was such a fine day. He became absorbed in the sights, and, near concert time, realized he was lost. Violin case in hand, he approached an old Hungarian street vendor, who bore a striking resemblance to SOSA's Papa Burany. The violinist asked "How do you get to Carnegie Hall?" The vendor replied, "Practice!" I was also reminded of my high school teacher who kept telling us that, "Practise doesn't make perfect; perfect practise makes perfect".

Among the reasons for becoming an instructor are service to your club, from standpoints of membership and safety. There have been opinions expressed in *free flight* about how to attract and maintain new members, specifically new students. SOSA, my home club, is large, with total membership about 200. We typically have 30% annual turnover, and currently have about forty new ab-initio members. Included in the turnover is instructor attrition. Last year, we had to restrict new membership midsummer because of a shortage of instructors and trainer aircraft. How do we handle the new members this year? New instructors. By becoming an instructor you ease the burden on the infrastructure and help ensure the future and survival of your club. In addition, as an instructor, you automatically become more safety conscious and coincidentally have more authority on the field. You can have a greater influence over the safe and expeditious operation of the club by setting good examples of skill, safety, enthusiasm, and, of course, hats.

Instructing has not only allowed me to refine my skills, but also to get to know more club members than I might otherwise meet. I have spent time with quite a few new people, and have been able to coach them in the procedures and traditions of the club, hopefully making them feel welcome in the process. In addition, I have been able to get their perspective on things and thus gain a greater understanding of how we can meet their needs, and possibly address the issue of new member turnover. It also helps to remember the things you liked and disliked about the instructional process you went through, including the availability and personalities of the instructors.

The course gave us information on the various principles of learning and instruction, including the aforementioned Primacy, and we learned to try and give a planned, concise, precise lesson. The process is to tell the student what will happen, show it, let them do it, encourage them to self-evaluate, then offer praise and constructive advice. In order to get all this into a short flight,

and to provide the consistency and "uniformly high standards" noted above, we were to use a standard form of patter that has been developed over the years and has proven to be effective: "Look ahead over the nose and notice the water tower". The lessons are presented in a standard sequence, moving from the known to the unknown as smoothly as you would move from one thermal, across a forbidding blue area, to the comfort of a new thermal on the other side. All with an economy of words, allowing the student to do as much flying as possible, while *Keeping It Simple, Sport*, to ensure clarity of communication, and trying not to have too many "firsts" in each flight. Five minutes in a 2-33 from release to circuit entry.

Sounds easy doesn't it? So does Carnegie Hall.

Just as you need time to get familiar with a new aircraft, you need time and practice to get comfortable with this new routine. For starters, the flight is for the benefit of the student, not me. My first few instructional flights were easy, in that I was either doing checkrides with experienced people, or ab initio stuff where I did most of the flying. However, these students are more observant than intro flights. (Hint: replace the yaw string with a pipe cleaner.) No judgement required.
The plan was going well until I had a student get a little confused on downwind. In an effort to praise while diplomatically beginning a discussion to allow the student to make himself aware of the situation, and suggest his own corrections, and thus avoid the dreaded, "I have control", I was also trying to avoid a situation where we would have needed several minutes on downwind to sort this out, and would have ended up a few miles past base leg. Naturally, we cut the discussion short, made the corrections, got on the ground and resolved the issues during the debriefing. To make up for the confusion in the air, I made sure we did not leave the debriefing until the mistakes were understood and the lesson was worthwhile. Some of our objectives are to teach well and give satisfaction and value for money. I am trying to avoid confusing the guy so much, and setting him back so far that I should reimburse him for the flight.

Last year, I was taught that each soaring flight should have a purpose, such as centering thermals. This hint really changed my flying from years of just circling the field. The same idea of a purpose is key to a good instructional flight. I find I enjoy the pre-flight briefing, getting to know the student's readiness and motivation, reviewing the logbook, discussing needs and wants, and planning the lesson. As the above example suggests, I have some way to go before becoming effective at the actual flight training part. I do feel good about the debriefing, because we get to assess what the student actually saw and felt. In many ways, it can be the part of the flight where most insight and learning occurs. I take great pleasure in watching my fellow new instructors walking back to the flightline with the student, using their hands to simulate a glider doing what they either just did, or should have done. It is good for me to note my strengths and weaknesses. A review of my own student logbook shows that in early flights, my flying left much to be desired, but from the beginning I achieved a consistent "4" in "Keeping a Lookout".

It is important to develop a sense of how far to let the student go before speaking or suggesting a correction, or finally taking control. We teach the notion of SOAR, which is to have the student pilot evaluate the Situation, check their Options, then Act, then Repeat, or Reassess the situation. The process of self-evaluation is continued to all aspects of the flight, to encourage the pilot to be vigilant and self-correcting in post-solo flights.

There's the old axiom that post-solo flights are quieter, not because the flying is more coordinated, but because of the lack of an instructor yapping away. In the meantime, I am honing that sense of timing, to gain a comfort level with letting the student continue in control in key situations, such as final approach, or my first spin lesson. Speaking of spins, part of our job is to teach respect and understanding of aircraft and specifically unusual attitudes. Respect as opposed to fear. Many of us suffered by learning to fly in cultures where stalls, spins, crosswinds, taildraggers, and new types of aircraft were shrouded in mystery and ⇨ **p20**

photo absent for this file

Standing (l to r) Darek Andrzejewski, Steve Liard, Dave Wilson, Doug Scott, Alex Rudy (all of SOSA), Daryl Purdie (Erin), and Gunter Jauss (unaffiliated member, came over from Germany); kneeling l to r: Doug O'Connell, Phil Wilson (both from SOSA), Tom Coulson (SOSA) assistant course director, Ian Oldaker (York) Chairman, FT&S Committee and course director, Simon Benzekri (MSC), Dan Cook (GGC) National Safety Officer lectured at course.

1999 Nationals

windy and wet, and enjoyable nevertheless

Denis Trudel, Directeur de compétition

AS CONTEST DIRECTOR, my priorities were set on having a competition and making sure that everyone on the site had a fair contest and a great time in the process. A gamble that, I am sure, was met if you ask any of the competitors or their crews.

For all of you folks out there who were looking for an up to date report on the Nationals from our website, my apologies. I can only offer this meager excuse: our inexperience in holding such an event with the new technology at hand. I know that most of you had a legitimate reason for not being with us (travel, work, family), but a website will never be able to make you feel the atmosphere of a contest. I guess the Nationals has to be lived from the inside. Most of us were in it for the first time, the only experienced member of our club being André Pepin.

The contest being the first ever to rely on electronic devices for scoring sure made things a bit harder to handle for my team. Computers have a darn literal way of interpreting the rules — hence the kinks in the scoresheets.

As chaotic the beginning of the competition was the first two days, I was happy to see the chips fall in the right places with help from Colin Bantin, Alain Berenstain and Dave Springford. We were able to get a grip on the situation and the rest, well, it's history, and a good history if you ask me.

Twenty pilots in three different classes were registered; six aircraft in 15m class, ten in Standard and four in the Sports class. The Sports class was unofficial, it being one pilot short of the minimum needed. The task committee consisted of André Pepin, Dave Springford, Bernie Palfreeman (weatherman) and myself as Contest Director.

June 28-29 Rain postponing all efforts, few pilots had a chance to fly around on the two practice days.

DAY 1, June 30
The task committee called for a 282 kilometre triangle between St-Dominique, Coaticook, Victoriaville and back to St-Dominique for the 15m and Standard classes. The Sports class was assigned a triangle of 245 kilometres between St-Dominique, Sherbrooke, Victoriaville and back. In all only four pilots (BW, YR, K1, 55) did not complete the task. Steve Jennings left the contest with instrument problems.

Lorsque André Pepin m'a annoncé que mon rôle dans les compétitions nationales 1999 serait celui de directeur de compétition, j'ai failli m'étouffer! N'ayant aucune expérience préalable et qu'en tant que pilote, je m'acharne toujours à compléter mon insigne d'argent, je me questionnais sur la sagesse d'une telle décision.

À trois jours des compétitions seulement, avec le «COOK-BOOK» en main, je tentais de démystifier les tâches d'un directeur de compétition et les affres de la réglementation. Je dois bien admettre que j'ai failli tout lâcher à ce moment. Cela aurait été ma pire décision. Car au-delà des appareils, des GPS, des règlements, il y a les gens.

Autant vous dire que les deux premières journées allouées aux pratiques furent chaotiques. Suite au retrait, au moment même où les concurrents arrivaient, de notre directeur de publicité et marqueur officiel, nous nous retrouvions sans les logiciels necessaires à la lecture des enregistreurs de vol et de la tenue d'une feuille de pointage. L'équation est simple: pas de feuille de pointage, pas de competitions. De plus, toutes les informations sur l'inscription des participants ainsi que la tenue des livres, compiler sur un deuxième ordinateur, furent irrécupérables. Je dois avouer, candidement, qu'à ce moment l'idée de tout lâcher est revenu me hanter pour une deuxième fois.

Colin Bantin, Alain Berenstain, Dave Springford, trois pilotes compétiteurs chevronnés, sentant la détresse nous envahir, nous ont apporté l'aide que nous manquions si cruellement. Retournant ainsi la situation à notre avantage. La suite du championnat fut excitante et enrichissante.

Lundi 28 et mardi 29 juin Les deux premières journées de pratique prévues ont dues être annulées en raison de la pluie abondante. Elles ont permisent au comité organisateur de compléter les inscriptions des pilotes compétiteurs soit: vingt pilotes répartis dans trois catégories différentes, six appareils au 15 mètres, dix au Standard et quatre au Sport, bien que cette dernière est déclarée non-officielle puisque le nombre de competiteurs est inférieur au minimum requis.

JOUR 1, Mercredi 30 juin
L'épreuve établie pour la classe 15 mètres et Standard est un triangle de 282 kilomètres entre St-Dominique, Coaticook, Victoriaville et retour. Le parcours établi pour la classe Sport consiste en un triangle de 245 kilomètres entre St-Dominique, Sherbrooke, Victoriaville et retour vers St-Dominique. Quatre appareils (YR, BW, K1, et 55) ne pourront compléter l'épreuve. Steve Jennings se voit contraint à l'abandon des compétitions suite à une défaillance de ses instruments.

JOUR 2, Jeudi 1 juillet
Les conditions météo étant marginales (thermiques faibles et un plafond bas), l'épreuve établie par le comité consiste pour la classe 15 mètres, Standard et Sport, en

DAY 2, July 1
With weak thermals and lower cloudbase than the previous day, the task committee chose a triangle of 128 kilometres between St-Dominique, Valcourt, Drummondville and back for all classes. The Drummondville region, located on the last leg, turned out to be a killer — five pilots (BW, D, K1, RS, 55) outlanded, some as close as only five kilometres from the finish. Adam Zieba (55) was forced to abandon the competition after his ship sustained damage during the outlanding. Alain Orfila's retrieve is sure to make *free flight's* pages in the next issue.

July 2 Overnight, the region was hit by a squall line, leaving an accumulation of water on the field and a few tents away from their anchorage. The day was scrubbed.

DAY 3, July 3
This day was a tough call for the committee, the weather could easily go either way — bad or good. The task set for the 15m and Standard ships was a quadrilateral of 288 kilometres around Sorel, Plessisville, and St-Paul d'Abbotsford. For the Sports class a 172 kilometre triangle around Sorel and Richmond was chosen. Unfortunately, cirrus cloud moved over faster than expected and landouts started to rain down on us only 45 minutes after the opening of the last gate. Unexpectedly, our sniffer, Carol King was able to follow the leaders and reported three outlandings before she outlanded herself. Well, if she had been in the contest, she would have finished third overall that day! Way to go Carol!

July 4 Poor weather conditions scrub the day at 1345.

DAY 4, July 5
Overnight another squall line hit the airfield, again blowing some tents away. No damge to equipment or aircraft was reported. The task selected for the day for the 15m and Standard classes was a 122 kilometre triangle to Valcourt, Bromont and back. The Sports class was assigned a 90 kilometre triangle between St-Dominique, Acton Vale, Valcourt and back. Again weak thermals and a minimum ceiling (3000 feet) made for a challenging day, and only one contestant completed the task. Most pilots outlanded one thermal short of the field. At least it made for easy and short retrieves.

July 6 The day was scrubbed due to high wind and intermittent rain.

DAY 5, July 7
The region was hit by a tornado just 40 kilometres to the north! Fortunately the airfield was spared and no damage done. The task set for the 15m and Standard classes was a quadrilateral of 159 kilometres around Sutton, Bedford, St-Grégoire and back. The Sports class task was a 121 kilometre quadrilateral, using turnpoints of Farnham, St-Hyacinthe, and St-Paul d'Abbotsford. The challenge for the day came from the wind which was 30 knots at 3000 feet. Only four pilots completed the task.

July 8 Unfortunately, just as on Tuesday, the weather was uncooperative and the day was cancelled.

Acknowledgements
I would like to thank all for your presence, dedication and professionalism in the course of the competition and more specifically:

un triangle de 128 kilomètres entre St-Dominique, Valcourt, Drummondville et retour vers St-Dominique. Après un départ moins que prometteur, les concurrents engagent finalement la course dans des conditions légèrement supérieures à mesure qu'ils s'éloignent. La région de Drummondville, localisée sur la dernière portion du tracé, s'avère cependant très exigeante. Jeffrey Water (BW), Dave MacKenzie (D), Dale Kramer (K1), Alain Orfila (RS) ainsi que Adam Zieba (55) ne pourront compléter l'épreuve. Adam abandonne les compétitions suite aux dommages subit par son appareil lors d'un atterrissage en campagne près de St-Liboire à quelques kilomètres seulement de l'arrivée.

Vendredi 2 juillet Suite à une sévère tempête qui a frappé la région durant la nuit (quatre tentes ont littéralement été arrachées du sol) entrainant une accumulation d'eau excessive sur la piste et d'un fort vent traversier, la journée est déclarée libre.

JOUR 3, Samedi 3 juillet
La journée s'avère plus difficile à évaluer. Le comité établi l'épreuve pour la classe 15 mètres et Standard en un quadrilatère de 288 kilomètres reliant St-Dominique, Sorel, Plessisville, St-Paul d'Abbotsford et retour. Le tracé choisi pour la catégorie Sport consiste en un triangle de 172 kilomètres reliant St-Dominique, Sorel, Richmond et retour à St-Dominique.

Il devient rapidement évident que la météo a été surévaluée puisque seulement 45 minutes s'écoulent avant l'annonce du premier atterrissage de campagne soit déclaré, quatorze autres suivront. Aucun des compétiteurs ne complétera l'épreuve. Carole King, notre éclaireur attitré, non satisfaite de se maintenir parmi la meute, s'engage avec les leaders dans la première partie de l'épreuve. Elle nous communiquera les premières vaches chez les participants. L'ironie veut qu'elle aurait probablement fini parmi les premiers si elle avait été inscrite aux compétitions! Tout à l'honneur des membres présent de Champlain, l'opération de récupération s'avère un succès.

Dimanche 4 juillet La météo tarde à développer les conditions minimums pour la tenue d'une épreuve. L'épreuve est annulée à 1345.

JOUR 4, Lundi 5 juillet
L'épreuve assignée pour la journée dans les classes Standard et 15 mètres consiste en un triangle de 122 kilomètres reliant St-Dominique, Valcourt, Bromont, et retour sur St-Dominique. Le triangle assigné pour la classe Sport consiste en un tracé de 90 kilomètres reliant St-Dominique, Acton Vale, Valcourt et retour à St-Dominique. Encore une fois les conditions météorologiques étant marginales, un seul pilote a réussi à compléter l'épreuve. Cinq planeurs ont bénéficiés d'un redémarrage, neuf sont allés aux vaches, la région immédiate de St-Dominique étant coupable pour la majorité de ces atterrissages. Consolation; les récupérages furent faciles et courts!

Mardi 6 juillet Un vent fort et des averses intermittentes n'ont pas permis la tenue d'une compétition.

JOUR 5, Mercredi 7 juillet
La veille la région de Drummondville, située à quarante

- To the task committee who made me look so good during the pilots' meetings: André Pepin (AVVC), Dave Springford (SOSA), Bernie Palfreeman (MSC). When Bernie calls for stormy weather at night he is serious.

- To my flightline crew and the towpilots, who would get everyone airborne within an hour: Réjean Girard, Jean-Claude Vallée, René Vallée, Jean-Marc Surprenant (AVVC), Claude Rousseau (AVVQ), Roger Bouchard (MSC), Greg Bennett (MSC), and John Bisscheroux (MSC).

- To my chief scorer and retrieval dispatcher, who, out of the blue and under sick days leave (some kind of weird virus got to them), carried out a difficult job: Jean-François Lamarre and Jean-Pierre Laliberté.

- To my sniffer Carol King, I'll be your wingman anytime.

- To the offical voice of "St-Dominique Ground": Bob Mercer.

- To Réjean Dallaire, who took over my job for the last few days so I could attend to my family.

- And finally to all of you — contestants, crews and helpers for your attendance and your *joie de vivre,* who made this championship a memorable moment in our life. You were a credit to your species, which is HOMO SOARUS COMPETICUS.

See you all next year at Pendleton. ❖

Pilot notes: ***Walter Weir***

Social: The hospitality at Champlain was wonderful and we felt very much at home right from the beginning, even though having all those visitors must be very unsettling for a small club. Every second evening or so we had a delicious home cooked dinner: beef stew, chicken brochette, roast pork (this prepared by Pierre Pepin himself), corn on the cob. The banquet was superb — home cooked country food with all the *vin ordinaire* one could drink! Campers had good showers, and power and water for each. And Montreal was a great tourist attraction for the no fly days.

Flying: (from my point of view) Tasks for the first two days were triangles flown at over 80 km/h with almost everybody getting home. I won them both!

Then on Day 3 we had 100% landouts in a pretty strong southwest wind. I got low at the second turnpoint and made a save from 450 feet over a nice freshly cut hayfield. One thermal later I was down to 1700 agl with Victoriaville airport right in front of me upwind. My L-Nav said I was 200 feet short of being on the glideslope and I didn't want to believe it because it looked like I could make it easily — but the instrument was right — the wind was really whipping. I struggled with ⇨ **next page**

kilomètres, a été victime d'une violente tornade. Heureusement, après les deux nuits mouvementées de la semaine, l'aérodrome fut épargné. L'épreuve choisi pour les classes Standard et 15 mètres consiste en un quadrilatère reliant Sutton, Bedford, St-Grégoire et retour vers St-Dominique pour une distance totale de 159 kilomètres. La classe Sport s'est vu assigner un quadrilatère de 121 kilomètres reliant Farnham, St-Hyacinthe, St-Paul d'Abbotsford avec retour sur St-Dominique. Le principal adversaire de la journée fut le vent (30 nœuds à 3000 pieds) ainsi quatre pilotes seulement ont réussi à compléter l'épreuve.

Jeudi 8 juillet Malheureusement, tout comme mardi, la météo s'est montrée intransigeante, privant les participants d'une dernière journée de compétition.

Tout au long de la compétition, je fus témoin d'un professionnalisme exemplaire des concurrents et des membres du club Champlain. Je pense plus particulièrement:

- Au comité d'épreuve (de m'avoir si bien fait paraître durant les réunions journalières), André Pepin (AVVC), Dave Springford (SOSA), et Bernie Palfreeman (MSC), notre météorologiste attitré (et croyez-moi lorsque Bernie annonce du temps orageux pendant la nuit il ne plaisante pas!).

- À notre équipe au sol, grâce auquels le lancement des aéronefs s'effectuait en moins d'une heure sous la direction de Réjean Girard, Jean Claude Vallée, René Vallée. Les pilotes remorqueurs: Jean-Marc Surprenant (AVVC), Claude Rousseau (AVVQ), Roger Bouchard (MSC), Greg Bennett (MSC), John Bisscheroux (MSC).

- À notre pilote éclaireur Carole King (DC), digne d'être un pilote competiteur.

- À notre marqueur officiel Jean-François Lamarre ainsi que notre répartiteur Jean-Pierre Laliberté (tous les deux sous le couvert d'un congé de maladie, atteints, semblent-ils, d'un étrange virus).

- À la voix «officielle» sur les ondes de «St-Dominique sol»: Bob Mercer.

- À Réjean Dallaire, qui m'a remplacé les derniers jours, me permettant de redevenir papa à la maison.

- Enfin à tous les compétiteurs et équipiers pour leur présence aux Nationales 1999 de St-Dominique. Ce fût un privilège pour moi de vous côtoyer.

- Tous ces gens ont contribués à faire de cet événement un succès.

À ceux qui songent ou hésitent à organiser les Nationales, ma recommendation est la suivante: FAITES-LE!

Vous ne pouvez pas être perdant si vous invitez ces compétiteurs à votre aérodrome. L'expérience acquise durant ces onze jours à notre club se fera sentir pendant des années. Et qui sait, peut-être un nouveau champion est-il en train d'éclore chez nous?

Dans l'espoir de faire partie un jour de votre espèce: «HOMO SOARUS COMPETICUS». ❖

1999 CANADIAN NATIONAL SOARING CHAMPIONSHIPS

				DAY 1			DAY 2			DAY 3			DAY 4			DAY 5			total	
				day pos	km/h	pts	day pos	km/h	pts	day pos	km/h	pts	day pos	km/h	pts	day pos	km/h	pts	pts	pos
15 METRE CLASS				282.3 △			128.3 △			288.0 □			122.0 △			159.4 □				
1	Heri Pölzl	LS-6b	KC	4	76.4	904	5	73.4	548	1	(203.5)	1000	3	(74.9)	387	2	(156.3)	599	3438	1
2	André Pepin	DG-600	DB	3	80.1	964	3	77.4	586	2	(160.5)	789	1	(103.4)	534	4	(90.3)	346	3219	2
3	Lorry Charchian	ASW-27	LJ	5	73.9	863	2	81.5	624	6	(15.1)	74	4	(67.9)	351	1	54.3	1000	2912	3
4	Walter Weir	ASW-20	2W	1	82.3	1000	1	81.8	627	2	(160.5)	789	5	(0.0)	0	3	(102.8)	394	2810	4
5	Dave Springford	LS-6	F1	2	80.7	974	4	74.9	563	5	(59.1)	290	2	83.4)	431	5	(84.4)	324	2258	5
6	Alain Orfila	Ventus	RS	6	65.0	719	6	(95.1)	181	4	(73.0)	359	5	(0.0)	0	6	(71.4)	247	1258	6
STANDARD CLASS				282.3 △			128.3 △			288.0 □			122.0 △			159.4 □				
1	Jörg Stieber	LS-4	JS	2	76.1	892	1	79.4	647	1	(203.4)	1000	1	(111.1)	611	3	(99.6)	387	3537	1
2	Ian Grant	LS-4	ZT	3	75.6	886	2	77.2	628	4	(88.0)	433	3	(70.1)	386	2	(133.6)	519	2851	2
3	Dale Kramer	LS-4	K1	4	71.3	829	8	(43.1)	100	5	(67.3)	331	2	(93.0)	511	1	53.5	1000	2771	3
4	Dave Mercer	Genesis	DM	1	84.3	1000	3	74.5	604	3	(160.5)	789	5	(0.0)	0	8	(0.0)	0	2393	4
5	Dave MacKenzie	SZD–55	D	5	70.4	817	9	(0.0)	0	2	(166.1)	817	4	(56.8)	312	5	(77.9)	303	2249	5
6	Charles Gower	Hornet	DW	6	59.0	667	6	33.8	296	6	(9.3)	46	5	(0.0)	0	4	(79.1)	307	1316	6
7	Andy Gough	SZD-55	44	9	(122.1)	192	5	49.0	379	7	(0.0)	0	5	(84.3)	465	6	(60.3)	234	1270	7
8	Adam Zieba	SZD-55	55	7	(256.1)	403	7	(89.8)	207	7	dnc	0	5	dnc	0	8	dnc	0	610	8
9	Colin Bantin	SZD-55	3B	10	(0.0)	0	4	56.7	446	7	(0.0)	0	5	(0.0)	0	7	(37.9)	147	593	9
10	Steve Jennings	ASW-19	YR	8	(215.1)	339	9	dnc	0	7	dnc	0	5	dnc	0	8	dnc	0	339	10
SPORTS CLASS				245.0 △			128.3 △			172.0 △			90.0 △			121.3 □				
1	Hans Berg	Std Cirrus	HB	1	65.1	1000	1	(43.1)	0	3	(55.3)	301	3	(0.0)	0	2	52.9	710	2011	1
2	P-A Langlois	DG-300	TD	4	(0.0)	0	2	(0.0)	0	1	(109.8)	598	1	77.7	267	1	62.7	725	1590	2
3	Gilles-André Séguin	DG-200	GS	2	55.3	814	2	(0.0)	0	2	(79.7)	434	2	(45.0)	70	4	(0.0)	0	1317	3
4	Waters/Berenstain	Jantar	BW	3	(198.7)	360	2	(0.0)	0	4	(0.0)	0	3	(0.0)	0	3	(66.0)	198	558	4

Note: ( ) values in brackets are distances in kilometres if the pilot landed out or had a no start.

THE TROPHY WINNERS ARE

MSC Trophy – 15m class champion
3438 points of a possible 4161
Heri Pölzl

Wolf Mix Trophy – Std class champion
3537 points of a possible 4258
Jörg Stieber

Dow Trophies (best assigned task flown)

- 15m class – 282.3 km @ 82.3 km/h
  Walter Weir
- Std class – 282.3 km @ 84.3 km/h
  Dave Mercer
- Sports class – 245.0 km @ 65.1 km/h
  Hans Berg

SOSA Trophy – novice **Dale Kramer**

O'Keefe Trophy – team **Waters/Berenstain**

bits of lift and finally made it straight in to the runway. Heri Pölzl got one more thermal, went forty kilometres further, got 1000 points for the day compared to my 779, and went from fifth to first.

Day 4: I had two launches and did not find a thermal – at all! So I quit and put the glider back in the box – big mistake since it redeveloped and I could have got away. Again, everybody landed out. André Pepin went the furthest and shot into first place 37 points ahead of Heri.

Day 5: A strong west wind but with cu that looked so good the task committee was sure they had undercalled the day at 159 kilometres. However only one from 15m class and one from Standard got home. When Lorry Charchian (from Michigan) landed and found out he was the only 15m finisher, his wife Mardi said his grin stetched all the way across the country. He got 1000 points. Heri landed three kilometres short and got 574 and I got 379 for completing about three quarters of the task. Dale Kramer was the Standard class finisher. This turned out to be the last day and Heri won the contest with André second (wailing, *"Quelle tragédie! – quelle tragédie!"* while beating on his chest), and Lorry third. I tried to talk the CD into proclaiming that the pilot winning the most days (me) was the contest winner but had no luck.

Jörg was the Standard class winner and Hans Berg won in the Sports class. André Pepin did a superlative job of contest organizing, and we all had a great time. ❖

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A Nationals moment – day 3: ***Jörg Stieber***

The sounding for 3 July indicated reasonably good conditions with cu bases around 4000 feet agl. However, the public forecast called for "clouding over in the afternoon from the southwest with rain following in the evening". In the hope that the bad weather would hold off for a while the task committee called a 280 kilometre plus task mainly in the NE quadrant with a return over the field and a short leg to the southwest.

My objective for the day was to push hard to make up the 60 points I was behind Dave Mercer (DM) who was in first place.

There were plenty of cu already at takeoff time but they were more show than action — initially we could get only to 3500 feet msl (field elevation is 250 feet). Despite the gloomy forecast for the late afternoon, I decided to wait for conditions to improve. Finally, around 1:30, the thermals seemed to firm up and I got a reasonable climb to 4000. I saw Walter Weir (2W) heading for the start and decided to tag along although I was 200 feet lower.

Out of the start gate we aimed for a good looking cloud on course but it turned out to be the first of many disappointments. While Walter and André Pepin were slowly climbing away above me, I couldn't connect at all. As I was descending below 2000 in search for a thermal, news of the first outlandings came through the radio. Time to open the dump valves! Being light now, a reasonable core allowed a good climb back into the race. Sorel, the first turnpoint, was next to the St. Laurent River and it was obvious lake effect would be a factor. Being acutely aware of the situation I climbed as high as I could under the last cu and used best L/D for the long glide in and out of the turnpoint.

It was good to meet up with Walter and André again. We all had the same idea to deviate far to the right of course to get away from the river. Conditions improved somewhat as we reached higher ground and the tailwind certainly helped. However, a band of thick cirrus, possibly wave induced, had appeared and its shade was rapidly catching up with us. Fortunately there were gaps and I tried to time the climbs and glides so I wouldn't be caught low in the shade. It became pretty clear however, that it would be impossible to finish the task — maximizing distance would be the game of the day.

As I was approaching Plessisville, the second turnpoint, the cirrus dissipated just as fast as it had appeared. Drifting with the considerable wind I tried to build up and conserve as much height as possible, leaving the turnpoint at 3500 feet on a southwesterly heading, facing into the wind. A constant five knots down on the vario made things a lot worse in a hurry. It didn't take long and I was down to 750 feet above Victoriaville airport. Talking to jump planes on the radio while trying to climb in bits of broken up thermals wasn't easy, but I managed to stay airborne. After a while André joined in and we were able to centre the lift somewhat. After what seemed like a long struggle and more drifting back than climbing I finally gained some height and flew upwind towards the town of Victoriaville in the hope for better lift. Just as audio started to beep, Heri (KC) joined in and together we managed to core the thermal. It started with two knots and went as high as four knots all the way up to 4200 feet, the high point of the day at just past 4 pm. On the radio we heard a number of gliders announce long finals into Victoriaville airport. I saw DM go in and knew I had achieved my objective for today.

The conditions on course looked grim with the sun disappearing behind a black altostratus deck. There was no lift under the last decent looking cu on course. Now all we could see were little white wisps under the overcast. Since it didn't look possible to reach home base I dialed in Drummondville airport on the GPS. The computer showed close to final glide. As we were climbing in a half knotter I pondered my options:

a) Stay on course, as there were still wisps ahead and eventually go into a field.
b) Attempt a final glide into Drummondville airport, deviating to the right, with no visible lift ahead, while overflying a lot of bush.

At 2950 feet the computer showed me on final glide to Drummondville and I started out with KC following a hundred feet below. Except for the wind drift there was no reason not to try to climb a little higher. As you will see, I wish I had taken an extra 200 feet.

Soon I found that the wind was quite a bit stronger than anticipated and my safety margin was melting away. Time to look at alternatives! Below was all bush except for a sandy area. It looked okay for landing as I overflew it and I decided to fly on to a much larger area of geometrically shaped sandy rectangles. If this turned out to be unsuitable for landing I still had enough height to return to the field I had just overflown. In the larger area I saw roads and earth moving equipment. Was this a mine or some kind of agricultural operation? As I overflew it I saw the rectangular areas looked flat and smooth, however they seemed to be quite a bit below road level. I mentally selected one and carried on. The airport was now three kilometres ahead, across the river. I announced a long final on the Unicom but things were very tight. I was now one kilometre past the sand pit and had still two to go. I hoped in vain for a last bump to help me reach the airport.

Since I could not safely commit to crossing the river I decided to turn back. Just as I was turning I was surprised to see KC on final for my field. I extended the base and set up a final two fields over. Everything looked good until I saw rows of sprinkler pipes sticking out of the ground, about two feet high and thirty feet apart. There was nothing I could do but to centre between the rows and hope the wings would clear the pipes. The soft ground made for a very short ground roll. To my great relief the wings had cleared all the sprinklers.

KC turned out to be undamaged as well. We had been in the air for 4:35 hours and 3:20 hours on task for a distance of 203 kilometres, about forty more than everybody else. The fields were part of a huge cranberry plantation and we were told the preparation costs are $30,000 per acre! It took six crew and two berry growers to carry the gliders and lift the pieces up to road level without causing damage to the fields or embankments. The manager of the plantation, although fairly reserved at the beginning, turned out to be a very nice fellow, helping to put our gliders away. ❖

hangar flying

New sailplane rescue system successfully tested

Friday, 14 May is a new date in soaring safety when a new parachute rescue system was successfully flight tested in Germany by Hansjörg Streifeneder.

Streifeneder flew a modified and specially fitted Discus in bad weather, but within a large cloud hole with a satisfactory view of the ground. While in straight flight he deployed a container holding a drogue and parachute. The drogue and then the main rescue chute opened as planned. After a short swing, the glider was hanging slightly nose down without rotation. After about ten seconds of stable descent, the chute was cut away and Streifeneder landed at his home airfield of Grabenstetten in south Germany. Two weeks later two more successful deployments were made at higher airspeeds.

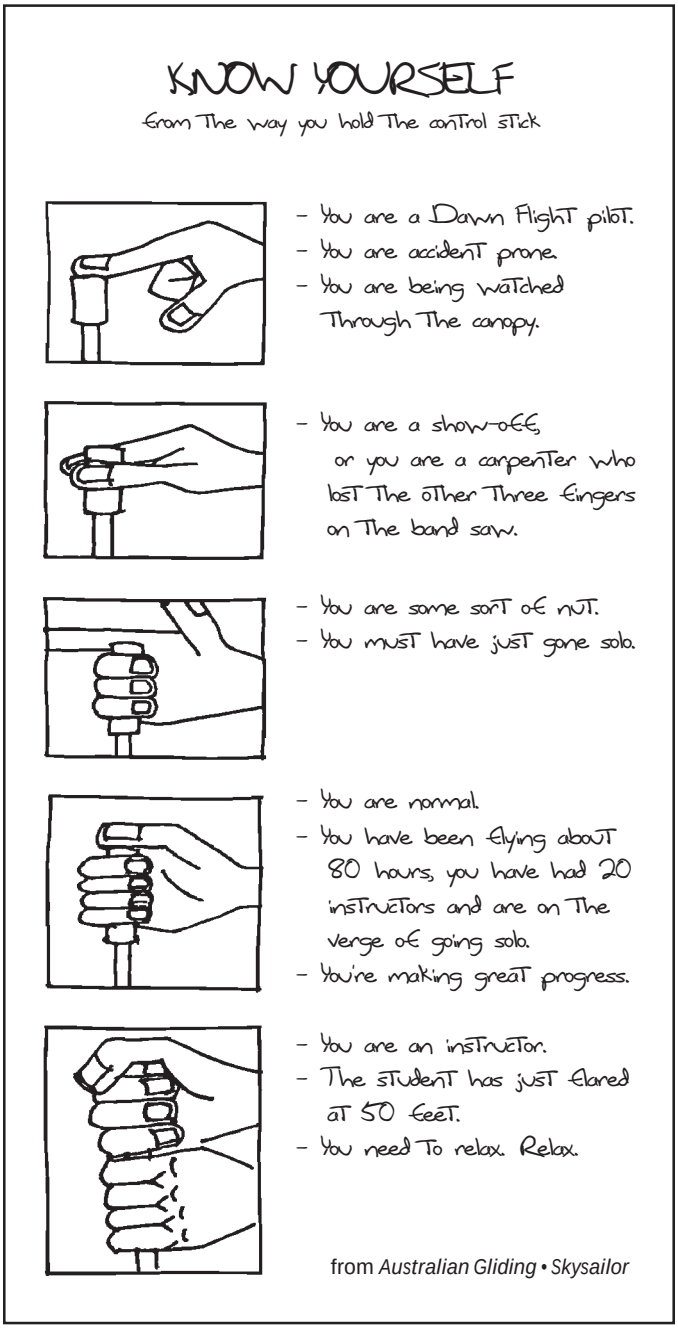
Further flights are being made to cover the expected mission airspeed range. These tests are being made with the permission of the German Bundeswehr to use a military training area to avoid any injuries that could be caused by the free falling parachutes during the tests. Some well known glider pilots used their connections to obtain these clearances for a few hours a week. It's remarkable that a very small company, Glasfaser Flugzeug Service Hansjörg Streifeneder, has done this on its own risk without third party support. Further test results later.

Peter Selinger (via Leo Schober)

Canadian Gliding Team shirts a quick sell-out

The 150 shirts for the National Team sold out! Thank you to everyone who supported our National Team by buying one. A team sponsor, KyberPASS, donated $10 per shirt to the Canadian team. The team fund can always use more donations and sponsors, contribute if you can (tax receipts issued).

Ron Walker



Wing runner's checklist

Here's an idea based on the CISTRSC checks

Controls Check to see that there are no control locks still in place, that the tail dolly has been removed, and that the control surfaces "look right". If the glider was assembled that day and you have not witnessed a positive control check, ask the pilot if he wants one.

Instruments Was the altimeter set to field elevation? Was the airspeed reading zero (or a reasonable value)?

Straps Do the straps look tight? If this is a two-seater with an empty back seat, are the back seat straps secured?

Trim and Ballast Is the glider ballast (if you can see it) appropriate for the size of pilot/passenger.

Release Is the right ring being used? Does the weak link look acceptable?

Spoilers Did you witness (see and/or hear) the spoilers being locked? Are the tops of the spoilers flush with the top surface of the wing?

Canopy Did you see the pilot securing the canopy? If you are familiar with the glider and the canopy latch(es) are visible, are they in the correct position? Does the canopy seem to fit tight to the fuselage?

Howard Loewen

Attention HP owners

Effectively immediately (or nearly so), Bob Kuykendall <*bkuykend@nortelnetworks.com*> will be the official US and worldwide distributor for plans, kits, and parts for the HP/RS sailplanes originally kitted by Dick Schreder. He has taken delivery of all existing HP/RS-related parts, materials, jigs, and templates and forming a limited liability corporation for this enterprise. Bob thanks both Dick and Angie Schreder for their contributions to his new enterprise and is honoured by their confidence that he can advance and support the HP/RS series sailplanes into the future.

Bob says: If you need anything HP, please contact me. Need a whole fuselage pod? Available in August. Need bellcrank bearings? In stock. Need PVC foam? Some is in stock, more available in August. Need new bellcrank bearings? I have them. Need a whole tail kit? In stock. Need a whole HP-18 kit? Not in stock, but if you really want one we can make it happen. Need plan sets? Available soon. Need a mixed plans set for a 16/18 or such? No problem.

Also, if you need any sort of oddball HP part that might have been hanging around the old Bryan Aircraft hangar, drop me a note. There's a lot of interesting leftovers to be taken care of. ❖

So you want to instruct from page 13

fear. It is difficult to approach that particular "unknown" with any confidence if you are terrified. My course evaluation included the notation that I was an "experienced and relaxed pilot ... who flies ... with confidence." At this stage, I struggle to teach each maneuver properly, recalling Primacy and the road to Carnegie Hall.

What is within my ability is to pass on that the simple joy of soaring comes from rationally dealing with the fears, and that relaxation and confidence let you concentrate on flying without being distracted by unnatural fear. Panic during weather, turbulence, spins, etc. can easily prevent you from flying the airplane, which is your first priority. I hope to raise my students' comfort level to the point where they enjoy each maneuver, each flight, each day at the club, and, no matter what the situation, they never fail to fly the airplane.

Unfounded fears can follow you post-licence, too. In discussion with members who, like me, joined SOSA from other clubs, we all found that we had been led to fear transition to a single seater, or going beyond gliding distance from the field, as delineated by a certain point. At York, it was the town of Arthur; at Erin, the gravel pit; at SOSA, Highway 401. While safety is paramount, a culture of fear can hold us back. Properly done, a landout is as easy as a spin recovery at altitude, or that first flight in a 1-26.

At SOSA, we have begun a program to encourage budding cross-country pilots, that includes dual time, landout practice, and plenty of encouragement to relax and enjoy the flight. The progression is not unlike one of our students in basic instruction. If the Bald Eagle returns, it will most likely be to bring you up to date on our cross-country program.

Meanwhile, my thanks go out to those who encouraged me to take the instructor course, and also to people like George Betton, who, while trying to teach me something, looked out and said, "There's nothing like flying". This helped me enjoy the flight, and all since. It's this sort of thing that keeps me relaxed and enjoying myself, and that's what I hope to pass on.

I would also like to remember Bryce Stout, who was a very nice man, and who sent me on my first glider solo, 11 October, 1992. ❖

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Archives/Historian
vacant

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(514) 362-7365 (F)

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Mbrs: Dan Cook
Tom Coulson
Fred Kisil
Terry Southwood

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Mbr: Dr. WL Delaney

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Tony Burton
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George Dunbar
dunbar@calcna.ab.ca

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wernebur@acs.ucalgary.ca

FAI badges

Walter Weir

3 Sumac Court, Burketon, RR2, Blackstock, ON L0B 1B0
(905) 263-4374, <*waltweir@inforamp.net*>

The following badge legs were recorded in the Canadian Soaring Register during the period 11 May to 11 July 1999.

SILVER BADGE
912 Alain Berenstain Gatineau

GOLD DISTANCE (300 km flight)

Alain Berenstain	Gatineau	303.9 km	Std Jantar	Pendleton, ON

SILVER DURATION (5 hour flight)

Charles Petersen	York	5:15 h	1-23	Arthur East, ON
Alain Berenstain	Gatineau	5:25 h	Std Jantar	Pendleton, ON

SILVER ALTITUDE (1000 m gain)

Charles Petersen	York	1160 m	1-23	Arthur East, ON
Alain Berenstain	Gatineau	1910 m	Std Jantar	Pendleton, ON

C BADGE (1 hour flight)

2624 Charles Petersen	York	5:15 h	1-23	Arthur East, ON

getting ready for a cross-country at Cowley

records

Frank Cwikla
(pro tem)

35 Mapleton Drive, Winnipeg, MB R2P 0J4
(204) 632-4773, <*fcwikla@lark.gawd.mb.ca*>

The following record claims have been received:

Pilot	**Brian Milner**
Date of flight	28 Jan 1999
Record types	1. World & Cdn (Open, citizen) 1000 km O&R speed 2. O&R distance (Open, citizen)
Sailplane	Nimbus 3, N245AB
Speed/Distance	147.02 km/h & 1128.93 km
Task completed	Lock Haven a/p to ridgetop at Whitten, VA and return
Previous record	1. unclaimed world / Cdn (C), W. Weir - 142.6 km/h 2. Walter Weir - 1032.1 km

Pilot	**Tony Burton**
Date of flight	3 May 1999
Record type	100 km speed to goal, Club
Sailplane	RS-15, C-GPUB
Speed	95.0 km/h
Task completed	Black Diamond to Picture Butte, AB
Previous record	unclaimed

Pilot	**Tony Burton**
Date of flight	26 May 1999
Record type	Three turnpoint distance, Club
Sailplane	RS-15, C-GPUB
Distance	527.3 km
Task completed	Invermere a/p to Nickelson to Elko, BC and return
Previous record	Al Hoar - 319.6 km, 5 May 99

NOTICE from Walter

If you want your badge claim processed in 1999 you have to get it to Walter before December 1st. If it arrives later it waits until April 2000. By that time, if you find out you have omitted some important part of the documentation, you have probably lost it and the claim has to be rejected. SEND IN YOUR CLAIM NOW!!

SAC SUPPLIES FOR CERTIFICATES AND BADGES

1	FAI 'A' badge, silver plate pin		$ 6.00
2	FAI 'B' badge, silver plate pin		$ 6.00
3	SAC BRONZE badge pin *(available from your club)*	(12 for $55)	$ 6.00
4	FAI 'C' badge, cloth, 3" dia.		$ 6.00
5	FAI SILVER badge, cloth 3" dia.		$12.00
6	FAI GOLD badge, cloth 3" dia.		$12.00
7	FAI 'C' badge, silver plate pin		$ 5.00
8	FAI SILVER badge, pin		$45.00
9	FAI GOLD badge, gold plate pin		$45.00
	Items 7–12 ordered through FAI awards chairman – see Committees list		
	Items 10, 11 not stocked – external purchase approval given		
10	FAI GOLD badge 10k or 14k pin		
11	FAI DIAMOND badge, 10k or 14k pin and diamonds		
12	FAI Gliding Certificate (personal record of badge achievements)		$10.00
	Processing fee for each FAI application form submitted		**$15.00**
13	FAI badge application *(download from SAC website forms page)*		n/c
14	Official Observer application *(download from SAC website forms page)*		n/c
15	SAC Flight Trophies application *(download from SAC website forms page)*		n/c
16	FAI Records application *(download from SAC website forms page)*		n/c
17	Flight Declaration *(download from SAC website forms page)*		n/c

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

ARTICLES ACVV POUR CERTIFICATS ET INSIGNES

Insigne FAI 'A', plaqué argent	
Insigne FAI 'B', plaqué argent	
Insigne ACVV BRONZE *(disponible au club)*	
Insigne FAI 'C', écusson en tissu, 3" dia.	
Insigne FAI ARGENT, écusson en tissu, 3" dia.	
Insigne FAI OR, écusson en tissu, 3" dia.	
Insigne FAI 'C', plaqué argent	
Insigne FAI ARGENT	
Insigne FAI OR, plaqué or	
Les articles 7–12 sont disponibles au président des prix de la FAI	
Les articles 10, 11 ne sont pas en stock – permis d'achat externe	
Insigne FAI OR, 10k ou 14k	
Insigne FAI DIAMAND, 10k ou 14k et diamands	
Certificat FAI de vol à voile (receuil des insignes)	
Frais de services pour chaque formulaire de demande soumis	
Formulaire de demande pour insignes	
Formulaire de demande pour observateur officiel	
Formulaire de demande pour trophées de vol de l'ACCV	
Formulaire de demande pour records FAI	
Formulaire de déclaration de vol par feuille	

Votre paiement dévrait accompagner la commande. La livraison est incluse dans le prix. TPS n'est pas requise. Les résidents de l'Ontario sont priés d'ajouter la taxe de 8%. Les articles 1–6 et 13-18 sont disponibles au bureau de l'ACVV.

Trading Post

Personal ads are a free service to SAC members (please give me the name of your club). $10 per insertion for nonmembers. **Send ad to editor**, not the national office, Box 1916, Claresholm, AB T0L 0T0
tel/fax (403) 625-4563, *free-flt@agt.net*

Ad will run 3 times unless you renew. Please tell me if your item has been sold sooner. Maximum ad length is 6 lines and subject to some editing as necessary.

single seat

BG12A, excellent condition and flies well. Retiring and must sell. Fibreglass trailer, port. radio, Security 150 chute and wing covers. 34:1. $3500 - cheaper than renting! (250) 344-6685, *<wag@rockies.net>*

1-23, CF-ZBR, #16, 2404 h, beautifully redone, two varios, airspeed, G-meter. This glider is all metal, fully aerobatic, and comes with a trailer. Only $11,000. Matt Kazacoff, (250) 342-3006, *<kaz@rockies.net>*

Skylark 4, fully equipped with trailer, hangared at GGC. Andrew Robinson (613) 226-7616 (H), (613) 713-2299 (W), (613) 237-4152 (F), *<andrewro@netcom.ca>*

Skylark 4, excellent condition, instruments, O2, barograph, parachute, trailer, hangared at GGC. $11,000. Bill Park (613) 947-1371 *<bill.park@ccrs.nrcan.gc.ca>*

Monerai-S, C-GTMY, low hours, professionally built, enlarged tail, centre-stick mod, standard equip. Encl trailer. $5000 obo. *<barnes_leigh@connected.bc.ca>* (250) 286-6378.

Pilatus B4, C-FHES, 1400h, standard instruments, alum Minden-type trailer. $22,000. Heinz Portmann (403) 720-0262 (W).

Std. Libelle, CF-QJS, #86, 862h, radio, computer/vario, chute, trailer instruments, hangared at Beaver Valley Soaring Club. Asking $22,000. Phone (519) 599-6749 or email *<ruthumm@bmts.com>*

PIK20Bc, C–GXWD, carbon fibre, 820h, vg cond, new paint, Ball 400 c/w netto & cruise, Edoaire 720 radio, chute, O2, gear warning. Call Lee Coates at (403) 242-3056 or Denis Bergeron at (403) 526-4560.

PIK20D, this is the model with both flaps and spoilers, high performance yet docile. Chute, water, good basic instr package, factory trailer. US registered. $32,500 firm. Brian Hollington (604) 467-0020.

SZD-55-1, brand new, to be registered as C-GENQ. Spring delivery. Trailer available. Ed Hollestelle, (519) 461-1464 ph/fx, *<solairecanada@compuserve.com>*

ASW 20, C-FNVQ, NDH, 1160 h, 372 launches, good cond. Cambridge Nav director/vario/ audio. Sage mechanical, back-up audio, radio, Smiley bags, solar panel, O2. Good homebuilt trailer. $43,000. Peter Foster (905) 584-1920 *<pede.foster@ibm.net>*

Ventus B, C-GVRS "26", in excellent condition, 812 hours. Fully instrumented with Ilec computer, Ball vario, Dittel 720 channel radio, O2, Masak winglets and Cobra trailer. Call or e-mail Lee (403) 242-3056, *<coatesl@cadvision.com>* or Rod (403) 240-4374, *<crutcher@med.ucalgary.ca>*

Read the fine print in the Trading Post box above. Often an ad on this page is out of date or is dropped when it should be continued.

misc

EW electronic barograph, Windows flight software, cables, and dot matrix printer. $550
OK mechanical barograph, ink or smoke, $100
Call Mike, *<thompson_foundry@bc.sympatico.ca>* (604) 534 8863

Baro, Winter, smoke, $200. David (613) 678-6565.

Winter **barograph**, 20,000 feet - smoke type - 3 speed drum revolution: $300 obo. Garmin 55 gps **aviation data base** $400. Two Minolta **data back cameras**, one year old! $60 each, $100 for both. Varicalc audio **vario / final glide computer** $450. (Almost a garage sale). André Pepin tel: (450) 923-3631, e-mail: *arcapep@cam.org*

SZD-55, **half share** (two 1/4 shares considered), 250h, immac cond, ndh. Extensive instrumentation, clamshell trailer, chute, tail dolly and rigging device. Competitive ship with great characteristics (L/D 43:1). Glider flies at SOSA. $32,000 or $35,000 depending on if the flight recorder, flight computer and GPS are required by the purchaser or not. Contact Nigel Holmes *<nigel.holmes@sympatico.ca>* (905) 387-1355 For photos and technical detail see the SZD web site, *<http://csrp.tamu.edu/Soaring/SZD.55-1.html>*

magazines

SOARING — the monthly journal of the Soaring Society of America. Subscriptions US$43. Credit cards accepted. Box E, Hobbs, NM 88241-7504. (505) 392-1177, fax 392-8154. *<74521.116@compuserve.com>*

NEW ZEALAND GLIDING KIWI — the bimonthly journal of the New Zealand Gliding Association. Editor, John Roake. US$32/year (seamail). Private Bag, Tauranga, NZ. *<john@roake.gen.nz>*

SAILPLANE & GLIDING — the only authoritative British magazine devoted entirely to gliding. Bimonthly. BGA, Kimberley House, Vaughan Way, Leicester, LE1 4SG, England. £17.50 per annum. fax 0116 251-5939 *<bga@gliding.co.uk>*

AUSTRALIAN GLIDING / SKYSAILOR — bimonthly journal of the Gliding and the Hang Gliding Federations of Australia. $A40.50 surface mail, air $A55. Payable by Bankcard, Visa, Mastercard. Box 1650, GPO, Adelaide, South Australia 5001. fax (03) 9379-5519. *<AdminOfficer@gfa.org.au>*

MOTORGLIDING INTERNATIONAL — NEW bimonthly jointly published by the Soaring Society of America and the British Gliding Association. $US34 per annum, (505) 392-8154. *<info@ssa.org>*

suppliers

Canadian Soaring Supplies Borgelt instruments and soaring software. Svein Hubinette, 343-150 Rue Berlioz, Île des Sœurs, QC H3E 1K3, (514) 765-9951 *<svein@videotron.net>*

Barograph calibration, most makes and models, Walter Chmela (416) 223-6487

Flying High Parachute sales, repairs, repacking, custom containers. Al MacDonald (403) 687-2225.

LD-200, variometer, hi-performance pressure transducer based varios with audio. No bottle required. Peter Masak (610) 738-9792, *masak@ix.netcom.com*

MZ Supplies Dealer for Schleicher sailplanes and parts, CONFOR foam, Becker radios, most German instruments. Ulli Werneburg,1450 Goth Ave, Gloucester, ON K1T 1E4 *<mgmzaqua@cmw.ca>* ph/fax (613) 523-2581

Solaire Canada SZD-55-1, Krosno, PW-5, trailers, GPS, instruments and other sailplane stuff. Ed Hollestelle, ph/fax (519) 461-1464, *<solairecanada@compuserve.com>*

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

return address:
Soaring Association of Canada
Suite 101 – 1090 Ambleside Drive
Ottawa, Ontario K2B 8G7

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