

free flight • vol libre

6/02
Dec/Feb



FAI Tissandier Diploma

I would like to start this column on a very pleasant note by offering congratulations, on behalf of the SAC board, to George Dunbar and Walter Weir for each receiving the Tissandier Diploma. Details on their contributions can be found on page 25. We all owe a debt of thanks to these two individuals as well as the many other volunteers who make soaring work in Canada.

Free flight

For over a year now, Tony Burton has been hard at work compiling an index of *free flight* content. His goal is to have all 50+ years of *free flight* indexed as a resource to pilots. You can access this index on the *free flight* page on the SAC website. We are looking for a volunteer to help maintain this index on the website and to coordinate moving it from its present storage location to the SAC website. If you are interested, please contact either Tony or myself. Tony is off to New Zealand this winter for a long vacation. As a result, the issue that normally appears in early February will not be published in 2003.

SAC website

You may have noticed that there haven't been many additions to the SAC website recently. This is primarily because very few individuals have come forward to assist with the task of maintaining the site. We are especially in need of volunteers to work on the French portion of the site. If you are considering volunteering to help with the SAC website, now is a good time to start as there is the whole winter ahead with not too much flying to distract from the task at hand.

AGM

This year, the SAC AGM will be hosted by the Club de Vol à Voile de Québec in Québec City on 8 March 2003. As has been the recent trend, the AGM will be a one day event. Following the business meeting will be a two track series of lectures on cross-country soaring for novices and experts.

On-Line Contest

If you have been following the Roundtable, you have seen many postings regarding the On-Line Contest (OLC) and how to pay the administration fee the contest organizers charge each participant. The organizers have expenses and in order for the OLC to thrive they must at least recoup these expenses — otherwise they probably won't be organizers for long. Unfortunately, the fee is difficult to collect and tends to discourage entrants.

One of the suggestions from the Roundtable was that SAC could pay the fee on behalf of all Canadian entrants. While this may sound like a convenient solution, it was not clear where this money should come from. SAC is run on a break-even basis, so if we wish to incur extra expenses then we must either reduce our budget in some other area or increase revenue by increasing SAC fees. Another consideration is the fact that SAC already spends a fair portion of its budget on the sporting aspects of soaring. One of SAC's largest single expenses is our membership in the FAI. SAC maintains two trust funds (the World Contest fund and the Wolf Mix fund) that are exclusively for the benefit of the competition community. SAC pays for the administration of these funds as well as the cost of tracking donations and issuing receipts. In addition, a significant portion of each board meeting is spent on competition-related issues.

Je suis heureux de vous annoncer que la Fédération Aéronautique Internationale a récemment accordé le diplôme *Paul Tissandier* à MM. George Dunbar (Cu Nim) et Walter Weir (Air Sailing). Tous les deux ont généreusement offert, de leur plein gré, temps et expertise afin d'améliorer notre sport. Parlant de volontaires, êtes-vous au courant que le site "web" de l'ACVV, qui était probablement le premier site "web" d'aviation au Canada, a été initialement élaboré par un étudiant de l'université McGill: des bénévoles pour le "peaufiner" seraient les bienvenus. Faites nous savoir si vous êtes intéressé.

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Board of directors meeting notes

latitude is not what it used to be

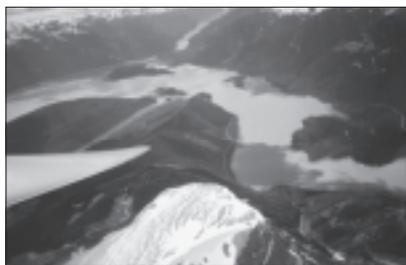
2003 aerokurier On-Line Contest

winching at Hope

saves and sky highways

fall Cowley has many Diamonds

ahh! et puis zut!



Cover

Looking to the northwest across Bush Arm with McNaughton Lake stretching towards the horizon, in the Columbia Valley, north of Golden, BC. The picture was taken on 24 June, 2002 by Tim Wood at 10,200 feet on his way to completing a Canadian record free 3 turnpoint distance flight of 871 km flying out of Invermere. photo: Tim Wood

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The SAC office is constantly having *free flight* and other mail returned because of incorrect addresses. In almost all cases this is because someone has moved or the address was not complete in the first place.

SAC receives a bulk postal rate for *free flight*; however, our ability to maintain this is dependent on a high percentage of the mail being accurately addressed. Getting kicked off the bulk rate would cost the Association and hence members a lot of money. Secondly, for every piece of returned mail, SAC gets billed 75¢ by the post office. The office has no way of keeping the address database up-to-date if it is not supplied with the information in the first place.

Meeting notes, SAC Board of Directors

THE BOARD'S SECOND MEETING OF THE YEAR was held 29-30 September at the SAC office to review the season's events and prepare for the next AGM. President Richard Longhurst chaired the meeting assisted by Executive Director and Treasurer, Jim McCollum. Howard Loewen, Prairie Zone, was unable to attend due to business pressures. As Richard will be stepping down from the Board at AGM 2003, Doug Scott from Great Lakes attended as a prospective replacement for the Ontario Zone Director.

We reviewed the Board's past decision on concessions for Junior or Youth memberships. At AGM 2002, a request was made to remove or reduce the cost of SAC Youth memberships as we do with Air Cadet members. The Board affirmed its previous position that such a move would impose an additional membership burden on all adult members and such a decision would require full SAC membership approval at an AGM. It is felt that the concession on SAC fees for Air Cadets is justified as most Cadets come to SAC clubs with a glider pilot licence and impose little instructional burden on the club compared to the requirements of an ab-initio Youth member. Also, Cadet status is lost at age 18 while Youth membership can continue to age 21. Nationally, the cost to SAC would be about \$3,600 and that would have to be made up from the 1000 or so remaining adult members.

Flying scholarships worth \$300 have been awarded to one Air Cadet in each zone as selected by the Air Cadet League. This year, Youth Flight Canada matched the SAC award. We would like to attract as many Air Cadet graduates as possible to SAC club membership. We are trying to find a suitable Air Cadet SAC member to join the Flight Training & Safety committee.

Individual membership status is another issue that may arise at AGM 2003. At present, all SAC members must be members of a SAC club. There are some glider pilots in Canada who would like to have SAC membership for insurance and/or competition purposes without the additional cost of a club membership. The position of the Board is that such a change would be detrimental to the clubs.

In 2001, SAC membership was 1346, but dropped to 1279 this year. Although over the same period our expenses have remained almost level, inflation is becoming a factor and our investments are not as productive. The reduction in membership and investment income means the costs have to be absorbed by fewer members so the anticipated fee for SAC membership in 2003 is proposed at \$112, a \$4 increase, subject to AGM approval. The insurance picture was not pretty either. Premiums had risen again in 2002 although we benefitted from a 31 December renewal date and there was some return of premiums from 2001 due to low claims. Now that 2002 losses are almost all in, we find that there have been \$147,000 in claims — almost 30% of total premiums — not too bad, but high enough so there will be no profit sharing to help with the 2003 premiums. As a result, an 8–10% increase is expected.

Canadian type approval for new gliders is too difficult. Perhaps TC may be convinced to establish a classification for gliders that is similar to that for ultralights. SAC will approach the TC recreational aviation division on this subject to simplify the process. Under a review of flight documents, we have been concerned for some time about the effectiveness of the wording in waiver forms used for non-member flying. SAC will be approaching each club to provide a sample form from which we will try to derive wording that all clubs can use with more assurance that desired purpose will be effectively served. Other SAC documents such as the Bylaws, Trust Deeds, and the Procedures Manual are also under review.

There has been some discussion on the SAC "Roundtable" providing funding for the popular On-Line Contest website. This comes back to the arguments for user-pay versus a general membership cost. SAC is concerned that it might become an on-going cost.

Some pilots who like to fly in the USA are being inhibited due to statements on Canadian medical licence forms, eg. that a Class 4 medical is not valid outside Canada, and/or that Class 2 medicals may not be valid outside Canada beyond two years. This is probably an unnecessary concern as the FAA document necessary for flying there states that it is, "issued on the basis of Canada pilot licence xxx", and "all limitations and restrictions on the Canadian Pilot Licence apply". Also, there is no medical requirement in the USA for glider pilots. SAC will be working toward an amendment to the wording to make it more of a caution and less invalidating.

This has been a view into some of the business conducted at our last Board meeting. Many other items of a more administrative nature were also covered. The next meeting will be held in Québec City during the AGM. The SAC Board is governed by decisions reached by membership representatives at the AGM. Please be sure that your club is represented and your voice will be heard.

Marty Vanstone, Pacific Zone Director



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.

Images may be sent as photo prints or as hi-resolution greyscale/colour .jpg or .tif files. Prints returned on request.

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.

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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 aéroclubs 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, des fichiers .jpg ou .tif haute définition et niveaux de gris peuvent servir d'illustrations. Les photos vous seront retournées sur demande.

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.

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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LATITUDE IS NOT WHAT IT USED TO BE

Walter Weir, FAI badge chairman

YOU ARE GOING to have to concentrate to understand this, but I know you can do it.

Your latitude used to be the angle between a line from you through the center of the earth and the plane of the equator. The earth was modeled as a sphere and the distance between parallels of latitude was always the same whether you were at the equator, one of the poles or anywhere in between.

Apparently they changed that quite a few years ago, and I just found out about it last week. It's become important now because the new FAI Sporting Code (downloadable from www.sac.ca and click on "documents") decrees that critical distances are to be calculated assuming that the earth is an oblate spheroid. Just in case you don't know what an oblate spheroid is — the earth now is smaller from pole to pole than it is across the plane of the equator, and a line on the surface from pole to pole is mathematically an ellipse.

The old sphere had a radius of 6371.0 km. The WGS84 oblate spheroid has a radius of 6378.137 km at the equator and from the centre to a pole it is approximately 21.4 km less than that.

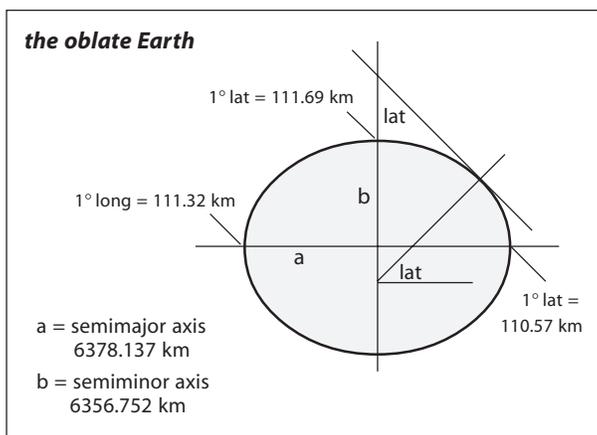
Are you still with me? Hang on — here comes the hard part. Your latitude is now measured as the angle between a line from you to your northerly horizon and the polar axis. In other words, latitude now depends on the slope of the north-south tangent to the theoretical earth's surface.

So what? So, at the equator where degrees of longitude are 111.32 km apart, the earth's north-south curvature is greatest and a degree of latitude is only 110.57 km. That's right, less than a degree of longitude. And at the poles a degree of latitude is 111.69 km — greater because the earth's north-south curvature is less.

Using the old spherical earth model and a hand calculator, we used to be able to calculate distances between turnpoints with relatively simple spherical trig equations. Now the solution involves a complex iterative algorithm and requires a computer program. Fortunately, the differences are only in the order of 0.5% and the old calculations are still acceptable for noncritical calculations. But don't plan your Diamond goal flight around a 300.05 kilometres course using spherical trigonometry. And if you have broken a world record, be sure to calculate your distance by the new method.

I bet you feel better now that you know. For more info and websites where distance calculating programs are available, download the "FAI OO guide to Sporting Code" (editing and contributions by Tony Burton) from www.sac.ca, click "documents" and go to Appendix 2 of the guide.

I like the calculator at http://www.fai.org/distance_calculation/.



the 2003 aerokurier On-Line Contest

Making things simpler

Gerhard Marzinzik, from *aerokurier*

THE AEROKURIER Online Contest 2003 will now use a simple, clear, easy-to-understand scoring system of one point per kilometre flown for long distance flights.

The aerokurier Online Contest (OLC) has undergone continuous change over its short, successful history since 1998. At the beginning, the rules used for scoring were quite simple. The pilot was awarded one point per kilometre flown. Since then they have evolved into something far more complex due to differences in the scoring of different flight geometries. In an "FAI triangle", every kilometre of the route is awarded 2 points, whereas a triangle that does not satisfy this standard the same distance merits only 1.75 points. And in a polygonal flight a kilometre is worth only 1.5 points.

These rules have been the target of a lot of criticism. Rightly so — why should an FAI triangle be worth more than one which only narrowly fails the percentage rules? Why ever, one might ask, should preference be given to a triangular course? And finally, flights today are documented with GPS. In the early days of closed competitive flights, ground observers were still necessary and in those circumstances triangular flights were definitely preferable because they required fewer OOs. But with today's technology, this method of scoring flights is outdated.

These issues were considered at a workshop on cross-country soaring entitled, *New forms of distance flying and their scoring*, held at the beginning of March in Hersbruck, Germany. The workshop was attended by ambitious leading OLC pilots, among them Hans-Werner Grosse, Markus Scherdel and Kai Lindenberg plus, from the other end of the spectrum, occasional distance pilots who derive just as much pleasure from taking part in the Online Contest. In other words, the full spectrum of participating pilots in the OLC were represented.

Their efforts were rewarded: at the end of the day the rules had been compressed into a few brief sentences which express the goal of the OLC: "The promotion of free long-distance gliding".

However, the search for a new scoring system was by no means easy due to all the requirements it is meant to fulfill. In particular, the system had to take due account of the airspace situation, which is becoming ever more complex and makes classical triangular flights virtually impossible from a lot of starting points. Pilots based in such airfields must not be disadvantaged by the rules. As many different flight courses as possible should be allowed, and a scoring system was to be created that

would be fair to all these variants as far as possible. It was desirable to create a homogenous scoring system without steps in scoring performance. At the same time, the rules needed to be as flexible as possible in regard to the number of allowed waypoints per flight.

In addition, an extension to a flight, for example after flying a triangle, should also score points. The scenario needed to be considered where a pilot lands earlier than intended even though weather conditions are still favourable. Why should he give away the rest of the day without scoring any points?

Above all, it was desirable that rule variations should be easily used during the flight. This in turn ruled out steps in scoring like the ones created by the current rules when you go from polygon to triangle or from triangle to FAI triangle in a free flight (without a pre-declared task). In those flights which attempt to check out the limits of the weather, percentage rules (as currently required in triangular flights) can only be satisfied with a high degree of mathematical preparation. Today's available technology with a GPS unit allows any set of coordinates to serve as a turnpoint, rather than just precisely defined geographical features like in the past. It therefore would become very difficult during the flight to determine the alignment of route sections (legs) and angles.

Rather than resulting in an extensive "catalogue of tasks" for the different flight variants, these requirements have now been condensed into a short, succinct set of rules. The basic idea is that every kilometre flown earns one point, as long as the flight really is long distance.

The essentials of the new scoring formula are as follows:

- distance flights of up to six legs will be accepted for the Online Contest.
- legs 1 to 4 are scored at one basic point per kilometre. Leg 5 will be scored 0.8 basic points per kilometre, and leg 6 with 0.6 basic points per kilometre.
- lastly, application of the handicap will reduce or increase the basic points score according to the sailplane's performance.

You will note from the significantly lower scores granted on legs 5 and 6 that in the OLC a basic flight variant should consist of four legs. This means that it's not necessary to fly a triangular course with the starting point on the leg, with every kilometre in the leg counting. And more complex flight patterns with four turning points can also be flown (see the attached sketches of possible flights). This will make new flight geometries which take

into account severely limiting airspace or geographic limitations as valuable as triangular courses. Extra legs are basically only necessary where a good day has been estimated far too pessimistically or where the day has turned out a lot better than predicted.

Under the new rules, it will no longer be essential to follow a closed course in order to earn one basic point per kilometre flown. Under this system, Gerd Spiegelberg's flight from Neu-Anspach in the Taunus to Serres in the French Alps (see *aerokurier*, March/April 2002), which amounted to over 700 kilometres, would now be scored in a way that reflects the considerable achievement that it actually was. The rectilinear flight that wends its way through quite different weather zones will likewise be awarded one point per kilometre (as for a triangle) — in keeping with the aim of the Online Contest, which is to promote long distance flying. Out-and-return flights are also no longer scored less than triangles under the new system.

For many people it may seem strange that rectilinear flights and closed tasks are to be evaluated in identical fashion. One thousand kilometres are thus worth exactly the same number of points, whether flown in a triangle or in rectilinear flight. The work group agreed that sufficient performance differentiation would be possible with the new rules.

Another advantage of the new rules is that they open up the possibility of breaking out of the existing somewhat monotonous tasking regime based around triangles and realize quite new flight geometries. New regions can be included which may previously never have been flown in for airspace or geographical reasons.

Awarding open and closed flight variants the same points eliminates another contentious issue in the present OLC rules, the 80% rule which was the subject of many controversial discussions.

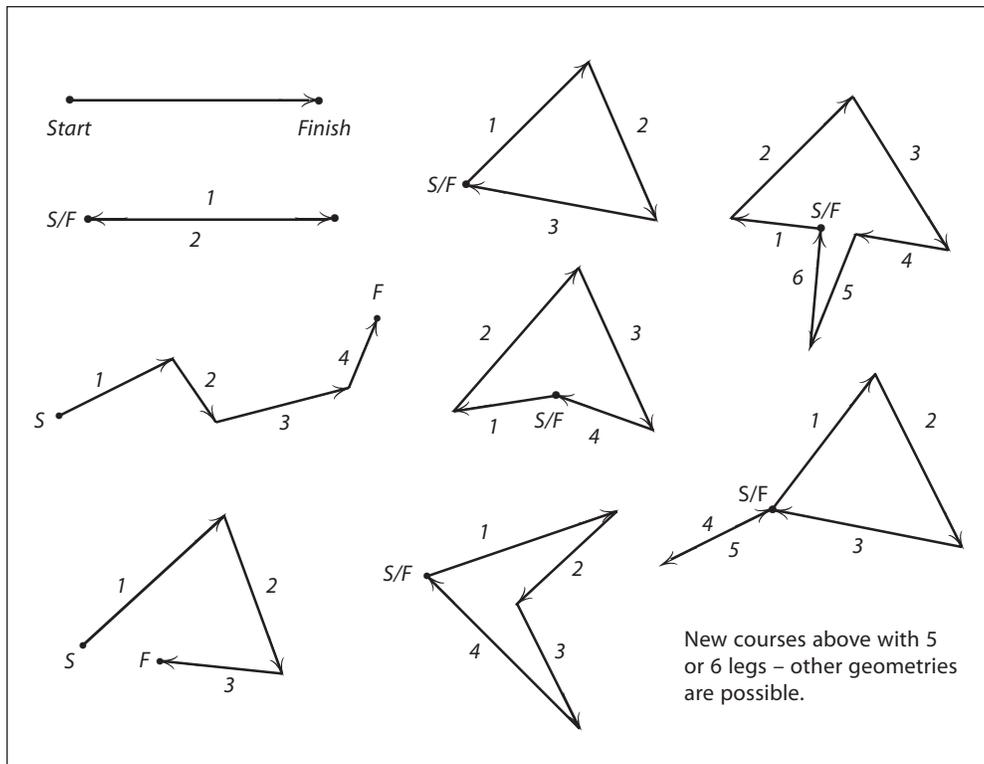
However, there is one problem the new rules cannot resolve: it leaves one dependent on evaluation software. The flight optimization calculation is planned to be performed on the OLC internet server for participants who do not have such evaluation software. The idea here is that flights which have not been optimized by evaluation software will be included in the daily ranking with a provisional score. Final scoring will then occur when the server has had time to perform the optimization in a quiet period.

In any case, the new rules make OLC flying a lot simpler and more straightforward. The catch phrase is simple: "the more kilometres flown, the more points!"

The Canadian connection

Ernst Schneider, Rocky Mountain Soaring

THE CANADIAN DECENTRALIZED National Competition (CDNC) was a great success for the 2002 season which came to an end on 15 October, with the new 2003 season starting then. 130 pilots and 17 clubs registered. 96 pilots submitted flights. In 136 soaring days, 150,000 km have been submitted with 826 flights. These flights are available for everybody to see at <www.onlinecontest.org/olc-ca/wertung.html>.



There are some amazing flights to view, and the flights submitted give a good idea on how good Canadian soaring can be.

No rules are perfect and the rules for the CDNC/OLC have been discussed throughout the year with the goal to make them even more simple than they are now. The new rules for the 2003 season allow for a greater variety of flight geometries and award the same score per kilometre for the first four legs of the flight as described above. In addition they allow for two additional legs which are slightly de-rated. The new rules bring new opportunities for those pilots who have been hampered by airspace or geographical limitations (lake effects). No more guessing in the air if the flight still can qualify for an FAI triangle distance leg.

The new rules will come into effect with the start of the new season and can be studied at <<http://www.onlinecontest.org/regeln-ca.html>>

Winching at Hope?

some very personal recollections on its history, etc, etc.

George Eckschmiedt, VSA

RECENTLY, the idea of possibly winch launching at Hope was opened up on the Vancouver Soaring Association's e-mail Roundtable. We have had some interesting input on the subject to say the least. Unfortunately, many responses were so negative that even I cringed and had the hair standing up on my back! Me, who has the reputation of being "slightly" negative about things. Though I'm not a particularly great friend of winching at Hope, many negative comments expressed reveal that pilots, who flew and were even instructed by winch launching, are still ill-informed about it.

Millions of safe winch launches are used all over the world, and yes, it can be done very safely. Still, many years ago I was told by one of the icons of Canadian soaring when he visited Hope that he witnessed the wings pulled off a K8 during a winch launch in Germany. The aversion and fear of the method is widespread, however unjustified it is. Any launch method can be done as safely, or as dangerously, as the participants make it.

In most part of the world winch launching is the dominant method of getting airborne, the biggest reason being cost. In North America, gasoline is still cheaper than water! Also, single engine airplanes are easy to come by. But think about spending \$3.50+ for a litre of gas as in Europe and soon winching becomes attractive, just you wait!

I was one of the first people, together with Peter Timm, who started winch flying at Hope. I categorically state that a safe winch launching operation at Hope can be done, was done at Hope for many years, and should be possible to be done again. The historical reason for our change to aerotow was both personal and political.

The early years I am personally aware that in 1957 the Gliding Council of BC flew by autotow at the Abbotsford airport. I was in the refugee camp there, and went out to the operation just to smell gliders. I helped around and recall, sadly, that they were not exactly friendly to most anyone, and I was not even considered for a flight. Later the Council moved to a field in Haney, built a beautiful hangar and flew there for a few years, but they crashed all their gliders. They had a 2-22, which was towed to Hope for some photo flights, and this glider built a "glider nest" in the Bowl. (*The Bowl is an aptly named mountain area just north of the runway where a lot of local ridge soaring takes place.*) No injuries, the first of many glider nests built in the Hope area. This was the last asset of the GCBC, and later even their empty hangar burned down.

With the complete demise of the Gliding Council of BC, there was no gliding for several years. A gentleman named Gordon Brown rebuilt the 2-22 CF-LYY and with it the Aero Club of BC started to offer gliding in Pitt Meadows. There

was an Auster for towing (I think this was also rebuilt), so soaring resumed in 1963 under the guidance of Vic Shobridge. Things were going quite well there. Lothar Schaub's flew his self-built Cherokee II, Peter Timm and Jake Brower bought a K8 kit which was covered by Pieter van Gruen, and became CF-PVL. Gordon Brown also built a Skylark III-f which he flew and later Pieter owned it. Vic had a BG-12A and a group of us had a 1-19. We had fly-ins with participation from American pilots and we had a great time there.

Hope was considered just too far to drive on a weekend so, on long weekends only, we aerotowed the 2-22 to Hope. Alfred Schmidt (a member of the GCBC who had moved to Hope) had a winch there, so it was a natural that we try it out. Hope and winching was just a nice intrusion in our life. As time went by, Pitt Meadows became very busy with power traffic, an air traffic controller was installed and so life became uncomfortable for the glider operation. Meanwhile, at the end of 1965, a group consisting of Walter Kunster, Peter Donitz, Paul Kalmar and Ottmar Rush bought a 1-26 on an impulse. They couldn't stomach the Pitt Meadows hassle we were subjected to and I distinctly recall them asking me to help them learn to winch the 1-26, so they could start flying at Hope. My logbook says it was on 11 November 1965. Each of them had four or five flights. With this, Hope as the base of gliding operation was established.

Meanwhile the Auster was written off when its propeller disintegrated while on a ferry flight from Hope to Pitt Meadows. Walter Kunster was piloting LYY (the 2-22) and landed in Chilliwack while the Auster landed in a field and crashed into a farm vehicle. Thus the 1966 season started at Hope with winch launching.

Initially, flying at Hope was considered to be much more challenging than at Pitt Meadows, so we had serious reservations. But then, with Vic's leadership as CFI, we decided that we would just have to teach for the more challenging environment. Incidentally, it was Peter Donitz who discovered the Hope Wave and he used it to fly the 1-26 up the Fraser Canyon to Boston Bar; I'm not certain if this was before or after Peter Timm's adventure to the same area in his Phoebus. Later on, Ottmar built the second glider nest in the Bowl. He survived the crash but unfortunately fell to his death from a cliff. (This accident has no relation to winching, I include it as a historical reference, but we had many crashes after these.) The winch was purchased by Horst Lamla, a club member, and later on he added another one, so we had an operation with two lines, greatly adding to airport utilization.

I gave many winch instruction flights at Hope. However, in parts of 1966/67 my job took me to all over Canada, I

flew a lot in Regina and instructed winch launching elsewhere in Saskatchewan, but that's another story.

I resumed instructing at Hope sometime in 1968. The VSA needed a CFI and I became it and did the job on and off for well over a decade. During the intervening time, flying went on without significant problems. I do not recall white-faced people after winch launch into flights (although I was when sending students solo). And just as many people came back after flying in the 2-22 and later the 2-33 (CF-FDR) on the winch as they do today with our sophisticated white plastic and expensive towplanes.

Dangerous ideas In the submissions to the e-list discussions, several serious errors were stated about winching by people generally considered knowledgeable in aviation matters. Erroneous references were made regarding the stick position, center-of-gravity hooks, nose hook launching, and about the past fatalities. Let's clear this up.

The thing that gives me the shivers is reference to the stick position during launch. It all depends on what is being done. One does *not* fly by the position of the stick in the cockpit, but by the attitude of the glider versus the desired attitude.

If a true centre of gravity (CG) hook is used, and if the speed is correct, the stick will remain in the neutral position. Below are some diagrams adapted and translated from an ancient but good Hungarian gliding text about winching. They were part of the required knowledge for "B" badge candidates. During a CG hook launch the stick position has to remain in neutral. Once I tried something stupid in a K8 (one of many occasions) by pulling up too sharply. The weak link broke at 300 feet but I still landed straight ahead. (Thanks, weak link, for saving my buns.) If the tow is too slow, one can pick up speed by pulling on the stick, but do it at your own risk. If the tow speed is too fast and if you pull, see above K8 event. Signalling is widely used during winch launching. Better to push over and waggle the rudder, or release.

The hook on the 1-26, 2-22, and 2-33 is not a true CG hook. To climb efficiently, the attitude had to be established by pulling the stick back. Remember, pulling on the stick will increase the speed during a winch launch, but only if the speed is already sufficient for climb. Never pull back under

300 feet; one person's reference to 100 feet is dangerously incorrect. It is sometimes done, and is called the "cavalier start", but strongly condemned by the experienced pilot.

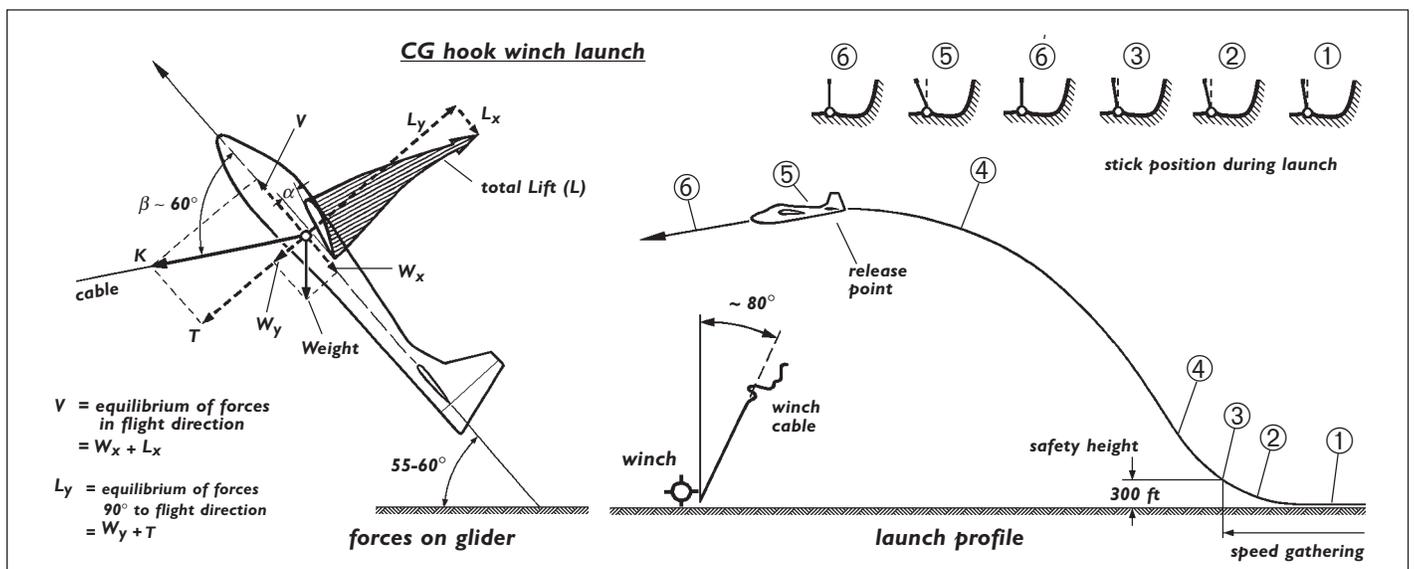
It is usually done on the erroneous assumption that one can get higher. Perhaps, but the difference may be 100 feet at the most, but with a much higher crash risk. Incidentally, I have often seen this cavalier start at some European airports and cringed at the sight.

Regarding winching from the nose hook, the engineer types should dust off their slipsticks (if they remember what that is, battery not required) and draw out the vector diagram of a glider during launch. In some countries these basic vector diagrams are included in the ground school curriculum.

Nose hook launching is widely used by those gliders without a CG hook. In fact, CG launching is considered an advanced form of take-off, requiring additional training. Primary trainers had no CG hooks, only nose hooks. After my "A" badge with the bungee launch, I had all my training to "C" badge using winch launch with a nose hook glider. I nose hook launched our 1-26 because it did not yet have a CG hook, it was added after we got it. No problems. I think Peter Timm also trained on the 1-19 by nose hook winching or auto tow launching at Princeton. I also winched this 1-19 at Hope. The last time I flew a nose hook winch launch was in 1996 in the same primary type I learned to fly on 46 years before. Got about 800 feet height and had a ball. I did the same in 1989 and have a full length video of it. Yes, with the nose hook one has to establish the climbing attitude by up-elevator. Applying too much will result in porpoising, but that is too much detail for now.

Two fatalities The discussions mentioned two fatalities that some people considered were associated with winch launching. The comments expressed reflect fear mongering and ignorance. True, both were during winching, but there is more to each story.

The first one was Keith Duckham in a Standard Cirrus. I did not witness the accident, but in my thirteen years of



analyzing every reported accident in Canada, I think I have learned a few things. Talking with the winch driver after the accident contributed a lot to my assessment. The Standard Cirrus has an all-flying elevator. So does the Phoebe that Peter Timm test flew at Hope on the winch and flew it many times after, as does the Ka6E that Harald Tilgner and Lothar Schaub still fly. With the right technique, they all are safe to fly on the winch. But one does not ever shove the stick forward with this type of stabilizer. Just think of the result: instant high angle of attack, the elevator stalls and becomes useless dead weight on the tail, with extra drag. It will result in a snap roll.

That is exactly what happened with Keith. He did not have all that much experience either, about a hundred hours total time. He started to climb when the winch slowed for whatever reason. Keith shoved the stick forward, as he was taught erroneously on the 2-33, so it was a natural reflex but the wrong one. At the same time, the winch driver applied power because he saw a wing drop, which is a signal to increase speed. The glider now in a flip-roll mode went inverted and slammed into the ground. Was this an avoidable situation? I think yes. As stated above, one does not shove the stick forward, or backward, but uses it to achieve a desired attitude, winch or no winch.

I was close to Keith personally, and it would be easy to start blaming the winch method or the winch operator. Keith made a serious error which he was not prepared for and paid for it with his life. The winch driver was in shock for a long time, never being able to figure out what else could he have done. As I recall, he did not do many launches after that one. In fact, this was the time when Monty Williams and Jack Barron started to think about towplanes.

The second fatality was Frank Archibald, flying Bernie Brayshaw's Libelle. The reports were that there was some problem with the release mechanism, that there was a winch failure, or a slow down. The cable was reported to have back-released, or otherwise came down. Frank, on his first flight on type, attempted a low speed turn to land back, and spun in at the end of the runway. Frank became the first pilot to spin in at Hope from a premature termination of the tow (any tow) but not the only one, unfortunately. In my not so humble opinion, referring to the launch method is completely irrelevant to the situation. We have had that from an aerotow, and by a pilot with hundreds of times more aviation experience than Frank had.

Now — power lines and dropping the cable on them. Yes, we did that. For reasons still not understandable to me, most pilots simply think that during winch launch one pulls the stick back and sits and waits till one gets up. I battled this attitude for years — the glider has to be flown all the way up on the winch, the only difference is the attitude relative to the horizon. One flies the glider in a different plane. Particularly with the crosswinds we can have at Hope, one has to fly the glider with ailerons, rudder and elevator.

I read still today that all one sees is sky on the winch. What nonsense! How about a bootfull of rudder (just kidding) and looking down sideways, eh? How else do you know where you are? Our instructors meetings were just the same then as they are today, discussing trivial things that most pilots should know in their sleep. Yet, glider pilots being what they are, they all think they are the greatest, and know it all — and keep wandering all over the sky on the way up. So you

go up quickly, so what? That is the nature of the thing, millions of launches were done before you, safely.

Let me illustrate one flight. As CFI, I went for a flight with a very advanced pilot from Norway, and by then a VSA instructor, Powel Petersen. He was in the back seat of the 2-33, me in the front. The launch went quite normal, with the right attitude, but we were drifting left. So I said, "Powel, don't you think you should correct?" The answer was, "I thought you were flying." So much for pulling on the stick and so much for briefing before flight.

Regardless, it was a constant battle to keep straight on the launch. Not for the pilots we trained, but mainly for the experienced ones; they just would not accept being told. The situation peaked on one day when we dropped the cable twice, once on either side of the runway. The most severe effect of this was that the power to Hope's hospital was cut off and their auxiliary power unit did not cut in. I grounded the whole club, no exception. I felt not so good about having to do this to illustrious and experienced high-time contest-calibre pilots, but I had no choice. Every pilot was required to have a checkflight with me or with another instructor, demonstrating full control during winch, which included the use of rudder, aileron, elevator, and looking down to the winch to find where they are (I still have the note that I distributed to every member).

We also decided to equip the winch and all gliders with CB radios. Remember, most aircraft radios still used tubes and those with solid state electronics cost almost as much as a glider. I recall that only Peter Timm had a Bay-side 90. Good thing I did this, as the following week the VSA received a letter from the Department of Transport, requiring us to "show cause why our permit to fly out of Hope should not be suspended." We did not really have any sort of formal permit, but they knew of us — particularly after the hospital complained.

So, me as the VSA CFI, humbled like a beaten dog with its tail between his hind legs, went to the DoT with our action items: grounding, extra training, checkflights and the promise of radios. They magnanimously consented to the plan. The launches improved, but the CB radios never really worked. The winch was noisy anyway, had terrible ignition noise, and we picked up California when the winch stopped, but hardly ever each other.

Many of these tumultuous events were in the mid-70s. Yet otherwise we had a safe and comfortable operation. We already had the Blanik EJA, Pilatus HES, 1-26 QGQ, still had the 2-33 FDR and the K8 PVL. We did have mishaps, but only one related to the winch operation. On an Open Cirrus launch, the cable wrapped around the wheel axle (the release hook is just before the wheel). The pilot rode it up all the way, the winch operator cut the cable and the Cirrus dragged the rope all the way around the circuit and landed intact. It was amazing that the cable never touched the power lines. Six feet of garden hose over the cable end prevented this from ever happening again.

We often had simultaneous winch and aerotow operation when the Seattle Gliding Council or the Air Cadets visited Hope. I do not remember any conflict, but then, most of us do not want to remember bad things, only

outstanding ones. There was no conflict between winch or aerotow operation, and we did not even have radios to coordinate. It was all very simple. The winch operation used the area where we tow from now, and aerotow was from the main runway. The winch launch had priority. The aerotow could not commence until both winch lines were returned to the takeoff position — one doesn't want to launch towards a tow cable retrieve car.

The instructors were slightly more assertive and thus were listened to more readily, and everybody paid more attention to the operations. Guess what? There was no Operations Director, or daily Operations Manager, and someone always volunteered to keep time at the flightline. Everybody was at the flightline, handling the gliders. We did not have to handle tow tickets or unit cards, as the club billed the members. Intro flights paid cash. Keith Duckham did an awful lot of work to streamline the system and he had it worked down to an hour's work a week. There was always much more action right at the flightline as opposed to today's situation where everyone congregates at the flight shack, handling bureaucracy, or in the "zero L/D" clubhouse shooting the breeze.

Going to towplanes Now some history about the purchase of our first towplane, AUJ. The winching situation started to turn sour after Keith's accident. The winch operator was devastated; one cannot blame him for not wanting to winch much after that. His father was the principal owner and operator of the winches. Initially the whole family contributed immensely to the operation of VSA. Later the winch owner moved to Hope, initially based solely on providing launching to VSA, but they also purchased a motel. However, after many years of good work, their service to VSA was starting to be unreliable. At the same time we were looking at the wave clouds and dreamed that if we had a towplane we could simply tow into it without having to struggle at the Knoll to 2000, then to Hope Mountain to 4000, then hope to make the wave at 3500 feet. (Guess what we do today: 2000 to Hope Mountain then struggle to 4000 and hope to catch the wave at 3500.) It was the availability, not the reliability, of the winch facility that became unacceptable.

The president at the time was Monty Williams and with his wife, Antonia (an even more distinguished pilot than he), were actively guiding the club. One nice day, Monty disappeared with Jack Barron, our first Towplane Manager, and in a few days reappeared after ferrying our first L-19, AUJ, from somewhere back east. I don't remember how we got the money for it — I was the CFI, my concerns now became the indoctrination of aerotowing instead of winching. I didn't have any more winch launches at Hope in my logbook after 1976.

It's wrong to state that winching is "inherently more dangerous" than aerotows. I am surprised at that statement; how can one tell? Carelessly used, both can kill pilots. Ask any towpilot who towed a glider getting too high on take-off! Many articles have been written about this, including our own club members. Look up Bruce Nicman's article in the 2/83 issue of *free flight*, "At the other end of the rope".

Do I still think winch launching is feasible at Hope? As far as flying is concerned, a definite yes! It has been proven that training on winch is possible at Hope, regardless of the nay-sayers. Been there, done that. Politically it is another matter however. We have many vested interests in one

thing or another, be it emotional or material. Having three towplanes is an emotional issue, and an expensive one. Can we really afford a "spare" just in case one breaks down? Can we afford not to? Can we afford to have a towplane just for the away trips? Was it politically astute even to mention the third towplane so that the winch launching option could be discussed? That's normal club politics, and we are all infected, like it or not.

The major obstacle now would be operational rather than political. When we winched at Hope, we were operating the airport and employed a jewel of an Airport Manager, Eric Newman, who cared of the field primarily for us. Now it is run by others and we would surely be chastised for tearing up the grass, for driving on the field, or for simple ignorance, as winching seems unnatural.

Regarding the fleet, the plastic wonders that we fly are launched by winches all over the world. The manufacturers install CG hook release mechanisms on most of them. In fact, some of them only have CG hooks, to the chagrin of aerotow operations. Even the Ka6 just has a CG hook. So what's the problem? Fear and ignorance, which build on each other to ever higher levels. Would I winch our Blaniks and our single seaters now? Bring a winch to Hope tomorrow and see! Our Grob 103's would need more consideration, as they are heavy and a lot depends on the strength and condition of the winch.

Winching does have its value at Hope, as does aerotow. On good days, one can get started on the Knoll at 1000 feet, and on every one of my flights before landing I try the lift there, just so I can tell someone that it works. And see how often Harald Tilgner or Paul Hajduk are towed only to the Knoll and get away from it. With winch launching we regularly launched to 12–1500 feet with the Blaniks and the K8 got to 2500 feet at times. That was often enough to get away. Conversely, I have also towed to 4000 to Ogilvy because Hope Mountain did not work. It all depends on the conditions and whether we are using a tunnel vision type of thinking.

When I first read the discussion group ideas on winch towing I just thought, the world goes around, history repeats itself, and there are no new ideas on this earth, just new people, God bless them. I also knew I will get into trouble, that I will have to spend a few days hammering these words into the keyboard. It actually gave me some sleepless nights, trying to gather my thoughts about the subject. I tried to avoid writing them, but one member quoting me was the final impetus that got me into action. It does not happen often these days, but tender points were touched, points that needed to be identified and corrected for our new generation of pilots.

As for the historical items about Hope, I wrote them from my memory, from my logbook, and from my notes. Then I realized that we have a book written by Lloyd Bungey, who followed me in the CFI's role. It is titled, *Trying their Wings – BC gliding from the 20s to the 80s*. After writing most of this essay, I reviewed the book to verify my memory — it is still functioning. I advise those who are interested in Canadian soaring history to get a copy and read it. The BC Soaring Society may still have some copies [*and a handful are held by the editor*]. Remember the old saying: those who cannot remember the past are condemned to repeat it. ❖

Saves and sky highways

Kenneth Armstrong

TODAY, WE LEARNED THE PRACTICAL SIGNIFICANCE of cloud streets. Soaring manuals tell us these lines of cumulus clouds often mark areas of lift — and of course the attendant pockets of sink. This phenomenon was graphically illustrated to my passenger (an RC model glider aficionado) as we climbed the Diamond Katana Xtreme motorglider through light lift to within a thousand feet of the dark scattered cloud bases. The initial nose pitchup followed by the boot in the rump was positive proof we had found the up elevator.

As the dark behemoth hovering overhead sucked us upwards, we converted the lift into airspeed and circled at higher speed in the strong thermal till we neared the gaping mouth of the cloud centre. We were on a westbound cross-country so we circled to the east side of the cloud and tucked the nose down as we turned westward and hurtled across the width of the dark mist, further increasing speed while remaining well clear of cloudbase. This allows us to accelerate across cloud number one's main lift and in effect catapult us to the next area of rising thermal activity.

Expecting an area of sink between the clouds, we were enthralled as the lift continued unabated, albeit at a reduced rate. Minutes later we reached the next black maw and were rewarded with a renewed surge of lift in the 800 ft/min range. A cold front had moved through the day before and the freezing level had plunged from 13,000 feet to only 6000 leaving a cold dome of air with a steep lapse rate. Cloudbases ranged from 4500 to 6500 feet and were scattered to broken all over the southern third of Vancouver Island.

As we proceeded from cloud to cloud along our route, my passenger, Jim, began to grin from ear to ear when

he realized we were off on our first cross-country flight, unplanned as it was. We had launched from Victoria's airport and climbed in the local lift to the island's most southern point near Victoria (Trial Island) before setting course along the centreline of Vancouver Island in a northwesterly direction. The "stop-cocked" and feathered prop served as our cursor to line up the nose with each subsequent cloud along the route dictated by Mother Nature.

A save As we approached Duncan, we learned the glider term: "save". We had left a particularly good thermal at nearly 6500 feet near Shawnigan Lake and headed for Duncan across an area of virtually no cloud. We found a lot of sink but no lift and the excess of altitude was quickly dissipated. How strange. We had flipped the switch to unfeather the engine and pulled the choke on to start up at our minimum safe altitude. I reached for the starter key and was about to crank the Rotax to instant life when Jim pointed out a squadron of Ravens. (Their name is capitalized in reverence as they provided the somewhat non-religious "save") The all black fleet cavorted in wing-tucked dives and aerobatics well above us, reminding us that they may indeed be the smartest of birds. My "expert" calculations had determined there would be no lift there, but Mother Nature and her fledglings overruled me. It was a narrow thermal core but my steep turns could average a few seconds in the upward core followed by a few seconds outside with the vario generally pegged above 1000 ft/min.

It turned out the wind direction forecast was very wrong and the avian creatures had simply been climbing in the upwind feeder for the cumulus. How do they know?

Now that we knew where the mid-level wind direction was, our soaring success increased logarithmically and we set course for Lake Cowichan.

On approaching this proven lift corridor, our plans are quickly ended by a growing cu nim that has taken up residence over the townsite and is spreading its billowing skirts to block access to the local ridges. What to do? Change direction. Now we head towards Nanaimo over the 3500 foot ridge of mini-mountains, confident in our ability to find lift. When Victoria Terminal asks about soaring conditions, I blurt out: "We could fly inverted today and stay airborne". Somewhat of an exaggeration, but likely feasible given the lift.

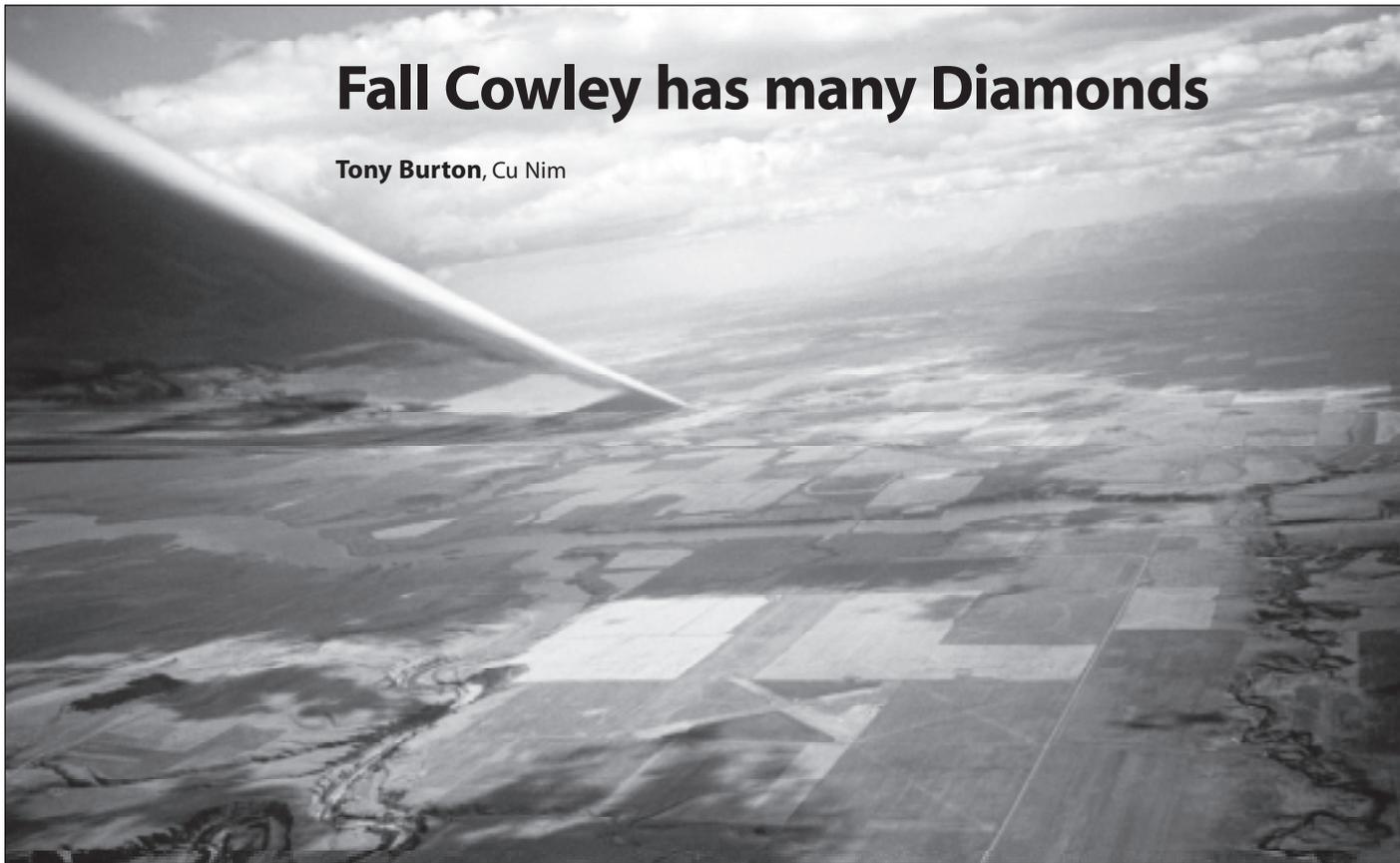
While we could easily continue up island, Jim has a previously arranged commitment so we simply reverse track and repeat the route a couple more times until ➔ **p19**

Ken Armstrong



Fall Cowley has many Diamonds

Tony Burton, Cu Nim



Ron Cefaruza

THIS PHOTO OF THE COWLEY AIRFIELD and surrounding scenery taken this summer gives you a good idea of the environment that greets the pilot to this generous wave and cross-country soaring site at the front ranges of the Rockies. The success this year fell out of the request by a group of pilots from the Gatineau Gliding Club to add a few extra days to the usual mid-week to Thanksgiving gathering to boost the chances of some wave flying following such a long trip. So the Alberta Soaring Council moved back the opening to the prior weekend and we had a ten day camp, 5-14 October. The extension was fortuitous because most of the wave flying took place up to and including Wednesday, the day the camp normally just opens.

Dave and Bob Mercer's Genesis II was an object of much interest — they said they are saving up to buy the rest of the fuselage. Also the L33 Solo that GGC brought along was looked at carefully by Cu Nim pilots who are considering another transition ship for the club. Dave was intent on going for a 100 kilometre speed triangle and had a GPS course set out with a wave climb second leg in the valley and a start/finish point west of Centre Peak. He flew it three times for a best speed of 135 km/h, but in the evening found that his loss of height over the course was 3016 metres — just enough to disqualify the attempt. However, one of the slower circuits was still good enough for a Club class record claim. At the end of the camp he also managed a 100 kilometre dirty downwind dash to capture my modest speed to goal record set in 1999.

With the jet stream overhead and paralleling the Rockies, the wave soaring took place under less than optimum conditions with generally off-axis the upper winds, often making the wave spotty, and a lot of flights required using the rotor to climb and pilots remarked on "interesting" tows.

On the Wednesday, the upper winds were more westerly than on previous days and strong enough. At the pilot meeting I predicted that it might be the best day of the camp. Was I ever right — there were 8 Diamond flights — the most achieved in a day since Cowley has been used as a wave site! The pilots were Dave Rolland (Cu Nim) 28000, Al Hoar (Cu Nim) 28000, Jeff Anderson (Cold Lake) 27500, Phil Stade (Cu Nim) 28000, Derek Brown (Cold Lake) 28000, Bob Hagen (Edmonton) 26300 and 5 hours on his first solo wave flight, Mel Blackburn (Invermere) 28000, and Scott Harrison (Gatineau) 26000.

The weather was active with the passage of four cold fronts during the camp. One crossed the field from the north on Monday afternoon and two pilots got surprising frontal lift, one a student to 11,500 feet from a 1000 foot agl practice circuit while wearing only a T-shirt (at 9°C, he had stripped off his parka, extra socks, etc. on his previous circuit).

Two more cold front passages on the Thursday and Friday dropped snow on campers and it was -14°C at sunrise Saturday morning! It took a half hour of serious coaxing to get an Air Cadet Scout started so it could tow out their 2-33 to a planned day of intro flights out to the east in Taber, Alberta. The cadets had been flying local squadrons the previous weekend and tied their equipment down for a few days.

Saturday evening featured a great dinner at the "Ginger Gardens" in Pincher Creek with 39 of us filling their banquet room. The GGC pilots were thanked for their timely visit and the Diamond pilots were given Cowley pins to commemorate Wednesday. The camp had 44 pilots registered with 20 private and club ships on hand. ➔ p25

Ahh! Et puis zut!

“Rien ne sert de courir, il faut partir à point.” – Jean de La Fontaine

Marc Arsenault, Outardes

LES CONDITIONS me semblaient toutes indiquées pour un cinquante. Passage de front froid, vents en altitudes moins de 15 nœuds. Les analyses aérologiques étaient même moins avares de bonnes nouvelles que d'habitude. Selon de savants calculs, la journée nous servait des thermiques de quatre nœuds au minimum. Une *légère* trace d'incertitude, il y en a toujours, apportait le doute dans ce qui était autrement une journée propice. En effet « notre » météorologue officiel et chef-instructeur M. Jean Richard nous avisait de nous méfier des subsidences prononcées surtout près des sites habituels du terrain.

Lorsqu'un collègue, monsieur Luc Morin est parti sentir le coin, son annoncer d'excellentes conditions était suffisante pour me faire installer l'enregistreur de vol et annoncer pour la enième fois cette saison: "C'est aujourd'hui le cinquante."

Une petite voix à l'intérieure se faisait entendre: "Héhé!"

Une remorquée sans encombre démarra mon enthousiasme. On grimpa comme des anges qui s'ennuyaient de la maison. Bien entendu que l'air relativement frais de l'automne contribuait aux performances mais les thermiques traversées étaient de véritables usines d'énergie. Je laisse partir notre Super Cub à 2300 pieds/mer de son côté. Je fais la coche traditionnelle pour l'enregistreur. Rien de modérer chez moi: 100 pieds. Et puis ouste, on part en montée +6 nœuds. Ouaf! Avec le lourd été que nous venions de passer avec les grands bleus ensoleillés et les Vz de 4 ou moins, je rigolais comme un gros encrouté.

Un peu de travail pendant une trentaine de minutes pour prendre connaissance de *mon ciel*. Une superbe fenêtre de 2000 pieds s'offrait. 2200 pieds à 4200 pieds/mer qui pouvait refuser cette offre? Surtout que la température se réchaufferait encore quelque peu.

"Départ du 50 messieurs, dames sortez vous mouchoirs blancs!" CZBM / Dunham / Sud (départ et point de virage) / SS4 (St-Dominique, point final) / CZBM. Je suis loin, *auf wiedersehen*. Passage CZBM à 3500 pieds à l'altimètre plus le *bip* de « Monsieur Cambridge » et me voilà en route, la vie est belle.

Un petit détour pour me refaire un plafond dans la grosse thermique au sud-ouest se solde aux 4200 pieds attendus sans difficulté. "Haut la main pour Dunham-Sud, tassez-vous."

Les vents en altitude 300 degrés à 9 nœuds calculés. Je travaillerai avec un MacCready de 3 conservateur mais très inclusif (règle 123) selon les paramètres de Herr Meister Reichmann. Le Pilatus B4 que je pilote est mon préféré, il n'y plus de secret pour cela aux Outardes. Je le connais par cœur maintenant. On doit faire un avec la machine que

plusieurs experts et plus expérimentés m'avisent. Ils sont plusieurs croyez-moi.

Où en sommes nous? Ah oui, direction Dunham-Sud. Une chute de -7 nœuds ne m'inquiétait pas trop au sud de Cowansville. Je volais presque perpendiculaire au vent dominant, je devais en sortir et me trouver une autre belle pompe, vrai? "Nan". La subsidence, vous connaissez? Je venais d'en faire un joli apprentissage. Les petites pousses nébuleuses que l'on retrouvait au sommet de ces merveilleuses ascenseurs n'existaient plus. Le grand bleu partout m'engloutit dans une espèce de sensation peu désirable dans mon état altimétrique du moment. 2400 pieds indiqués et toujours rien. Une grosse décision s'impose. Rebrousser chemin au nord-ouest de Cowansville, du style: "Retraite, retraite où sont les drapeaux blancs!"; où je pouvais rattrapper une thermique résidente que je commençais à connaître. En perspective, il aurait fallu aller plus au sud pour monter mais je m'éloignais ainsi de Bromont et rendant la tâche plus ... "Non, non je ne disais rien."

Il est assez vexant d'annoncer que ma Vz n'a guère changé une fois que le vario s'est accroché à -7 kts. À 1800 pieds c'est le cap sur CZBM incontestablement. Je tente d'accrocher sur des bulles qui décollent plus vite que des roquettes. Rien à faire: enfer et damnation j'étais pris! Une nouvelle décision fut transmise du poste de commandement à 1500 pieds:

"C'est la vache, rangez votre témérité, sortez votre humilité!" En fait la réalité, c'est que j'ai contacté mon pauvre ami Luc qui se tapait une superbe sortie pour l'aviser par radio que les contacterais une fois au sol, loin de Bromont.

Voici le processus décisionnel détaillé que je note, s'est formulé en l'espace de 0,5 seconde:

"En vol, en-dessous de 2000 pieds-sols je suis local d'un champ. J'avance vers ZBM et me rapprocherai du champs. Le champ est visuel depuis un bon bout. Excellent accès routier, belle entrée mais des fils téléphoniques et un de ces arbres. Rien de grave, *le gros*, travaille pour moi comme balise". Toujours en route vers mon champs: "Tiens une superbe pelouse à gauche: *Achtung, Verbot*. C'est la prison fédérale de Cowansville, même à l'extérieure des murs, la publicité médiatique aurait tôt fait d'achever la pratique du sport sur une base nationale." Autre facteur décisionnel qui n'aurait pas dû entrer en scène: "Bon sang, je vais foutre en l'air ou à l'inverse si vous voulez, l'après-midi de mes collègues devenant malgré eux l'équipe du *retrieve*. Ils ne le savent pas encore. Ce n'est pas si mal. Le champ! Où est mon champ (ton légèrement haussé), c'est bon je l'ai: *le gros* est là. C'est fou ce



Le Pilatus B4 C-GIBZ aux vaches bien loin de sa base.

The outlanded Pilatus B4 C-GIBZ far away from Bromont. Not a cloud in sight. The winds were calm and the canopy was left open to dramatize the evacuation effort. Both the glider and author are reported to be in good condition.

que la perspective changeante change la vision ou en crée." Oh! Ça monte ici: un tour, *nan!* Le champ, droit devant, son orientation 03-21. Le vent à ZBM était du 280. Pas ici, je ne peux atterrir 21. La dérive me paraît favorisant la 03 et puis la pente monte légèrement 03: excellent. Allez, vent arrière droit 03. Vario +3, tiens cela monte, je tente ou non?"

Donc, vent arrière: une autre voix me crie: "Checkliste, checkliste!" (traduction: Procédure de mise en marche de la liste de vérification pré-atterrissage). Pas possible: je me parle tout seule, ma condition devient pathologique." Train sorti bonne vitesse compensée et un sacré joli pinceau d'approche, j'ai une bonne quantité d'énergie sans trop d'excès. Désolé, pas le temps de devenir une statistique. J'ai besoin d'air de manœuvre, je ne connais pas ce champ." Je fais le tour de ma balise — *le gros* — note que le champ est relativement plat sans trop de pente. Touché vitesse minimum, pleins aérofreins. "Que c'est bossus!" Sans avoir le temps de terminer la syllabe, me voilà arrêter. Verrière ouverte: "Ouf!" (Après mon enquête: 150 pieds de course au sol). Je suis radieux de joie le sceau est brisé.

Je reste à bord, je me fais un auto-débriefing à la stupéfaction d'un cycliste qui s'est arrêté pour assister au cirque volant. Je venais à ce moment de comprendre d'où venait le petit rire au début de l'envollée. Ce n'était pas celui du pilote emballé par les conditions météo géniales mais changeantes, c'était l'ogre dévoreur de vélivoles arrangants. Vous le connaissez celui-là?

Je passe donc un coup de fil au club. Le téléphone portable possède une de ces valeurs incommensurable dans de pareils moments. Je transmet mes co-ordonnées géographiques, La GPS possède une valeur toute aussi prati-

que! La technologie au secours de l'incapacité, j'imagine. Je n'ai plus qu'à attendre, prendre quelques photos. Effectivement, la verrière ouverte pour évoquer l'effet d'évacuation. Le vent est calme! Je discute avec Madame Brisson, la propriétaire du terrain, pour lui faire parvenir une photo. "Mon mari ne me croira jamais," qu'elle me dit!

Mes collègues enjoués pour le moins dire sont galamment venus à mon secours. Je crois qu'ils sentaient déjà les arômes de la cuisine du restaurant, italien j'ajouterais, auquel ils auront droits selon la tradition. Le retour sur Bromont s'effectua en 3 heures et demi. Pas un record mais toute une expérience. Même que deux d'entre mes sauveteurs ont tout-de-même pu retourner en vol et constater que les ascendances s'étaient résorbées. Je crois qu'à la fin de la journée, je n'étais pas déçu, si ce n'est que ma ferveur pour le vol à voile venait de grimper d'un autre cran. Et dire que je n'ai tenu que 55 minutes, c'est mon seul regret. Finalement, je venais de me rendre compte que le facteur décisionnel est capital au cours de ces minutes critiques. Ne faites seulement que le calcul. La position du champs était 3,5 km en ligne directe avec la piste de Bromont. Un B4 chute à un taux moyen de 1000 pieds sur 9 km. À 1500, soit 1100 pieds / sol de Bromont je devais me rendre, théoriquement. Visuellement, dans ces conditions de subsidences je percevais une pente d'approche beaucoup moindre. Combien de fois lisons-nous ces rapports d'individus qui tentent d'étirer ce fameux plané final? J'ai horreur de piloter dans l'incertitude, pas vous? Il faut que je retourne en vol, cela presse. Je resterai accroché, c'est certain cette fois! ❖

The english version of this cross-country and outlanding adventure is available at the author's website: www3.sympatico.ca/marcarsenault/index

Updating the flight training curriculum

FOR SOME TIME NOW there have been rumblings that our clubs do not train new pilots to high enough standards. It must remain a discussion point whether or not the current accident rate is a reflection of our training, but at first glance one might say that it is.

Accepting that we can and should always seek to improve the way we do things, we have embarked on a program to upgrade the training of glider pilots in this country by introducing an enhanced curriculum. The current training is to be extended with some new exercises, designed to make pilots more proof against the types of error that are leading to today's accidents. We plan to hold seminars across the country this winter to disseminate the training materials to all clubs; this will include an updated instructor's manual, new instructor's air notes booklet and a new pilot training record.

Our training is lagging in the area of the modern sailplane. These have, for example, very flat glide angles and to go with this feature generally powerful air brakes (they no longer use spoilers) and they will spin readily. So too, modern training aircraft have good L/Ds, more of them will spin well and yet our training materials and methods are lagging behind.

To attend a cross-country seminar the generally accepted standard is the Bronze badge, yet how many pilots try to reach this level of competence soon after licensing? Note that licence standards in Europe generally equate to the Bronze badge (in Germany a 50 kilometre flight has to be completed as a licence requirement!). It is with this background that our committee has decided to take the bull by the horns and update our methods and materials as a matter of urgency.

Many readers will know that OSTIV has a Sailplane Development and a Training and Safety Panel — see box. The Training and Safety panel met in August most recently and Dan Cook, our National Safety Officer, and I attended. We met for three days, then took part in the flying seminar during which training methods were compared and evaluated. It was very interesting to fly with Europeans and to see that our training methods are not that different. However, one has to admit that in several areas we can and should enhance the training of pilots in our clubs.

The Europeans have started to emphasize more training in stalling and spinning. These are areas that are catching out pilots in many countries today, and our own accidents are

no different. The training materials here will emphasize further stalling and spinning exercises, to make sure pilots not only understand the glider's responses, but to enable the pilot to avoid stalls and spins. We'll introduce more situations from which pilots can inadvertently stall and spin, teach them how to recognize them, and so enhance their safety. In particular, we will recommend improvements to the teaching of recoveries from cable/rope breaks, the so-called interrupted launch.

The 45-degree diagonal cutoff to the base leg is a circuit modification to the standard rectangular pattern that has become standard in several countries. We propose to recommend more general adoption of this change. Differences to the way in which we teach circuit judgement and flying of the circuit were discussed. The use of airbrakes and approach control will be visited. More emphasis will be placed on the aerotow and emergency procedures. Revisiting the exercise list, we now propose a list containing approximately 45 separate exercises, some are new and several

are brought forward from the last page of the Student Progress Logbook. Several of the exercises are short and relate to flying the circuit and low-level emergencies, but would be done at height. For example the cable/rope break recovery exercise is to be done several times at height before a simulated break is performed at low altitude.

The SAC Board of Directors has agreed to the seminars across the country, and for all clubs to be shown and given the revised curriculum and training materials. The completely revised Instructor's Manual has been used since 2001 in instructor courses, and is to be further revised this winter. It will be generally available at the seminars. We plan to prepare a new Pilot Training Record (to replace the current Student Progress Logbook) that will have the complete list of flying training exercises on facing pages for instructor rating, and intermediate facing pages for instructor comments.

Look for your CFIs together with Safety Officers and senior instructors to attend local seminars early in the new year.

Ian Oldaker, Chairman

What is OSTIV?

WHAT DOES "OSTIV" MEAN — and what is the OSTIV Training and Safety Panel? Most glider pilots have heard about the FAI, IGC, and other international organizations. Some might have heard about OSTIV, but they probably don't know what it is.

OSTIV is a shortcut for the French: Organisation Scientifique et Technique Internationale de Vol à Voile, which in plain English stands for the international organization for soaring-related science and technique. There are three divisions in OSTIV:

- The Sailplane Development Panel (SDP)
- Training and Safety Panel (TSP)
- Meteorological Panel

This is only an explanation of what the TSP is dealing with. The panel was founded in 1973 by Bill Scull (UK), Fred Weinholz (Germany), and Ole Didriksen (Denmark). They met and exchanged information and good ideas regarding training and safety. A few years later some more coaches and CFIs attended the meetings and they did such a good job that this panel became part of OSTIV.

The OSTIV TSP deals with all matters of training and safety. Sometimes the panel approaches problems which have to be solved by sailplane manufacturers, and occasionally the TSP and SDP have meetings together, where joint concerns are discussed. Every second year the panel has a two day meeting somewhere in Europe. Every tenth year or so the meetings have taken place in USA in connection with the SSA convention.

At the time being, following nations participate in the TSP: USA, Canada, Finland, Sweden, Norway, Denmark, Germany, Holland, Belgium, Switzerland, France, and Australia. We want to have delegates from countries which are not participating in OSTIV TSP at the time. The profile of delegates is usually national chief flying instructors, national coaches, national accident investigators, national board members, etc. As the next meeting is scheduled in connection with the World Championships held at Lezno, Poland in 2003, we find it will be an excellent opportunity for new delegates to start participating at this occasion.

Sakari Havbrandt, OSTIV TSP chairman

Fly the airplane!

SO THERE I WAS, sitting on the ground, pre-launch checklist complete. I gave the thumbs up signal, and as I was going through my “one last check” ritual, the tug started to go. The early part of the launch went good in spite of the bumpy air. The light Russia tends to get bumped around, but control authority is very good so I had no problem staying behind the tug.

When I got to 5-600 feet, Bang!, cold swirling air filled the cockpit!

A quick glance showed me that the canopy had come open, but it was still attached to the hinge, and the lanyard had stopped it from going on over and hitting the wing. Needless to say, my normal intensity during tow increased an order of magnitude ...

In moments of potential disaster like that, it seems like everything is happening at once. My brain went into mega-multi-tasking mode. I was mentally flooded with, “I have a problem, how do I deal with it?” Somehow, FLY THE AIRPLANE came to the surface so I was able to stay behind the tug. Strangely, “don’t let your hat blow off” was also a priority! I yanked off my glider pilot goofy-hat and stashed it under my left leg. I knew that closing the canopy on tow might take two hands and was not an option.

Calming down a bit, I decided that, unless things got worse, I’d go on up on tow to 1000 feet and release there, hoping that would give me time to close the canopy. At 1000 feet I yanked the yellow handle. I was free and knew I could make it back home. It did take two hands to pull the canopy down and get it latched, so I let go of the stick. The nose dropped and the airspeed started to increase. In my rush to solve the problem, I’d forgotten to move the trim from tow to cruise.

With the trim problem fixed, I got the canopy closed and committed to land. About the time on downwind when I got abreast of the point where I planned to touch down, I opened the spoilers and Bang!, the canopy opened again! This time the lanyard’s metal ring that attached it to the fuselage fitting failed and the canopy swung over and hit the wing. But the hinges held and the canopy was still hooked to the airplane.

Fortunately, I’d had quite recent experience with open cockpit flying, so, though it was terrifying, I was no longer thinking about saving my hat. And I knew that with both hands occupied by stick and spoilers, the two extra hands I’d need to close the canopy were not available. I flew the airplane and made an okay landing.

Whew!... Obviously I didn’t need to open the canopy, so I sat in the cockpit for a while,

unbuckled, and studied the frequency and amplitude of my shaking hands...

As always at a glider field, folks gathered around and tried to determine why the canopy had opened in flight. There was much speculation about alignment of pins and diameters of holes to accept the pins, and on and on. The hinge-side latch pins let that canopy lever move forward to the stop. The latch side did not. What was wrong?

I let other folks study the problem. In the end, I calmed down enough to think about the problem, scraped off the adhesive foam tape I’d applied to the fuselage canopy rail, and voilà, the canopy latched fine!

I had applied the cockpit sealing foam tape just after I started flying #015, didn’t know the airplane, and thought the latch worked with the foam in the way, not noticing that the latch-side handle didn’t go all the way to the stop. It was an incident waiting to happen. In retrospect, I think that going up without taping the wing root/fuselage joint was a contributing factor. The canopy popped open during a bumpy climb where the air pressures inside the glider change, and popped again when I started playing with the spoilers, again an opportunity for differential fuselage pressure to change. But that’s conjecture — a theory I won’t be testing.

What did I learn?

Though the authorities make a distinction between the owner-operator of an aircraft and the pilot, it is not wise to trust either of them, especially when both of them are you and both of you think you know what you are doing. Get other people to check your work — even seemingly minor things like sealing the canopy.

Training definitely helps but can never fully prepare you for the unexpected. By definition, it’s something you didn’t expect. I’d like to thank every instructor I’ve gone up with who pounded, “fly the airplane” into my thought processes. It saved my airplane, my butt, and my hat.

Del Ogren

The Glider Pilot Licence: a licence to re-learn

ONE THING I’VE NOTICED in my brief flying career, so far, is that there seems to be no end of new things to learn and that the thrill of developing the next new skill is no less great than that of the previous or the first. While nothing so far has equalled the excitement of my first solo, it feels like with every season, if not every flight, there is some new skill to work on, whether it’s cross-country preparation and pilotage or simply coring thermals more efficiently. At the same time

though, it strikes me that in my enthusiasm for developing the advanced skills, I may be neglecting some of the basics. My checkrides illustrated that I could still handle the aircraft and keep myself in the right spot for each part of the flight, from tow to landing, but they didn’t show up the real flaws that my lack of currency may have engendered.

A couple of incidents set alarm bells off in my head and convinced me to go back to the basics of safe flight *thinking* and practise it as religiously and carefully as I practise thermal centering.

In the first instance, I allowed my enthusiasm to overcome my good judgement. Our club acquired a new glider this year, a lovely L-33 Solo. I’d watched other members fly it and discussed its characteristics with them. I’d decided in my own mind that I would wait for a nice calm day — a gliding day rather than a soaring day — take a 3000 foot tow and get to know the L-33 under the gentlest possible conditions.

One fine soaring day, however, I found myself strapped into the cockpit (albeit after a lengthy briefing) facing turbulent air and a crosswind that was strong and variable. New glider, relatively low time pilot, tough conditions — I’d count that as three strikes against the idea of flying on that day. On the other hand, I wanted to fly the airplane very badly indeed, and nobody else seemed to think I shouldn’t be able to do so.

The flight was, predictably, at the edge of my skill level. I had one hand on the release from “all out” to the final blessed moment when I released into strong lift at 2500 feet. I handled it, but just barely. My flying was adequate, my pilot skills were not. If I had been truly at the top of my game as a pilot, my judgement would never have allowed my ego and enthusiasm to risk a new glider — much less my life and that of the tug pilot. A simple delay of hours, or even a day or a week or two would have made a much less hairy initiation into the new ship. Furthermore, that aerotow spooked me. Even though the L-33 proved delightful to fly and to land after release, I was very nervous about flying it again. I made darn sure my second flight featured a wind straight down the runway. It was much less stressful!

The second impulse to reflect was not born of any particular flight or mistake. Rather, it was an epiphany of sorts born of a discussion about typical student problems. One of our instructors noted that some students can do all the required elements on command, but can’t seem to do them consistently without prompting, or put them all together on the same flight. As we talked, I mentally reviewed my own flying. Was I really taking a good look for traffic before turning on my last soaring flight? I couldn’t remember. Did I do a proper

SWAFTS check on downwind? I thought so, but I wasn't sure. How about my radio procedures? Did I call my position and my intentions properly in flight and in the circuit? It's easy to get sloppy once you have a fair bit of experience as PIC in a particular airplane. I wondered whether my own pilot skills were keeping up with my flying skills.

My resolve for the next flight was (and will remain for the rest of the season) to work intensely on some fundamental skill in each flight, and to try to be as committed to the mental part of the game as I am to the physical. If we really want this sport to be safe, our re-currency training must be part of every flight and not merely the focus of a couple of checkrides at the start of the season. Good pilot decisions come from good pilot practice; simply flying more is not enough. These are some of the lessons I'm taking from my experience.

First, be current, but don't take it for granted that recent flying alone makes you competent. Good judgement is not simply inherent; it is based on accumulated experience and requires a conscious willingness to exercise it. It's easy to rationalize your way into a dangerous flight. Don't.

Second, realize that as PIC only you can make the most important decision: whether to fly at all at that moment. I ignored the alarm bells my subconscious was sounding because other pilots didn't give any evidence of having heard them also. But how could they? In the absence of grossly evident incompetence, the other pilots are likely to presume I know what I'm doing.

Third, practice isn't just for pre-licence students; we should all be students of flight, and we should find in every flight opportunities to practise both basic and subtle pilot skills. When you fly, pay attention to the process, not just the result. Practice does not make

perfect; *perfect practice* makes more nearly perfect. The result may be an efficient climb in a thermal; the process is a combination of lookout skills, flying skills, and pilotage. In a competition, gaggle flying between and in thermals, which of those skills is likely to be paramount?

I've always known I have a lot left to learn about soaring; now I know I have a lot to keep relearning as well.

Dave Luukkonen
Saskatoon Soaring Club

It's vital to know your weight & balance

"What is your weight?" is perhaps an impertinent question in polite circles, but not when it comes to flying and knowing the position of your centre of gravity! Centre of gravity (cg) changes are very noticeable in say a small glider such as a PW5 or L33 when the pilot lifts his or her legs, or leans forward a bit. The glider responds quite noticeably! The Blaniks that are commonly used for training are forgiving machines generally but not when improperly balanced. "How can this occur?" you may ask.

Gliders are designed according to the Joint Airworthiness Requirements (JAR-22) to fly over a large speed range and to be fully controllable and recoverable from all normal and what are called emergency manoeuvres over an allowable range of the centre of gravity. The glider is still flyable outside the certified cg range but it will be a different machine to handle. For example with the cg somewhat ahead of the allowable range, the glider will have less elevator authority and will feel heavy and may be difficult to fly at the normal thermalling speeds. It will also be difficult to flare properly for a good landing unless it is being flown faster than normal. None of

these situations are desirable; added to which it is now being flown illegally.

For the L13 and L23 Blaniks the allowable cg range is from 23% to 38% of the mean aerodynamic chord, or MAC. This translates to only a seven inch range! The maximum permissible all-up weight for both types is 1101 lbs (500 kg).

The pilot weight, including parachute, in the front seat solo can reach a practical maximum of about 220 lbs (100 kg) without overloading the L13 or 23 or exceeding the forward limit of the cg. This practical limit is for the reason that during dual flight, a second person is in the rear seat and the maximum gross flying weight can come close to being exceeded. Such a person would have to fly with an instructor whose weight including parachute is less than 175 lbs (79 kg).

Practically this means that the instructor must weigh less than about 150 lbs (68 kg). How many of us fit this description? With this combination the cg is at the most forward position (23% MAC), meaning that the elevator authority is now becoming challenged! When flown solo by the front pilot, the glider will feel a bit different and in fact less heavy.

When the pilots are light in weight, the cg moves back, and this can lead to a potentially dangerous situation if not watched carefully. Not only will the glider feel somewhat twitchy in pitch (have any of you light pilots done a few PIOs on takeoff recently?), but also it will be a different machine when recovery from a full spin is needed. Some gliders, with the correct recovery actions, will take some time to respond to the control inputs before the pilot will see the glider begin to recover. Others will be very difficult to recover from a spin, and may need extraordinary measures such as releasing the straps and leaning well forward or flapping the wings to effect a recovery. Don't be alarmed! There are actions



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that can and should be taken now to keep the cg within the proper range.

The minimum pilot weight is quoted as 154 lbs (70 kg) solo in the front seat. This places the centre of gravity at 38% of MAC. What does this mean? It means simply that the centre of gravity of the glider is now at the rearmost allowable position, a position that the pilot will not have experienced during dual training!

"How does the glider feel when solo under these conditions?" is the next question coming to mind. As we rarely add more than say 33 lbs (15 kg) of ballast to the front seat, a 106 lb (48 kg) pilot plus 15 lb (7 kg) parachute will have the cg at the rearmost allowable position when flying solo. Add an instructor who is there for all the pre-solo flights (!) and the cg moves forward. With a typical-weight

instructor plus parachute of say 180 lbs (82 kg) the cg moves forward to 31% MAC. This is a substantial amount and the solo student pilot will definitely notice the change in handling characteristics when first flying solo.

A desirable situation is to try to place the solo position of the cg close to the position that the student will have experienced during training. This will keep surprises to our students to as few as possible. With a large position change to the cg from dual to solo with a light pilot, consider what extra weights should be carried during dual training. If we accept a position of approximately 28 to 32% MAC as normal during training and therefore as desirable for early solo flying, we should attempt to keep the cg close to this value. When flying solo this pilot should therefore attempt to fly at a total pilot weight of about 185 lbs (84 kg), not at the published (manual)

minimum of 150 lbs (68 kg). This will place the cg at 32.5% MAC, still behind the position with the 180 lb (82 kg) instructor.

The lightweight pilots among us should always carry ballast in the glider. Tables of pilot and parachute weights are in the glider manuals; however, these do not give the cg positions for all combinations of weights. The Balance Chart in the L23 manual does provide a method to determine the cg position for any pilot/weight combinations. It is not easy to use but can be understood with some guidance. All lightweight pilots should discuss with their instructors what weights to add when flying dual and solo, so as to keep the solo cg close to the same position that they will have experienced throughout their training.

Ian Oldaker, chairman
Flight Training & Safety committee

Sky highways

from page 12

we need to land to disgorge Jim (followed by the mandatory visit to the facilities after 4.5 hours airborne).

Moments later the motorglider and I launch again for further flights afield into the remote centre of the southern part of the island. During my first year of ownership, I always assumed the engine would not start in flight and flew the glider accordingly so that I was always within gliding distance of a suitable airport — virtually any airport. Without a ground team to lend support during off-field landings this has been a prudent strategy. However, hundreds of starts with and without choke have proven the 912 engine is exceedingly dependable.

Now, during solo flights, I am experimenting with much lower safety altitudes and finding thermals readily over the dark rocky areas and slopes facing the sun. They become harder to find at higher altitudes because they drift downwind from their source and often break up with wind shear and turbulence. However, down low, they are much more dependable and easy to find. With the propeller unfeathered and the engine ready to start, flight below one thousand feet is now practical for us and it opens many more opportunities. A few hours of rewarding soaring follows during which I have lots of time to realize how lucky Victoria-based glider owners are with such a broad selection of lift phenomenon: wave, thermal, convergence and slope soaring. Because there are no launching facilities at the international airport, that fleet of soaring aircraft boils down to the self-launching Xtreme. Have you thought of a motorglider to expand your soaring horizons?

Howmuchizit?

Many gliding enthusiasts avoid considering a motorglider because they see the additional cost of an engine and its operation as

exorbitant. But it isn't! This week, we flew 18.3 hours in six days and logged 5.5 hours of engine time with a total fuel burn of seven gallons for this fuel-miserly 81 hp engine. (Note: much of the engine time is low power after the initial four minute climb to 3000 feet.)

Using mid-grade fuel at 76 cents a litre, fuel costs total only \$5.32 for the week. Adding ten dollars an hour for engine and prop overhaul as well as oil changes we find our average hourly cost to operate an engine and propeller this week is \$3.30 an hour for the 18.3 hours. So, tell me, how does that compare to the costs for the winch launch or towplane at your club? Now, add in the cost of operating a vehicle and trailer and your ground crew. If you love the effort spent driving around the country retrieving your glider, don't place an intrinsic cost on that time.

In balancing this equation of values, don't forget that the motorglider can be used as a cross-country airplane in which you can go directly to a destination and not be concerned about lift conditions ... Who could ask for anything more? ❖

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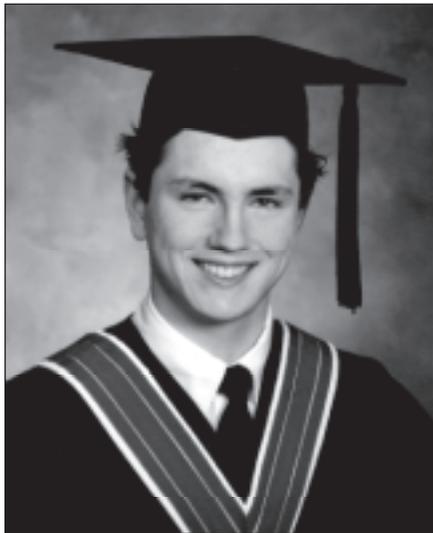


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Peter Corley Memorial Scholarship winner for 2002

Congratulations to Craig Cameron Kirschner, this year's recipient of the Peter Corley Memorial Scholarship. Here is some background about Craig:

Club: Vancouver Soaring Association

Age: 18

Educational institution:

Simon Fraser University freshman in the co-op science program.

Gliding experience:

around 100 flights – solo in a variety of gliders, has an FAI "C" and a SAC Bronze badge. Graduate of the Air Cadet League of Canada's glider pilot training program at Comox, BC.

SACAG M

Québec, 8 Mar 2003

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www.cvvq.net/SAC_AGM.html

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for novice and "expert"

SAC membership 2002

| Club | 10 yr avg. | 2002 total | % avg |
|---------------------------|---------------|---------------|-----------|
| ASTRA | 8.5 | 8 | 92 |
| Air Cumulus | 5.0 | 5 | 100 |
| Air Sailing | 20 | 17 | 85 |
| Alberni | 15 | 20 | 129 |
| Base Borden | 10 | 0 | 0 |
| Bluenose | 31 | 25 | 81 |
| Bonnechere | 7.8 | 7 | 90 |
| Bulkley Valley | 4.3 | 3 | 70 |
| Central Alberta | 11 | 17 | 153 |
| Champlain | 62 | 34 | 55 |
| Cold Lake | 18 | 6 | 35 |
| COSA | 32 | 22 | 68 |
| Cu Nim | 62 | 58 | 96 |
| Edmonton | 55 | 51 | 93 |
| Edm. Gliding (cadets) | 2.0 | 1 | 50 |
| Erin | 32 | 30 | 93 |
| Gatineau | 91 | 87 | 96 |
| Grande Prairie | 9.4 | 4 | 43 |
| Great Lakes | 17 | 27 | 157 |
| Guelph | 27 | 32 | 119 |
| London | 35 | 30 | 87 |
| Montréal | 99 | 95 | 96 |
| Mont Valin | 3.1 | 4 | 129 |
| Outardes | 28 | 31 | 113 |
| Pemberton | 10 | 11 | 110 |
| Prince Albert | 14 | 18 | 129 |
| Québec | 45 | 53 | 117 |
| Regina | 26 | 13 | 50 |
| Rideau Valley | 31 | 28 | 90 |
| Rockies | 18 | 31 | 174 |
| Saskatoon | 16 | 17 | 105 |
| Silver Star | 10 | 12 | 120 |
| SOSA | 152 | 180 | 119 |
| Swan Valley | 4.5 | ? | - |
| Toronto | 21 | 20 | 97 |
| Vancouver | 90 | 87 | 97 |
| Winnipeg | 63 | 58 | 91 |
| York | 95 | 117 | 124 |
| Non-club | 20 | 31 | 153 |
| Air Cadet League | | 5 | - |
| <i>totals</i> | <i>1301</i> | <i>1288</i> | <i>99</i> |
| <i>membership in 2001</i> | | <i>1346</i> | |

FAI General Conference highlights

The 2002 General Conference of the FAI was held in Dubrovnik on 11-12 October. Canada was represented by Jack Humphreys, FAI vice-president for Canada, and Bob Carlson, delegate to CASI. Meeting highlights follow:

FAI fees The executive council asked for and was granted one more year to finish the new subscription schedule. Indications from the floor of impatience at the slow pace of these efforts were noted by the council and the one year extension was granted on the promise of action next year. The problem seems to be in a lack of uniformity in the reporting of "Air Sport Persons" by the aero clubs. In particular, Private Pilot Licences and

aeromodelers were not reported uniformly. The executive council will issue guidelines to assist in reporting.

SAC comment from Jim McCollum

SAC has argued for a long time, both with the FAI and the Aero Club, that Canada's annual subscription appeared to be unreasonably high compared to countries like the USA, UK, and France. Our assessment is based, in part, on the relatively large number of private pilots licences in Canada, as well as licences held by Air Cadets, even though the Aero Club has no way of collecting revenue from them (nor does the FAI offer services that would encourage organizations like COPA and the Cadets to join the Aero Club and thus assist with Canada's FAI membership subscription).

Airspace The discussion about airspace was concerned with the simplification of European airspace and has little relevance to us except insofar as it presages similar changes here. Concern was expressed at the tendency of commercial operations to grab airspace to the detriment of sport aviation purely for controller convenience, always of course, using safety as the excuse.

An interesting proposal was advanced as a philosophical point; the concept being that commercial operations should pay a fee for the use of public airspace and the fee should be based on the amount of airspace used. It would then be in the commercial operators' interest to use the *least* airspace that they can consistent with safety rather than *any* amount for convenience. This is a political point which probably should be addressed through our elected representatives.

WADA [drug testing for sports competitors]

FAI already publishes a list of banned substances and the general consensus is that most air sports will not be affected by WADA. Only those sports such as Olympic demonstration sports and some high profile aerobatics competitions would warrant the attention of WADA. In any case FAI is dedicated to minimizing the effect of external bodies such as WADA on our activities.

Elections We are pleased to announce that Bob Carlson [a member of SOSA] has been elected as the President of CASI [FAI's *airsport general commission*], and that [Canadian] Robert Clipsham has been returned to his position on the executive council.

World Air Games Work continues on simplifying and streamlining the World Air Games concept. In particular new events such as Artistic Aerobatics (aerobatics performed to music) are being tested and initial reports look promising. The object is of course to find events more "media friendly" than our traditional world championship events.

Jack Humphreys (York Soaring)
FAI Vice President for Canada

SAC Video Library

Ted Froelich

2552 Cleroux Crescent, Gloucester, ON K1W 1B5

(613) 824-6503 ph & fax- call first if faxing

<fsacvideo@aol.ca>

Rental is free but you pay \$5 shipping and return postage. Send cheque to Ted Froelich at address above. Copies: \$3 per tape + 10¢/minute of video duration + \$5 shipping.

All films now also available on DVD.

Professional videos

- P1 *Running on Empty (USA)* 22 min
Top pilots compete in Arizona. Narrated by Cliff Robertson.
- P2 *Free flight (UK)* 51 min
Joys and frustrations of soaring in the UK, history, and how gliders are made. Derek Piggott, Hans-Werner Grosse featured.
- P3 *Pure flight (UK)* 30 min
Cliff Robertson tells power pilots about soaring in Vermont and Colorado.
- P4 *Soaring (USA)* 20 min
A history of soaring and the 1988 Region 8 competition.
- P5 *Soaring – in harmony with the wind (USA)* 14 min
Excellent ridge soaring from Stowe, VT.
- P6 *Delta Fox (France)* 24 min
A flight over the French Alps (to music).
- P7 *Riding the Mountain Wave* 27 min
The 1982 Cowley wave camp (CBC).
- P8a *Wind Born* 55 min
A young lady learns to fly gliders and then goes on a spectacular trip across the Southern Alps.
- P8b *Champions of the Wave* 52 min
World championship won by New Zealander. Good time lapse footage of wave.
- P9 *Soaring in France*
Collection of 20 professional and amateur soaring films from 4 to 35 minutes.
- P10 *25ème Championnat du Monde* 37 min
1997 World championships in France.
- P11 *Silent Flight (Canada)*
Gliding – good video from the “Flightpath” series on Discovery Channel.
- P12 *Bayreuth 1999*
The World championships in Germany.
- P13 *Over Canada [NEW]*
Coast to coast, seen from a low-flying aircraft.
- P14 *Soaring, your sport for the new millenium*
Short soaring promo video based on P8a.

- P15 *Apollo 11 & Columbia '59 (USA) [NEW]*
The first landing on the moon and the Space Shuttle Columbia.
- P16 *Apollo 13 (USA) [NEW]*
Dramatization of this eventful moon flight.
- P17 *Space (USA) [NEW]*
Secrets of the unknown.
- P18 *The Space Shuttle (USA)*
From the Discovery Channel.
- P19 *The blimp is back* 60 min
History of the steerable hot air balloon.

Canadian Club videos

- C1 *SAC 50th anniversary (eng & fr)* 15 min ea.
Soaring from Hope to Halifax.
- C2 *GGC and Pendleton's 50th anniversary*
Tiger Moth gathering, giving rides and tows. Displays, aerobatics and speeches.
- C3 *Base Borden Soaring Group*
Winch soaring at its best. Well filmed/edited.
- C4 *Chasing Phantoms, Hope BC* 8 min
A professionally done filmed slide presentation with musical background, and some breathtaking aerobatics.
- C5 *Winnipeg Gliding Club* 29 min
TV documentaries and some interesting amateur shots at the field.
- C6 *1982 Nationals at SOSA* 27 min
High quality documentary by Molson's.
- C7 *Bluenose Gliding Club* 90 min
a. The Harris Hill Soaring Museum
b. The quiet challenge
c. A motorglider visit from Florida
d. Sailors of the sky
- C8 *1989 Flying Week at Bluenose*
A documentary of activities at Stanley, NS, and a visit to St. Raymond, PQ.
- C9a *Interview with Tony & Ursula* 32 min
TV interview answering many layman's questions about soaring in general and is very useful in introducing the public to soaring.
- C9b *Building the AV-36* 37 min
The flying wing gliders built by the “Tendardee” club members in Calgary in the early 50s. Flying activity in southern Alberta that led to the discovery of the wave at Cowley. Transcribed from 8mm film by builder Bill Riddell who does a “voice-over”.

- C10 *SOSA in the 60s*
When club was in Brantford (from 8mm).
- C11 *Soaring at GGC in the early 70s.*
Soaring before fibreglass (from 8mm).
- C12 *AVV Champlain (French)* 5 min
Intro flight over Eastern Townships

Educational videos

- E1 *To be a Pilot (TC)* 21 min
Overconfident student prangs the club's Cessna 150 in a crosswind landing but is given a second chance.
- E2 *The Wrong Stuff (TC)* 51 min
A warning to complacent pilots.
- E3 *Ian Oldaker et al (SAC)*
Eight interesting 1 hour lectures.
a. *Dangers on tow* – Ian Oldaker
b. *Airspace use* – Kathy Fletcher (TC)
c. *Stall prevention on final*
d. *Joining gliders in a thermal* – Ian
e. *Stress overload* – Ian
f. *Dehydration* – Dr. Hanson (TC)
g. *Post-solo training*
i. *The important first flying lesson* – Ian
- E4 *Collision Avoidance in gliders (SAC)*
How to enter a gaggle safely.
- E5 *Why Airplanes Crash (NOVA)*
- E6 *Better Communication for Better Safety (TC)* 26 min
- E7 *Safety by Stress Management (TC)* 40 min
- E8 *Accidents and Pilot Planning (SAC)* 24 min
- E9 *When in Doubt (TC)*
About ice on the wings.
- E10 *Bon Voyage. But ... (External Affairs)*
Travel tips for Canadians abroad.
- E11 *Speed to Fly*
Karl Striedieck from a cross-country video series. Other videos from the same series (Navigation & Map preparation, Thermals & thermalling, Soaring physiology, Instrumentation, Landing out, and Soaring weather) can be ordered from “Airscares, Inc.”, (864) 574-4857, fax (864) 574-1886.
- E12 *CAS Symposium* ~45 min ea
Eight lectures in Hawkesbury in 1999.

club news

Winnipeg Gliding Club

To sum up our flying season in a word, one could only choose "busy" as the best way to describe life at the Winnipeg Gliding Club field in Starbuck. From the get-go in early April with a satellite operation in effect at a small rural airport 100 km south of Winnipeg, to the frantic pace with which our Chief Towpilot dealt with an emergency Airworthiness Directive on our Pawnee. Everything seemed to spool up to 100 % and stay there throughout the entire season.

As mentioned our season began with the pre-season checkflights taking place at Altona. The airport is community owned and operated with a very enthusiastic general aviation crowd, eager to host us for the month of April. Here, we were able to complete most of the checkflights for our licensed pilots and instructors. There were even a few days warm enough to provide several enjoyable soaring flights, one that even managed to make a run to the International border. The entire operation was returned to home base after four weekends of flying and under some trying weather on the way home, all aircraft were safely stored back in Starbuck.

Our student population swelled with the largest intake ever witnessed. A completely revised ground school was presented by CFI Fred Sharp and other instructors, many of whom gave lectures throughout the twelve week course. Flights began mid-May and with four nights a week plus weekend morning instruction being offered, our instructors were quite busy, many having to do double duty while others were on holidays.

The season progressed safely with only a few incident reports being handed in, nothing of any serious note to report on here. Our Pawnee, purchased in 2001, performed superbly and served us well, until an emergency AD was issued in late September. At issue was an

internal bolt in the engine, which had to be changed within ten flight hours. Our Chief Towpilot, Jeff Bell, made several calls around to procure the proper bolt and in conjunction with our AME, only five days of service were lost. Fortunately our backup towplane (the now anemic by comparison Citabria) was still in operation, so our flying did not suffer.

Another potentially more serious AWD was issued this year for our two Krosnos. At fault were the two brackets that hold the horizontal stabilizer on top of the vertical fin. The originals were of a thinner material and may be prone to cracks. We had discovered one with apparent cracks (shown by a darkening line of less than 1/32" in length) on a previous inspection 2 years ago, and had already had it replaced. This AWD may have been driven by a Service Difficulty Report that was issued by our AME after the repair. As of this writing, new parts have been installed on the second Krosno and the glider put away for the winter. No down time was incurred with this AWD.

We were also busy with some promotional items throughout the year. At Christmas we offered gift certificates and videos as an alternative for the hard-to-buy-for person. From one advertisement in the local daily paper we were able to sell over fifty packages. We also worked with the provincial tourism board to ensure that we would be given mention in the summer 2002 guidebooks. A local community television station replayed a five minute spot that aired in 2001. This was shown several times throughout the summer months with good response each time. We also captured the centre section of the "other" local daily with an afternoon spent with the reporter and photographer. The writeup and pics did a great service to our club.

A late season Fly-In BBQ for the power pilots offered us the chance to wave our flag, with a privately owned Jantar being towed overhead the airport and put on display for a sunny Sunday afternoon. These events are high visibility and while they do not attract

as many public eyes as one would hope, they are a great way of showing the sport off.

Throughout the season our membership took advantage of several organized BBQs and theme nights, the last being a potluck dinner to bid farewell to the season just passed. As one would expect with the end of the flying season on the prairies, we were treated (tortured?) with an early snow, not enough to stay around, but enough to remind us what we are in store for during the next six months. As most pilots have heard before, there is always next year.

Mike Maskell

The absolutely most basic rules of glider flight

Rule 1 – Don't collide with anything

Rule 2 – Fly the ship
(no matter what's going to hell around you)

Rule 3 – You've got to land
(if you think you'd rather not, why did you take off?)

Rule 4 – Everything else: have fun

Cu Nim Gliding Club

Well, what has the season been like for you? There have been no major accidents this year at Cu Nim. Our number one priority is to fly safely. There was a repair to some popped rivets on the tail of one Blanik, and two canopies had to be repaired. So maybe we can't say it was totally accident free. Phil Stade did a great job reminding us to pay attention to certain critical things like speed and properly banked turns in the circuit, and Phil also keeps reinforcing our safety culture.

There have been many individual achievements so far this year: two members were licensed and five soloed. Dave Rolland ven-

| | |
|---------------------------|-------------------------|
| DG-303 Elan Club/Standard | 1:41.5/43, acro +7, -5g |
| DG-800S 15/18 | 1:46/51.5 |
| DG-808B 15/18 SOLO 53hp | 1:46/51.5 |
| DG-505 ORION 17/18/20 | 1:acro/40/44 |
| DG-505 MB 20/22 SOLO 64hp | 1:44/47 |
| DG-1000 18/20 | 1:acro/43/46.5 |



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Happy New Year! See you next flying season.

Mel Blackburn



ured cross-country, landing at Claresholm, Vulcan, and Okotoks airports. To be fair, I kind of enticed Dave to come and land at Vulcan ... I just wanted some company.

Gord Taciuk is back flying the single seaters after a few years absence in Australia. Peter Neary seems to be having a great time in his Open Cirrus, and welcome back to Cu Nim to Al Stirling. Tim O'Hanlon joined us from SOSA, bringing his SZD-55, and he is figuring out the Cu Nim weather (I notice that he comes to fly on all the best days!). Tony Burton learned to fly his new Russia and is now, once again, hard to keep up with. Congratulations to all.

The soaring weather has been a bit better this year than last, but still not great, and I long for another week like we had for the cross-country week in 2000 ... perfectly spaced cumulus off to the horizon.

I managed to fly in Valemount this year for the first time. Darwin Roberts from Cu Nim was there as well and past members Mike Glatiotis and Dick Mamini. The flying was organized by VSA, mostly Joe Gegenbauer. Valemount is a spectacular place to soar. Mountains, glaciers, and peaks close by the airport all around. From the face of Mount Robson it's an easy glide back to the airport. Even the rainy days were fun! Ron Cattaruzza came out from Edmonton for one good flight. Then he drove back overnight 560 km on a Friday so the glider could be available at ESC on Saturday.

Maybe Cu Nim should do a club safari to Valemount? Or maybe a club safari to some of the airports out on the prairies would be a fun (and easier) thing to do? What about Vulcan, Medicine Hat, Drumheller or Bow Island? There are many small airports around Alberta that would be fun to fly at. We should try some with an eye out to selecting a good site for the 2005 Nationals. Two key elements of a logistically easy safari are that everything except the towplane goes to and from the location on a trailer, and the towplane goes

with a towpilot who does not take a vehicle. The important thing is no extra trips driving back and forth.

We have discussed what the nature of Cu Nim should be like in five or ten years time. I do not think a club can stay the same forever. In my view, a club needs to grow or it will shrink. I believe we need to invent new ways to serve our members. Staying the same will not work over the long term.

One of our members has proposed and volunteered to staff a concentrated two weeks of instruction next spring. This is an excellent new way to deliver service to members. There are other new things we can try as well. One of my favourite topics, easy to say but not that easy to deliver, is to have tows available every day during the best months of April, May, June (or May, June, July). How can we do this? Is this a worthwhile thing to do?

Several members are reviewing our glider fleet with an idea to make changes to better serve our members. It's important! Provide what *current* members want and members will stay longer; guess right about what *new* members will want and new members will be attracted.

This summer was our first year with a warm building, complete kitchen, showers and flush toilets. Wow! It sure was nice to have a warm dry place to have dinner on some evenings. The season-end awards party on 2 November was the first really big affair to be held in the new clubhouse.

What will the 2003 soaring season bring for us all? Evenly-spaced cu as far as one can see, new members, new achievements, lots of great flying for all of us in this wonderful sport. Is it time for someone to soar from Cu Nim to ESC or Cold Lake (or vice versa)? Tell you what, if anyone soars the 349 km from ESC to Cu Nim I will personally drive you back! Any day, any time — phone me at work.

Al Hoar

† Jim Henry

On 3 October 2002, the Montreal Soaring Council lost one of its most unique personalities. Jim Henry, MSC past president, board member, instructor and towpilot passed away at his home at Lac Barron in the heart of his beloved Laurentian Mountains. Jim had been ill for several months prior to his passing. Jim joined MSC somewhere about 1965, though the exact date is a little hazy by now, and shortly afterwards joined a syndicate in a Nimbus, (later upgraded to a Nimbus 2C), with George Adams, Ian Martin, and Hans Baeggli. Several years later Jim and I became partners in the 2C.

In addition to the numerous appointments held in the club, in his other life as a long time member of the now Bombardier family, Jim played a leading role in the development of the Challenger as well as spending many hours in stress analysis work for the CF-18. After his official retirement Jim spent time in Ottawa working for Transport Canada and also served for many years as Chairman of the SAC Technical committee, working on arranging the type approvals for many of the gliders being imported into Canada at that time. And, just before taking ill in June, so we are told, Jim had applications out for a number of positions including one at the observatory on Hawaii!

An Irishman to the last, Jim had the wonderful ability to enjoy life to the fullest. Jim gave his utmost, whether riding his horse, driving his motorcycle, sailing in any one of a number of boats, flying his ultralight, scuba diving with his pals in the Caribbean, or entertaining his friends over a jug or two after a day of flying and investing the day's activities with his own unique sense of humour.

My personal memories of Jim are those of a man with a great sense of humor, and a relaxed view of those aspects of life that were not life-threatening which, in his view, were most of them. Yet, when professionalism was required, Jim would brook nothing but the best that one could give. There are far too few Jims in this world of ours and now, unfortunately, he too, is with us no more. But he has not really gone — the stories of his doings, which have entertained us so often in the past, will be with us as long as there are some of us around to remember them. And so, his memory will be with us still. Rest in peace my friend.

Peter Trent

FAI badges

Walter Weir

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

The following badge legs were recorded in the Canadian Soaring Register during the period 8 September to 12 November.

GOLD BADGE

| | | |
|-----|--------------|-----------|
| 300 | Frank Pilz | Vancouver |
| 301 | Tracie Wark | SOSA |
| 302 | Otto Doering | Montreal |

SILVER BADGE

| | | | | | |
|-----|---------------------|-----------|-----|------------------|-------------|
| 951 | Evelyne Craig | Rockies | 956 | Michael Viechweg | SOSA |
| 952 | Allan Wright | Pemberton | 957 | Martin Jones | Rockies |
| 953 | Remy Knoerr | Gatineau | 958 | Yves Bastien | Montreal |
| 954 | William VanderBurgh | York | 959 | Gerry Bunder | Great Lakes |
| 955 | Matt Chislett | Winnipeg | 960 | Francis Miquet | Montreal |

DIAMOND GOAL and GOLD DISTANCE (300 km goal flight)

| | | | | |
|-------------|---------|----------|--------|----------|
| Terry Healy | Toronto | 305.7 km | SZD-55 | Conn, ON |
|-------------|---------|----------|--------|----------|

DIAMOND DISTANCE (500 km flight)

| | | | | |
|--------------|----------|----------|--------|---------------|
| Otto Doering | Montreal | 500.8 km | DG-400 | Invermere, BC |
|--------------|----------|----------|--------|---------------|

DIAMOND ALTITUDE (5000 m gain)

| | | | | |
|---------------|-----------|--------|-------------|------------|
| Alan Hoar | Cu Nim | 5900 m | Std. Cirrus | Cowley, AB |
| Scot Harrison | Gatineau | 5210 m | Blanik L-13 | Cowley, AB |
| Derek Brown | Cold Lake | 6200 m | Blanik L-13 | Cowley, AB |

GOLD ALTITUDE (3000 m gain)

| | | | | |
|---------------|-----------|--------|-----------|------------------|
| Frank Pilz | Vancouver | 3640 m | ASW-20 | Hope, BC |
| Stirling Ward | Vancouver | 4120 m | L-33 Solo | Hope, BC |
| Tracie Wark | SOSA | 3100 m | LAK-12 | Tocumwal, Austr. |
| Otto Doering | Montreal | 3410 m | DG-400 | Minden, NV |

SILVER DISTANCE (50 km distance flight)

| | | | | |
|---------------------|-------------|---------|-------------|-----------------|
| Evelyne Craig | Rockies | 51.6 km | PW-5 | Invermere, BC |
| Allan Wright | Pemberton | 51.3 km | L-33 Solo | Pemberton, BC |
| Bob Hagen | Edmonton | 69.0 km | ASW-15B | Chipman, AB |
| William VanderBurgh | York | 61.1 km | PW-5 | Arthur East, ON |
| Matt Chislett | Winnipeg | 51.6 km | Std. Cirrus | Invermere, BC |
| Michael Viechweg | SOSA | 54.9 km | 1-26E | Rockton, ON |
| Martin Jones | Rockies | 55.2 km | Discus B | Invermere, BC |
| Yves Bastien | Montreal | 59.0 km | PW-5 | Hawkesbury, ON |
| Gerry Bunder | Great Lakes | 51.2 km | Ka6CR | Colgan, ON |
| Francis Miquet | Montreal | 59.0 km | PW-5 | Hawkesbury, ON |

SILVER ALTITUDE (1000 m gain)

| | | | | |
|---------------------|---------------|--------|------------|-----------------|
| Evelyne Craig | Rockies | 1640 m | PW-5 | Invermere, BC |
| Allan Wright | Pemberton | 1340 m | L-33 Solo | Pemberton, AB |
| Drew Wilson | Great Lakes | 1350 m | ASW-19 | Colgan, ON |
| Remy Knoerr | Gatineau | 1250 m | Jantar | Pendleton, ON |
| William VanderBurgh | York | 1740 m | 1-23 | Arthur East, ON |
| Matt Chislett | Winnipeg | 2280 m | Std Cirrus | Invermere, BC |
| Martin Jones | Rockies | 1610 m | Discus B | Invermere, BC |
| Craig Kirschner | Vancouver | 1850 m | L-33 Solo | Hope, BC |
| Martin Detering | Montreal | 1190 m | LS-1 | Hawesbury, ON |
| Gerry Bunder | Great Lakes | 1220 m | Ka6CR | Colgan, ON |
| Francis Miquet | Montreal | 1470 m | PW-5 | Hawkesbury, ON |
| Jacobus Steyn | Prince Albert | 1370 m | K-7 | Birch Hills, SK |
| Brendan Yetming | Great Lakes | 1480 m | SZD-48 | Colgan, ON |

SILVER/GOLD DURATION (5 hour flight)

| | | | | |
|---------------------|-------------|--------|------------|-----------------|
| Stirling Ward | Vancouver | 5:16 h | L-33 Solo | Hope, BC |
| Kazimierz Bulka | York | 5:10 h | 1-26 | Arthur East, ON |
| Evelyne Craig | Rockies | 5:40 h | PW-5 | Invermere, BC |
| Allan Wright | Pemberton | 5:21 h | L-33 Solo | Pemberton, BC |
| William VanderBurgh | York | 6:04 h | PW-5 | Arthur East, ON |
| Matt Chislett | Winnipeg | 5:14 h | Std Cirrus | Invermere, BC |
| Martin Jones | Rockies | 5:11 h | Discus B | Invermere, BC |
| Martin Detering | Montreal | 5:25 h | LS-1 | Hawesbury, ON |
| Gerry Bunder | Air Sailing | 5:16 h | Ka6E | Belwood, ON |
| Zdzislaw Oczynski | York | 5:33 h | 1-23H15 | Arthur East, ON |
| Miguel Londono | York | 5:04 h | 1-23 | Arthur East, ON |
| Brendan Yetming | Great Lakes | 5:14 h | SZD-48 | Colgan, ON |

SAC records

Roger Hildesheim

49 Maitland Street, Box 1351, Richmond, ON K0A 2Z0
(613) 838-4470, <Lucile@istar.ca>

The following Canadian record claims have been received as of 9 November 2002:

| | |
|-----------------|-----------------------------|
| Pilot | David Mercer |
| Date/Place | 8 October 2002, Cowley, AB |
| Record type | 100 km Triangle speed, Club |
| FAI category | 3.1.4h |
| Sailplane type | Genesis 2, C-GBKK |
| Speed claimed | 115.6 km/h |
| Task completed | 3 GPS turnpoints |
| Previous record | unclaimed |

| | |
|-----------------|----------------------------------|
| Pilot | David Mercer |
| Date/Place | 13 October 2002, Cowley, AB |
| Record type | 100 km Speed to goal |
| FAI category | SAC only |
| Sailplane type | Genesis 2, C-GBKK |
| Speed claimed | 113.0 km/h |
| Task completed | Cowley GPS start to Champion, AB |
| Previous record | Tony Burton, 93.3 km/h, 1999 |

The following record claim has been approved:

| | |
|-----------------|---|
| Pilot | Dave Springford |
| Date/Place | 25 January 2002, Tocumwal, Australia |
| Record type | 750 km Triangle speed, Club, Citizen |
| FAI category | SAC only |
| Sailplane type | LS-8, OH-898 |
| Speed approved | 94.6 km/h |
| Task completed | Tocumwal, Cootamundra, Hillston, Tocumwal |
| Previous record | unclaimed |

A note about the 200 km speed triangle claims of late

Dave Springford flew his Club class flight two days prior to Tracie Wark even though his paperwork arrived later. As a result, Tracie's claim will not be recorded as superseded (it was *already* superseded) and Dave's record becomes the 200 km speed triangle citizen record.

C BADGE (1 hour flight)

| | | | | | |
|------|---------------------|---------------|----------------------|-------------|-----------------|
| 2725 | Daniel Leduc | Montreal | 2:12 h | Astir CS77 | Hawkesbury, ON |
| 2726 | John Dodd | Vancouver | 1:10 h | Blanik L-13 | Hope, BC |
| 2727 | Evelyne Craig | Rockies | 5:40 h | PW-5 | Invermere, BC |
| 2728 | Allan Wright | Pemberton | 5:21 h | L-33 Solo | Pemberton, BC |
| 2729 | Drew Wilson | Great Lakes | 1:40 h | ASW-19 | Colgan, ON |
| 2730 | Rick Bjorndahl | Vancouver | 1:20 h | Blanik L-13 | Hope, BC |
| 2731 | Craig Wright | Great Lakes | 1:05 h | KR-03A | Colgan, ON |
| 2732 | Sean Kennedy | Great Lakes | 1:01 h | KR-03A | Colgan, ON |
| 2733 | William VanderBurgh | York | 6:04 h | PW-5 | Arthur East, ON |
| 2734 | Tony Booth | Edmonton | 1:06 h | 2-33 | Chipman, AB |
| 2735 | Ward Thompson | Vancouver | 1:12 h | Blanik L-13 | Hope, BC |
| 2736 | Christopher Buller | Vancouver | 1:15 h | Blanik L-13 | Hope, BC |
| 2737 | Shawn Braiden | Vancouver | 1:19 h | Blanik L-13 | Hope, BC |
| 2738 | Curtis Mullen | Vancouver | 1:27 h | Blanik L-23 | Hope, BC |
| 2739 | Martin Jones | Rockies | 5:11 h | Discus B | Invermere, BC |
| 2740 | Katie Burgess | York | 1:04 h | 2-33 | Arthur East, ON |
| 2741 | Manfred Mattat | York | 1:39 h | 1-23 | Arthur East, ON |
| 2742 | Paul Czernenko | Montreal | 4:05 h | PW-5 | Hawkesbury, ON |
| 2743 | Martin Detering | Montreal | 5:25 h | LS-1 | Hawkesbury, ON |
| 2744 | Gerry Bunder | Air Sailing | 5:16 h | Ka6E | Belwood, ON |
| 2745 | Jeremy Sawyer | York | 1:20 h | 2-33 | Arthur East, ON |
| 2746 | Wilhelm Van | York | 1:40 h | 2-33 | Arthur East, ON |
| 2747 | Scot Harrison | Gatineau | see Diamond altitude | | Cowley, AB |
| 2748 | Tina DiMattio | Gatineau | 1:18 h | L-33 Solo | Pendleton, ON |
| 2749 | Derek Brown | Cold Lake | see Diamond altitude | | Cowley, AB |
| 2750 | Jacobus Steyn | Prince Albert | 2:20 h | K-7 | Birch Hills, AB |
| 2751 | Ron Blicq | Winnipeg | 2:32 h | KR-03A | Starbuck, MB |
| 2752 | Brendan Yetming | Great Lakes | 2:10 h | KR-03A | Colgan, ON |

FAI Paul Tissandier Diplomas go to two Canadians

This prestigious diploma, established by the FAI in 1952, is named after Mr. Paul Tissandier, who was Secretary General of the FAI from 1919 to 1945. It may be awarded to those who have served the cause of aviation in general and sporting aviation in particular, by their work, initiative, devotion, or in other ways. The following Diplomas were awarded to Canadian glider pilots for the year 2001:

Walter Weir Walter is well known within the soaring community and has been an active contributor at the national level for many years. He is the chairman of the FAI Awards Committee of the Soaring Association of Canada and has homologated Canadian applications for FAI badges for more than a decade. He is also a recognized name on the competition scene and has competed in numerous contests in Canada and the United States.

George Dunbar George Dunbar has been a pioneer in Canadian soaring and an active participant since approximately 1940 when he flew with the McGill Gliding Club. After World War II, he was instrumental in the formation of the first Maritime province club, the Gull Gliding Club of Dartmouth, Nova Scotia. George served as a director of SAC starting in 1954 and later held various positions such as Pacific Zone Director, Trophy & Awards chairman, Director-at-Large, and the Alberta Soaring Council secretary-treasurer.

He has been very active in sporting and contest matters over many years including crewing at four World Contests. His fame as the "Father of Computer Scoring" arose from his years as a scorer at the Canadian Nationals. He developed the first computer scoring system for the 1969 Nationals at Innisfail using a time-shared remote computer terminal connected to a mainframe in Seattle. George continues to give his expertise and encouragement to the sport that has benefited so much from his outstanding contributions over more than 60 years.

For info on previous recipients, see pages 56-58 of "Book of the Best", 2001 edition, available on the SAC documents webpage.

The problem with Gerry

I recently received a claim from Gerry Bunder of Great Lakes Soaring for Silver altitude and distance flown on 20 July in Ka6CR CF-RWO. He also asked for the FAI Certificate, enclosing the required photos.

Now I know that Gerry, his dad Karl, and his son Shawn have been in gliding for years — I couldn't believe that he had never applied for a C badge. So I went foraging into the "dead" files. Sure enough, I found a file folder with "Gerald Bunder" on the tab and a claim form for a Silver duration flight of 5 hours and 16 minutes performed in Ka6E CF-AJH on 10 Aug 1975 when he was 18. There were two passport pictures in the folder with the claim form but nothing else. I searched the Canadian Soaring Register for evidence that the claim had been accepted but found no trace of that.

I e-mailed Gerry, told him the story, and attached a scanned copy of his teenage mug shots. He e-mailed back that he found that flight in his log book and correctly identified the date and flight duration. He has no idea why the claim was never processed. Since the 1975 claim form was correctly filled out and there was no reason for denying it, I was able to award him Silver badge #959. Now I have to issue him an FAI Certificate, but I don't know whether I will use his photos from 1975 or 2002!

Walter Weir

Cowley gives many Diamonds

from page 13

Bob Mercer sends this note on the GGC adventure trip:

It was several years ago that I started considering the feasibility of Gatineau Gliding Club mounting a mission to the Cowley Fall camp. A little over a year ago my son David started to organize the venture in earnest. There was a lot to do: we had to see if ASC would extend the camp to make the trip worthwhile, would we be able to come up with a two seater for checkouts as dragging one that far was not in the cards, would we be able to get an oxygen system into our L33 Solo, who would tow a glider west, who would sign on for the trip and in the numbers needed to make the trip practical.

All of these questions were quickly answered. ASC very graciously agreed to extend the camp. Cold Lake would bring its two-seat Blank for checkouts. We bought an oxygen system good to 25,000 feet and were able to borrow a regulator for the very high altitude work. I was feeling good to tow the L33 west and looked forward to the drive. We had a total of six flying members signed up which would work out very well indeed. The mission was on!

David left mid-September with the Genesis 2, first stop Edmonton to attend a wedding. I left on 29 September planning to take 4 or 5 days to drive across Canada pulling the L33 but I hardly saw a drop of rain or snow either way and was able to complete the drive in three days each way for a total of nearly 8000 kilometres. Each one of us had a mission in mind for Cowley. David was hell-bent on trying to set some speed records, Mike, Scot and Ron going for altitudes, Tina getting a few good flights as well as a bit of touring, having never been in the west. My goal was to do a bit of towing and have fun, enjoying the camaraderie of all the pilots present.

When all was done, many of our personal goals were achieved and everyone really enjoyed themselves and is looking forward to the next Cowley mission. Above all we owe a great deal of thanks to the western folk who made the trip possible and provided the wonderful hospitality and friendship. It made the trip memorable and successful. ❖

2003 Nationals are at Gatineau

The 2003 Nationals will be held at GGC Pendleton 29 July to 7 August with practice days on 27 and 28 July. It is also anticipated that we will have some form of Air Canada passes to give away again. The contest manager is Ken Brewin and the CD will be Bob Mercer.

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