free flight

1/82 Jan-Feb

vol libre

PRESIDENT'S MEMO

A year ago Ursula Burton took on the task of editing *free flight*. Our magazine had been in something of a sump for a while. There was a lack of material; headings and graphics often took up half of a page or more just to fill the space! "Topical" news was history by the time we read it. Upcoming events had usually upped-and-gone by the time we were informed about them. Reading a report of a June event in the September/October issue which arrived in January of the following year just did not convey an image of an active society living in the present, *free flight* had become a frustration.

Ursula, with the kind of energy which could have her editing "Time" or "Newsweek" and a stated goal of producing "a timely, informative, reliable National Soaring Magazine", set about changing the image of *free flight*. Changes started right away, and have continued — in layout, in style, in quality and quantity of material, and in timeliness of information. Such change do not just happen. They are a result of a tremendous amount of input by the Editor (150 to 200 hours per issue), first in letter writing to solicit material (followed up by phone calls when promised words don't arrive on time); in making translations if necessary, then in selecting and laying out material for the publishers before Jim Leach forces everything through the printing and production stage with minimum delays (Ursula's goal is zero delays!) to the point of mailing.

We now have a magazine which we can send abroad, or show to potential advertisers with some pride, and with an assurance that anything submitted by the stated deadline will appear when expected.

There are still aggravations, however. One of the most serious of these is the mailing process. Deliveries regularly take two to three weeks in many parts of the country and delays of over five weeks are not uncommon. This may improve with the Post Office under new management, or we could assure ourselves of faster delivery by using first class mail. With the new postal rates, and the envelope requirement, this could amount to $3.00 to $4.00 per member, an increase which would have to be covered by an increase in membership rates. Such a change would only be made at the request of the membership.

Another source of aggravation is the small lead time on announcements of instructors courses, meetings, contests and other events where individuals need the information to be able to plan their own schedules, holidays, etc. Much of this stems from the fact that we, as an organization, do not do our own planning far enough in advance — and by **we**, I mean the member clubs. The Instructors Committee or the Sporting Committee and the Directors cannot say when or where a course or contest will be held until a bid to host such an event has been received and evaluated. By the time the information is published in *free flight* and arrives in your mail box, several months will have passed from the time the decision to bid was made by the Club Executive. Realistic timing requires that clubs start planning *now* for 1983 events.

Ursula, herself, has brought *free flight* to the point where further improvement can only come from us. Current news from committee chairmen, prompt and exciting reporting on events, plenty of advance notice for upcoming events is our responsibility.

Russ Flint
President

free flight

1/82 Jan-Feb

The Journal of the SOARING ASSOCIATION OF CANADA
Le Journal de L'ASSOCIATION CANADIENNE DE VOL À VOILE

Photo: Hans König

Cover
Hallowe'en at Cowley. George Dunbar prepares to wedge himself into his Dart for his Diamond climb (5310 m) to 23,000 feet in the secondary of the wave.

Total circulation of the Nov-Dec issue was 1700

AGM UPDATE

As a result of the Board of Directors Meeting held in Ottawa, the following items were considered to be of significant importance to fill this space. The presentations which follow cover the AGM agenda, which may be adjusted when all returns from clubs have been received and advance notice of Board sponsored Notices of Motion which will be followed up with a letter to individual members.

Summary of Notices of Motions

Notice of Motion No. 1
The Soaring Association of Canada recommends to Transport Canada the following changes to the Personnel Licensing Handbook, Volume 1 (Flight Crew), Chapter 3, Para 5. "Experience" to read as follows:

"An applicant shall have acquired not less than eight hours of flight time in gliders. The total flight time shall include at least six hours flight time during solo flight, and such flight time during solo flight shall include not less than twenty take-offs and twenty landings;" and Para 7 "Skill" to be amended to read: "An applicant shall have submitted a letter from the holder of a Canadian Glider Pilot Licence endorsed for instructor privileges stating that the applicant has demonstrated his ability to perform normal maneuvers, spins to the right and to the left with appropriate recovery and emergency maneuvers under different circumstances appropriate to the glider used for the test and with a degree of competency appropriate to that of a glider pilot."

For background to this, see *free flight* No.6 /1981 "President's Notes".

Notice of Motion No. 2
A largely untapped source of potential SAC members is the Air Cadet League of Canada. To encourage these young people to join the SAC and to develop their interest in gliding we propose the following amendment to SAC Bylaws; to add to SAC Bylaw No. 1, Article 4.1, Subpara i, a new membership category as follows:

"Air Cadet Affiliated Members — Air Cadet Affiliated Members shall be individuals who are current or former members of the Air Cadet League of Canada who are not members of a SAC sustaining member club nor are registered in any other category of SAC membership who shall have paid such annual fee as is approved from time to time by the members in a general meeting. Air Cadet affiliated members shall be entitled to attend all meetings of members but shall not be entitled to vote. Air Cadet affiliated members on joining a sustaining member club in any flying membership category shall be permitted to pay 50% of the SAC fees for the respective membership category for one year only."

Notice of Motion No. 3
While the details of the 82/83 budget will be forwarded to each member separately, the Board is recommending an inflationary increase to SAC membership categories as follows:

a. Club affiliated members	From $45.00 to	$50.00
b. Junior members	(No change)	$30.00
c. Married couple members	From $80.00 to	$90.00
d. Associate members	From $45.00 to	$50.00
e. Individual members	From $45.00 to	$50.00
f. Corporate members	(No change)	$65.00
g. Air Cadet affiliated members	(New)	$20.00

(Subject to AGM approval)

Notice of Motion No. 4
The Board of Directors views Sentences No. 4 and 5 of By-law No. 1, Article 5.13 as an anachronism in that it is the only article which restricts the actions of the Board in carrying out its duties as a responsible organ of the SAC. Thus it is proposed that the existing sentences No. 4 and 5 be deleted and replaced with the following:

"It is further understood that whenever a matter concerns changes in the Aeronautics Act or the Air Regulations (including the licensing conditions of glider pilots and sailplanes) or any other matter involving or affecting adversely all or a great majority of the Members, the board shall be obligated to refer the matter to a permanent or ad hoc committee. After review and consideration of the committee's findings the Board shall inform all Soaring Association of Canada Member Clubs as to findings and recommendations of the committee as adopted by the Board."

Notice of Motion No. 5
In view of the unusually short time interval between the 1982 Nationals and the 1983 World Soaring Championships the timing for selection of the National Team according to standard SAC procedures is not possible. Thus it is proposed to adjust SAC Procedures for this year only as follows:

a. Para 7, delete ten months, substitute six months.
b. Para 12, delete three months, substitute one week.

AGENDA
THIRTY-SEVENTH ANNUAL GENERAL MEETING
19-21 MARCH 1982
RAMADA AIRPORT INN, MONTREAL, QUEBEC

19 March 82, Friday

1900 Hrs. Pre-registration
Reception

20 March 82, Saturday

0830 Hrs. Registration
0900 Hrs. Welcoming Address
0915 Hrs. **SAC Status and Programs**
Long Term Planning
Budgeting and Financing
SAC Development Week
Publicity
World Contest

1030 Hrs. Coffee

1045 Hrs. **Current Issues**
Announcements
Licencing Requirements
and Instructor Classifications
Insurance

1200 Hrs. Lunch

1330 Hrs. **AGM Business Meeting**
Confirmation of Minutes
1981 AGM Reports
Motions of the Board
New Business
Elections

1830 Hrs. Cocktails

1930 Hrs. Banquet

21 March 82, Sunday

0830-1400 Hrs. Directors Meeting

0900-1200 Hrs. **Workshops**
1983 World Contest
Publicity
National Competition
Reorganization
Aircraft Type Approvals

The SOARING ASSOCIATION OF CANADA

is a non-profit organization of enthusiasts who seek to foster and promote all phases of gliding and soaring on a national and international basis. The ASSOCIATION is a member of the Royal Canadian Flying Clubs Association (RCFCA), the Canadian national aero club which represents Canada in the Fédération Aéronautique Internationale (FAI, the world sport aviation governing body composed of national aero clubs). The RCFCA has delegated to SAC the supervision of FAI-related soaring activities such as record attempts, competition sanctions, issuance of FAI badges, and the selection of a Canadian team for the biennial World soaring championships. free flight is the Association's official journal.

Material published in free flight is contributed by individuals or clubs for the reading 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, opinion, reports, club activities, and photos of soaring interest. Prints (B & W) are preferred, colour prints and slides are acceptable. No negatives will be used.

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

All contributions to the magazine will be acknowledged on receipt. We will endeavour to say when it will be used. All material is subject to editing to the space requirements and the quality standards of the magazine.

For change of address and subscriptions to non-SAC members ($15.00 per year) please contact the National Office.

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L'ASSOCIATION CANADIENNE DE VOL À VOILE

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

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

vol libre est le journal officiel de l'ASSOCIATION.

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

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

L'exactitude des articles publiés est la responsabilité des auteurs et ne saurait, en aucun cas, engager celle de la revue vol libre, ni celle de l'ACVV, ni refléter leurs idées.

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

Pour chaque article reçu, nous retournerons un accusé de réception et donnerons la date probable de sa publication. Les textes et les photos seront soumis à la rédaction et, dépendant de leur intérêt, seront insérés dans la revue.

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

Pour changements d'adresse et abonnements aux non membres de l'ACVV ($15.00 par an) veuillez contacter le bureau national.

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5

OPINIONS

GET OFF YOUR BUTTS!

I've heard it said that in any large group or organization, 20% of the members do 80% of the work. The 80% will go along with the flow, or may bitch about almost anything — but they *will not* contribute. They may get so mad at some particular policy adopted in the club or SAC, they may even quit — loudly decrying the fall of events as if they were acts of a spiteful fate.

Friends, the "A" in SAC means ASSOCIATION. SAC is YOU, and YOU, and YOU — it is a democracy, not a dictatorship. It will only grow with the active participation of every member, but how many times has that been said by others only to go in one ear and out the other.

In a small club, active participation is a matter of survival, but as it grows, the seemingly inevitable 80/20 ratio gradually develops. My club, Cu Nim, is probably no different than any other large club in SAC. With 106 members, maybe 25 at most will show up for a meeting — always the same faces. The pilots with the most at stake in the future of their club, the new pilots, sadly under-represent themselves.

It has been suggested that in a society in which a person can satisfy most wants simply by putting dollars on the table, the lack of "sweat equity" devalues any personal satisfaction so obtained. In the good-old-days, gliding could mean committing 50-100 hours of labour towards building the primary trainer you flew, and teamwork to get bungee'd off the hillside. Nowadays, if you really want to see improvements in gliding at the club and at the national level, the effort to contribute YOUR 2 cents worth may come more from an 'intellectual' commitment which does not give the old instant gratification, but the commitment MUST still be made.

YOU — the Western pilot who wants to go to Instructors school this year, are you willing to help your club sponsor it, have you asked them why they are not? Did you expect it to fall into your lap by magic?

YOU — the pilot who is happily content to screw holes in the sky over the airfield in your glass beauty. That ship exists and is yours because others before you wanted to go further, faster — have you helped organize a weekend contest or a regionals lately?

YOU — who sees some specific problem in the gliding movement and has a good idea, when is the last time you wrote a letter to your Zone Director?

YOU — the keen pilot eager to start on your own badge work, why are you waiting for the overworked club maintenance man to fix the flat on the 1-26 trailer?

What all this boils down to is that there are dues to pay in this sport beyond the club and SAC membership fees. Don't ask what SAC is doing for you — YOU are SAC!

I happened to see the minutes of the recent Board of Directors meeting in Halifax (see 6/81, page 5). The work that was covered astonished me. Their major efforts are going towards policy — the direction we are heading in the coming years. They *cannot* do the day-to-day stuff in isolation and without prompt and helpful input from all of us out here in the boondocks.

If you feel isolated as a SAC member, but haven't contributed your ideas or active help, it's your own damn fault.

SAC'S communication problems can only be solved by communicating — what a novel idea! The SAC Directors and Committee chairmen, through *free flight* and club mailings, are slowly improving matters from the top down. YOU work from the bottom up. For example: in this issue of *free flight* there is a plea from Dave Marsden for input on the direction competitive soaring may go, John Firth is looking for suggestions on what content the first-ever cross-country course should have, and one small club is asking for information on using medium/high performance gliders for basic training. Don't for a moment think that others will handle it — get your fingers out and write! or phone!

Tony Burton

BONNECHERE – BLANIK OR 2-33

One question that always generates active discussion in our club is what constitutes a basic trainer? We presently have a 2-22 that we would like to retire some time in the near future. Basically we have two schools of thought:

1 We should have a SGS 2-33 due to better performance, ruggedness, availability of spare parts;

2 Buy a higher performance single seater to encourage X-C flying and use, say the Blanik, as a basic trainer.

We would greatly appreciate opinions from anyone out there in soaring with experience in basic training using a medium/high performance glider.

Iver Theilman
7 Hoffman St.
Petawawa, Ont.

A constructive opinion had been brought to our attention by Danny Webber, CFI Lahr Gliding Club; see issue 6/81 page 4. As far as I know, Wide Sky Flying Club, Bulkley Valley Soaring and Vancouver Soaring Association use the Blanik as a basic trainer. Please contact these clubs for their experience. A copy of these recommendations would be most welcome by free flight for publication. Editor

SAC ACTIVITIES — THE $ AND SENSE OF IT

reprinted from "Vancouver Soaring Scene"

This article was originally written for the "Vancouver Soaring Scene" in response to some club members questions why VSA should remain in SAC.

Inflation is with us. It's a part of our everyday life. The cost of soaring is going up, too. In times like these everyone looks to see if money cannot be saved by cutting our luxuries. Perhaps SAC membership is a luxury, after all you don't really need it to be a soaring pilot. Outside of SAC insurance, what has SAC provided for the soaring pilot to make it worth the money we all pay?

To answer that question, I decided to ignore the efforts of the various committees that provide services to the enthusiasts like the new students (instruction), the early solo pilots (badges), the competition pilot (sporting committee), and concentrate on those items that can be tabled in dollars and cents value to the weekend flyer who just wants to do his "thing" without any fuss or bother.

The following are some items that came to mind when I tried to decide in dollars and cents how SAC has helped the soaring movement in Canada just since 1970.

EARLY 1970's
Transport Canada introduces medical examinations for glider pilots to bring them into line with other licensed pilots. SAC negotiates for a five-year medical examination instead of the two-year (for pilots under 40) and one year (pilots over 40) required of all other categories (PPL, Student PL, Balloon and Gyroplane).

Ongoing benefit to glider pilots:
- under 40 — saving of $15 per year
- over 40 — saving of $30 per year

Transport Canada makes installation of Emergency Locator Transmitters mandatory for all aircraft operating outside of a 25 mile radius of its home field, except for gliders. SAC convinced Transport Canada that their installation in gliders would serve NO useful purpose.

Benefit to any glider owner (private or club):
- capital savings of $700
- ongoing maintenance savings, and savings later when a battery problem necessitated their removal and later replacement

1976-1979
Government budget introduces surtax of 10% on aircraft. SAC reacts to point out that although gliders are defined in legislation as "aircraft" they do not use fuel. Since the surtax is aimed at fuel consuming luxuries (private aircraft) gliders should be exempt. A directive to this effect goes to Customs.

Benefit to any person or club who imported a ship into Canada between 1976 and 1979: 10% of its value at time of import.

1977-1978
In early 1977 an Ontario club was notified that, because it charged its members for tows, its towplanes were commercial aircraft. This decision by the Air Transport Commission had serious implications for all soaring clubs and was appealed by SAC. If soaring clubs are forced to treat their towplanes as commercial aircraft they will have increased maintenance demands (25 hour inspections on top of the current 100 hour) and greater difficulty in obtaining towpilots as these will require commercial licences.

The initial appeal is rejected and the dispute continues for almost a year. SAC continually points out that the legal precedent being used was a decision in a case concerning an operation set up as a profit-making business, whereas the club concerned is non-profit. After almost a year of hard debate, the matter is finally resolved such that non-profit club's aircraft are treated as private aircraft providing the charges for flying are to club members only. Air Carrier regulations are amended to reflect this decision.

Benefit to all non-profit soaring clubs:
- Avoidance of the need to go to 25 hour inspections.
- Greater availability of towpilots since commercial licences are not necessary.
- Estimated saving to pilots: over $1 per tow.

1978-1979
A change in procedures by Transport Canada is instituted whereby the long established procedure of SAC processing all glider Type Approvals is replaced by Transport Canada processing them in a similar manner to power planes. This change in procedures will add to the cost of glider Type Approvals by:

1. requiring the applicant for Canadian Type Approval paying the Transport Canada Fee (minimum $10,000);
2. require the Type Approval to be complete prior to import, thus requiring a Canadian test pilot to be sent to the country of origin of the glider to carry out a test flight program.

Both these additional costs would be bound to be passed along to future purchasers of the ships by either the manufacturer or agent. Additionally, the high cost of getting a Type Approval would limit the number of manufacturers prepared to seek Canadian Type Approval for their ships, hence our selection of gliders would become limited.

SAC appeals this change of procedures, and finally, after over one year of negotiations obtains a compromise solution, whereby shipments from Western Europe will once again be processed by SAC but under more rigorous demands by Transport Canada, and shipments from Eastern Europe will be handled by Transport Canada.

Benefit to soaring pilots:
Unnecessary inflation of new glider prices avoided, restricted selection of gliders available to Canadian pilots avoided.

So if you have been wondering if SAC is really worth the money you have been paying for it, just sit down with a piece of paper and figure out how many dollars more you could be paying for your soaring if SAC had not been there in the 70s to fight on your behalf on just the five items mentioned. Then think some more about the non-dollar items, like presenting the soaring pilot's needs for access to airspace (see 3/81 page 7 and this issue page 4).

A lot of what SAC does goes unnoticed, and because it is unnoticed a lot of people might think it doesn't do anything. Major issues don't come every day but when they come they could hurt us badly. The reason that we haven't been hurt badly yet is because we have a watchman looking after our interests. In business, a watchman may seem like a luxury since as long as he's there nothing is stolen; but dispense with the luxury and see what happens.

AIRSPACE

Dave Tustin,
Airspace Committee

Some of the airspace changes will be implemented this winter but the main changes will be held up "pending legislation" probably sometime next summer. To most of us, the changes are beneficial. Controlled airspace is being reduced in lateral dimensions and increased vertically from 9500 feet asl to 12500 feet asl right across the country. Before we couldn't fly above 9500 feet asl on AIRWAYS. When the plan goes into effect we will be able to fly up to 12,500 asl anywhere. If you wish to fly above 12,500 feet asl and are in controlled airspace, approval must be obtained from ATC.

I have attempted to put a package together that will be suitable for pilots who wish/need to fly in this airspace but the constraints required by the ATC system appear at this time to be too difficult to work with; so this project is on the "back burner". Anyone wishing to establish a "record" that will require use of airspace above 12,500 ft is assured that Transport Canada will cooperate with him/her in every way possible.

The only dark cloud on the horizon is the fact that flight in Class C airspace (TRSA) will require a transponder. Extensive research has been done by a special Transport Canada committee. Does this mean that more TRSA's are to be formed when they don't exist today? At this time, I don't

LES TÂCHES DE L'A.C.V.V.

Alexandre W. Krieger
Club de Vol à Voile de Québec

On s'interroge parfois, sur le role et les tâches de l'Association Canadienne. Il faut remarquer d'abord, que les vélivoles au Canada ont la chance d'être beaucoup moins réglementes que leurs collègues de la plupart des autres pays. Ceci est surtout le mérite de l'Association Canadienne du Vol a Voile qui a été fondé en 1945 et qui depuis ce temps là, représentant presque tous les vélivoles du pays, a su d'acquérir un prestige remarquable auprès des autorités fédérales.

Presque tous les aspects de notre sport sont sous l'autorité soit du Ministère des Transports ou du Ministère des Communications. Les intérêts des pilotes du vol à voile sont très particuliers et souvent rentrent en conflit avec d'autres branches de l'aviation. Les vélivoles ne sont pas nombreux, ils n'ont aucune influence politiques. Mais réunis au sein de l'Association Canadienne et ayant parmi leurs membres des spécialistes reconnus, ils sont capable à se faire reconnaître et exercer une influence très considérable dans des questions qui affectent directement nos opérations de vol quotidiens.

Voici une liste des initiatives et études, accomplis ou poursuivis par l'Association et ses comités, et qui nous laissent profiler soit en forme d'économie soit en forme de règlements qui nous sont favorables:

1 Un projet de nouvelle subdivision de l'espace aérien a été introduit récemment par le Ministère des Transports. Tous les clubs dont l'espace aérien d'opération se trouve près d'une zone contrôlée ou près d'une voie aerienne pourraient être affectes. Le président du comité de l'espace aérien (lui-même au service du contrôle aérien à Winnipeg), a été responsable de recueillir des détails sur les opérations de tous les clubs, leurs exigences au point de vue espace aérien. Il a étudie des conflits possibles entre ces exigences et le nouveau projet du Ministère et a préparé un mémoire dans ce sens.

2 Depuis quelque temps des projets de révision des règlements des communications ont été discutés proposant les transponders dans tous les aéronefs, exigeant une correspondance bien soigneuse pour obtenir une exclusion ou exception pour les planeurs. Ce genre de problème exige un travail très considérable, des dépenses de déplacement et surtout un succès est plus probable, si l'Association représente le nombre le plus grand de pilotes de planeur.

3 Par suite d'une initiative de la Gendarmerie Royale il y a eu interprétation des Règlements de l'Air exigeant que les pilotes de remorqueur soient des pilotes commerciaux. L'application de ce règlement aurait augmenté considérablement le coût de remorquage. L'Association a demandé à la Commission des Transports Canadienne de donner une nouvelle interprétation et ceci a pris plusieurs mois et une correspondance considérable. La décision a été dans notre faveur et le règlement maintenant permet la pratique courante et les pilotes de remorqueurs, membres du club n'ont besoin que de la licence de pilote privée et de l'expérience prévue par le règlement.

4 Depuis 10 ans l'Association a réussi d'avoir une police d'assurance responsabilité et cellule. Les primes chargées sont considérables, mais encore acceptables si un nombre maximum de pilotes et planeurs y participent. La présente police est le résultat d'un développement qui a pris plusieurs années pour couvrir toute sorte d'éventualités qui n'existent que dans notre genre d'opération. Par exemple, l'entraînement des pilotes de remorqueur est couvert depuis un nombre d'années, ainsi que de manœuvres qui sont reliés au remorquage et qui ne sont pas couverts par des polices courantes. La situation générale présente sur le marché des assurances d'aviation n'est pas brillante. En restant toujours à la recherche d'un courtier qui pourrait nous offrir des conditions encore meilleurs, il faut reconnaître que même le contrat présent est tout à fait raisonnable.

5 Le comité technique de l'Association est reconnu auprès du Ministère comme des autorités par excellence dans la question de certification type des planeurs. Ce service est d'une valeur inestimable et assuré par le prestige personnel que notre Association a su acquérir durant une longue période.

6 Par intermédiaire de l'Association nous participons avec notre délégué aux activités du CIVV (Comité International du Vol à Voile) de la FAI (Fédération Aéronautique Internationale). En particulier ces activités comprennent la politique des insignes internationaux des exigences techniques de navigabilités des planeurs — exigences qui maintenant sont adoptées par les gouvernements du Marché Commun et, depuis récemment, par les États-Unis. Un tout dernier développement est la demande de l'OIAC (Organisation Internationale de l'Aviation Civile) au CIVV d'établir un recommandation concernant des exigences internationales pour la licence de pilote de planeur (voir 6/81 pages 2 et 4).

7 Le plan d'entraînement des élèves vélivoles ainsi que la formation des instructeurs ont été soumis plusieurs fois à l'examen du Ministère des Transports. Le Ministère a aussi consulté l'Association, représentée par le président du comité des instructeurs, en ce qui concerne la rédaction des examens écrits pour la licence de pilote de planeur. Encore là les opinions et les objections que nous avons présentées ont été écoutées avec la plus grande attention et nous pouvons être très satisfait d'avoir l'occasion d'exercer notre influence dans une question aussi fondamentale.

Cette liste de problèmes peut être continuée. L'aviation en générale et le vol à voile en particulier, resteront des activités hautement réglementées pour un nombre de raisons que tout le monde connaît. Les problèmes de nos pilotes et du vol à voile sont assez mal connus par le public et par les autorités en dehors de Transport Canada. Comparé à d'autres groupes d'aviation les pilotes de vol à voile ne sont pas nombreux. Notre seule chance de survie est d'être bien organisée, bien unie avec le nombre maximum de participants, maintenir une attitude professionnelle et une coopération et liaison compétente avec les autorités concernées et le Ministère des Transport et de garder et préserver l'immense prestige que notre Association a réussi d'acquérir grâce aux efforts de nos nombreux prédécesseurs et adeptes. □

SAC may be our watchman but it can't do this job without our support. Although a lot of SAC's efforts benefit all soaring pilots whether they are SAC members or not, all soaring pilots cannot afford not to belong to SAC. It is in their long term interest to do so. If a dollar saved in membership this year means a loss of a privilege next, it's a pretty poor way to save a dollar. □

UPDATE

know, but if local ATC requests the implementation, it will probably be done! However, we must consider the requirement for carriage of transponders as a safety related issue, When we, as glider pilots, fly in close proximity to major airports, it is important that a useable radar signal is shown on the ATC equipment in order for the controller to be able to advise us of pertinent traffic.

At the January '81 meeting with Transport Canada we objected strenuously to transponder carriage primarily because of cost, power requirement, space limitations in cockpit.

They considered our comments and advised us that they would approach 'industry' to see if a single code, light weight, low power drain transponder could be found or produced. Seems logical that if we have all sorts of instruments that have been miniaturized including the power requirement — so why not a sailplane transponder? However, Transport Canada have since advised us that it is not 'their role' to develop a new transponder.

What can we do? Surely there is someone in our ranks who has the expertise to advise us on this matter. Please consider this request. If sufficient interest is shown I will approach the SAC executive for a budget to cover the project.

Please contact Russ Flint, 96 Harvard Ave, Winnipeg R3M OK4 (204) 284-5941.

DID YOU KNOW THAT…

a survey of Canadian gliding from the woman pilot's point of view.

Ursula Burton

A year ago I mailed about thirty-seven letters to women pilots in Canada asking for answers as to how well they get along with gliding male pilots, instructors, and their club members, and if they are exposed to any chauvinistic attitudes. Sixteen responses came in quickly, but only today do I find the time to compile those responses as other duties crossed my path such as the reorganization of *free flight*, trips to the world contest in West Germany, across the continent, and to competitions. Somehow this year I logged only ten solo flights with my "new" Ka6CR, Cloverleaf, and time for instructing was even less. Now winter is here. Well, I hope the next year is my year of flying ...

It would not be fair to draw any definite conclusions from the little information at hand. Rather than statistical tables I believe that the many written opinions reveal a general insight to women's problems in the sport, as well as the specific concerns of everyone who contributed to the survey.

WHERE IS THE OUTHOUSE?

… so often we say that women can fly as well as men so why do we have a separate contest from the men? If we want equality then why have separate contests?

I had the unique opportunity this year to meet Mrs. Ann Welch, and I would like to share with you her views: "The women's nature is entirely different than that of the men. She enjoys the beauty, and resents aggressiveness. She is patient, and therefore often would be a better instructor than a man. Of course, a woman likes to win but she seems to seek self-confidence in a group of her equals first instead of exposing herself to the harsh world of contests populated by men. A whole world of tradition resists the women's push to evolve into the open..."

... there is one problem associated with being a female pilot that still perplexes me. Males carry plastic bags with twist-ties for use when relieving themselves on long flights, but what can a woman do? I have had several cross-country flights over 6 hours duration but the time seemed to go quickly and I had no problems. However, this is probably due in part to a low fluid intake and increased perspiration. The dangers of dehydration however are such that I don't consider this a good solution in hot weather, I don't think that catheterization is the answer either. Do you have any solutions?

I questioned a "flight suit maker" in Paderborn who advertised a "built-in toilet" for men. For women, the only advice available at the time was "hospital pampers", the solution used by Hanna Reitsch on her long flights. The Americans seem to be doing some research on this problem, especially by NASA for the women astronauts — a space flight "spin-off" which may give a lot of women a sigh of relief.

… I suggested an outhouse on the field—that idea was dismissed without serious thought. For me this is yet another deterrent to flying.

... it would be fun to have a women's soaring seminar in Canada similar to the one held in Pennsylvania last year.

FILLING IN THE FAMILY

… I find it impossible to switch instantly from mother to pilot; I need time on the flight line to get into the mood. I often wish that our club would "bend the rules" for us mums so that we could get up more quickly and make the best of our few hours. Most male pilots are self-centred, and if the weather is good they forget about family and chores. If you have only 2 hours and you spend 1-1/2 hours waiting to get off the ground, you won't get far!

... I find I'm torn between responsibilities at home and spending weekends gliding. Since I work full time, the weekends are the only time for shopping, housework, etc. My husband is a pilot and he says just forget the other things, but I find that difficult to do.

… we usually bring the boys (2 and 5 years old) to the field in the morning with a babysitter and this way they are around us — it's more a pleasant family affair.

. . . I'm most enthusiastic about soaring and love every minute of it. My only regret is that my husband is not interested in taking up the sport although he gives me all the support I need to carry on myself. *One year later:* I got my passenger rating and took my husband soaring a dozen times. He became very interested, there was more to it than he thought, and also liked the people involved, so he decided to take lessons also ...

… I decided to take up gliding realistically appreciating that, as my husband intended to learn, it was a small price to pay for improving our relationship and might even be fun! In fact I found it a thoroughly rewarding sport.

Fortunately my husband, who introduced me to the sport before we were married, is as deeply involved as I am. It is wonderful to be able to share each other's experiences in gliding and to have someone who can understand when things aren't going so well. Studying and discussion related to the sport is greatly enhanced when you are both in it together.

Most women get into gliding for the wrong reasons: to please their spouse or boyfriend. This rarely carries them through the hours of waiting around, the moments of fear, the frustration of not being able to do it properly, and so on.

LEARNING AND TEACHING

… I took a long time to go solo because my flying was very sporadic based upon my money situation at the time. I ask a lot of questions and people tell me the answers. Our club has been for me a very nice safe place to grow up in.

… this fall I got the award for the "Best Student Pilot" for the club. I've guessed that it was for perseverance and enthusiasm. During all my training I never felt any obvious prejudice against me. Perhaps at times the odd male instructor made me feel incompetent — but at that point maybe I was — and also I found that at my age of 50 I perhaps learned a little slower.

… I was never particularly ambitious but found it a thoroughly rewarding sport. I found myself jealous of the fact that my friend's progress was faster than my own and needless to say this further hampered my learning. Many of the male instructors were very sympathetic to my emotional dilemma and with a great deal of patience the hurdle was leapt and I went solo.

. . . no one suggested that my husband and I were too old. After some dual instruction flights I learned that my instructor didn't have a rapport with me, so I changed to a female instructor. It was her positive attitude that encouraged me to keep on trying despite my age and it wasn't long before I went solo and I expected it wouldn't be long until I acquired enough solo time to try for my licence. Then everything began to break down: weather, lack of qualified instructors to send me solo again, winter, and I found myself flying dual again until I had accumulated a total of 33 flights between my first and second solo! My flying

had deteriorated as I had lost confidence and I had the feeling that not many people thought I could do it, or was licence material.

… generally my students have done well, especially the more sensitive personalities. Women students seem more prone to be put off by an unfortunate experience. Women seem to be reluctant to spend a whole day at the field in return for one or two flights and I have not met a women who insists on her "fair" share — me included. I find a tendency for male instructors to give up on the women student too soon, or to be too nice and not push her enough to really do it right. Most women are sensitive to this and will easily delude themselves into thinking they cannot do it.

… Some men seem to be a bit leery of a female instructor, initially. More so, passengers wonder about a female taking them for a ride. We have not run into any problems — just a few strange looks.

… the only time a difficulty has arisen is with introductory rides. Some people are aghast to think a woman was to take them. The men in the club take that as a personal affront and are quite concerned that I have been insulted by these people. However, these occurrences are few and far between, and those that specifically ask for me more than make up for some people's smallness.

CHAUVINISM?

… only rarely have I encountered anything but encouragement, friendly helpfulness and willingness to share knowledge and experiences. My flying ability is judged by my performance.

… there are a very few men in our club who have no confidence in women pilots and are supercritical of their performance, but nearly everyone accepted me and the other women at face value. Of course, quite a number of male pilots are oddball characters and so not always easily social — but it takes all sorts.

… your questions have disturbed me somewhat, I must confess. I've had none of the problems you've mentioned.

… we must be careful not to misinterpret an instructor's suggestions for improvement as male chauvinism, even when said with a loud voice, unless we are certain that our male peers do not receive the same treatment.

… I was given a check flight by the CFI at that time for my instructor's endorsement. On winch tow, the "Student" (instructor in front seat) froze on the controls (he was about 100 lbs heavier than I). I don't think that this was a wise or safe or necessary "test" of my abilities, and I never heard of this being done to a male. It may have been an isolated incident for this person. □

A GLIDING AVIARY

Eric Newsome

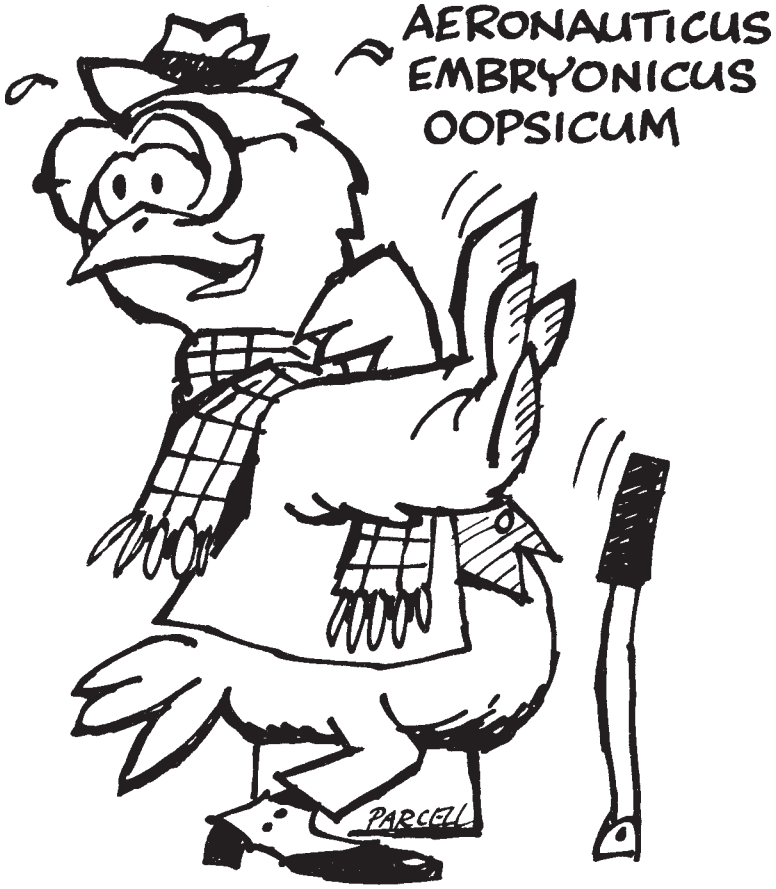
'Aeronauticus Embryonicus', like all fledglings, appears in Spring in copious quantities and an unlimited variety. With varying degrees of trepidation, they have the common characteristic of wanting to try out their newly discovered wings.

Fledglings cannot easily be distinguished as they range from trim females delightful to strap into a glider, to gross males almost impossible to fit into the cockpit. They can chiefly be identified by their habit of being the only ones working on the flight line. Senior flock members have long since discovered that the use of fledgling energy in running wings, retrieving tow ropes and pushing gliders around is infinitely preferable to using their own fading energies.

Charged with the task of getting Embryonicus safely airborne is the sub-species 'Aeronauticus Pedagogicus'. As is the way of the young, the manner in which Embryonicus regards Pedagogicus changes with developing skill and confidence: first he appears as the heropilot who can miraculously fly; then as a calm, disembodied voice patiently explaining how to do things that never seem to work out; later as a 'put-down' artist who, when the student is convinced that all the elements are conspiring to make flying impossible, places a casual hand on the stick and peace is restored; later still he becomes a nagging voice over the shoulder becoming ever more critical and finally to Embryonicus, poor Pedagogicus is relegated to the lowly status of excess baggage to be dumped as soon as possible.

In the air, Aeronauticus Embryonicus can be further subdivided according to reaction to training. Examples of these subdivisions are 'Aeronauticus Embryonicus' 'Oopsicum', 'Musculatum', and 'Randomum'.

Both sexes of 'Oopsicum' are the maiden aunts of the flock. No one knows why they want to fly but there they are. Installed in the front cockpit they resemble Queen Victoria in her most 'we-are-not-amused' mood with eyes fixed imperiously forward — a fixation that will not change throughout the flight. When eventually, 'Oopsicum' an be persuaded to handle the control column it will be with the same distaste as is generally accorded to poisonous snakes and any movement is so gentle as to be almost imperceptible. This bird can, with patience, be taught to fly straight at a sedate pace and will eventually also master turns providing the angle of bank does not exceed five degrees. To any sudden event requiring immediate corrective action the only reaction to be expected is a shrill 'Oops' — no more. 'Oopsicum' gradually fades from the scene with profuse apologies about not really having enough time to devote to gliding. □



The Canadian Contest Scene – 1982 and Beyond

David Marsden
Chairman, Sporting Committee

This article has been prepared to consider several possible options in the types of contests we may have in the future, and site selection for Nationals and Regionals. The intent of publishing the article in *free flight* is to encourage feedback from all pilots intending to compete in the future. I would very much like to hear from anyone with specific proposals that may have a chance of succeeding, given the problem of our sparse gliding population.

A discussion on National Team selection options will appear in the next issue of *free flight*.

COMPETITION ALTERNATIVES

1 Keep the present system — Nationals every two years and Regionals in world contest years.

The reasons behind our present system of Nationals and Regionals are:

a Regionals allow participation in a nationals level competition without the travel expense needed to attend a nationals.

b The quality of competition at a nationals is reduced if our National Team pilots do not attend because they are away at the World Contest.

c A regional contest can be held from Sunday to Saturday of one week with one day travelling time on each end allowing a pilot to attend with only one week holiday time.

d By using handicapping we can encourage participation by club pilots with older sailplanes and provide a friendlier atmosphere for introduction of new pilots into competition.

A major problem with the Regionals is lack of status. They should be considered to be a split Nationals. One way of giving them more status would be to give some points towards a seeding list for our National Team.

2 Nationals every year. The main advantage would be to provide a more prestigious competition in place of the Regionals. Disadvantages are in travel costs, lower quality of competition because fewer people could afford to attend and loss of our National Team pilots on alternate years. Perhaps most important, there is nothing to replace the Regionals as we have them now. Provincial contests would be a further step lower in calibre.

3 Class Nationals every year — Standard Class at one location, 15 Metre/Open Class at another, no Regionals.

This would be consistent with practice in other countries since the introduction of the Standard and 15 Metre Classes. The advantage would be in reduced travel time and cost, if we hold one east, one west.

Two contest organizations would be needed, but they would be easier with fewer sailplanes and only one Class to take care of. Again, the loss of the Regional contests would leave older sailplanes out of meaningful competition.

4 Class Nationals in place of our present Nationals — each Class at separate sites every second year.

This retains the advantages of Regionals and would help reduce the travel cost of attending National competitions. A disadvantage is that pilots would not get to know other pilots who fly in a different Class, although the combined Classes at Regionals would help to offset this.

REGIONAL COMPETITIONS

There are some advantages to retaining Regional competitions. If we are to continue with Regionals in world contest years, we should keep the handicapping system tried last year for the first time.

The main reason for handicapping is to encourage participation by people who may have older ships, and allow them to compete on a more equal basis. In particular, Open Class sailplanes such as the Open Cirrus, the HP-14, Phoebus C, could compete with 15 metre span aircraft having more or less the same performance. Older Standard Class aircraft such as the Ka6 would also have some chance of winning.

The field is split into two performance range groups according to handicap, since handicapping works well when performance differences are not too large. Also, more challenging tasks can be set for the higher performance group.

Regionals are likely to have too few entries in a particular FAI Class to have a good contest. The Open Class appears to be in danger of disappearing even from the Nationals.

Those who have bought the latest Racing Class machines should not feel that handicapping has taken away all their advantage. The higher performance machines have advantages in crossing blue holes or just staying airborne in weak conditions that can't be accounted for in a handicap. The top competition pilots won't be rushing out to get a Ka6 for the handicapped contest.

PROVINCIAL CONTESTS

These contests should be aimed at maximum participation with reasonably informal organization. To qualify as a Provincial contest it must be organized by a Provincial association and all clubs represented by that association must be invited to participate.

SAC will supply advice on how to organize a contest and suggest (but not insist) that the current Regional Rules and Regulations be used. Length of contest and the way in which a Winner/Provincial Champion is arrived at can be left up to the Provincial association. Some people feel that the introduction of start gates etc. and competitiveness into a meet takes the fun out of it. In fact, the opposite is true. The real satisfaction is in completing a difficult task or in covering a course at a good speed. If there is no real competition, there is little incentive to keep on going when the going gets difficult and there is a tendency to abandon a task that might have been completed to avoid the risk of a retrieve.

RECOMMENDATIONS

Option 4 has the advantage of minimizing travel costs and retaining the good features of the Regionals. The Regionals would be "beefed up" giving them more importance in selecting our National Team and by generally upgrading their prestige.

SITE SELECTION FOR NATIONAL AND REGIONAL COMPETITIONS

OBJECTIVES

1. To provide the maximum amount of soaring competition during a 10 day period. This depends primarily on the weather since no competition at all is possible on a "no-contest" day.
2. To determine the best pilot. Weather is of prime importance since more competition days will reduce the luck factor and provide an opportunity to demonstrate a mastery of soaring in a variety of weather conditions.
3. A competition provides an opportunity for soaring enthusiasts from across the country to get together for friendly competition and a practical exchange of knowledge on cross-country flying.

CURRENT POLICY ON SITE SELECTION

There is no written policy. The unwritten policy is that competitions will alternate between east and west locations but not necessarily on any strict pattern, and competitions are always held during school summer holidays.

While there are some compelling reasons for this policy it gives almost no consideration to the above objectives, with the result that we have had a really dismal record of competitions with typically less than five contest days out of a ten-day contest.

OTHER CONSIDERATIONS

1. Safety aspects of the site and surrounding terrain. Is the airfield large enough to accommodate the anticipated number of competitors? Would there be a problem if conditions forced large numbers to land back after launching has started? Are there emergency landing fields if a pilot is short on final glide? Does the countryside in the contest area generally provide enough emergency landing fields?
2. Facilities. On-site facilities such as tie downs, trailer parking, camping, briefing, room, etc. Off-site facilities such as motels and restaurants.
3. Local support. Most of the manpower to run the contest comes from local clubs. SAC should make every effort to reduce this dependence on local support since it restricts our choice of contest site for reasons that have nothing to do with the main objectives given above.
4. Tow aircraft. Local support is important since it is costly to ferry tow aircraft. Again, this problem can be overcome and should not be allowed to override more important objectives.

PRIORITIES IN THE CHOICE OF A SITE

With the above discussion in mind, priorities to be followed in selection of a competition site are as follows:

1. Location and dates of the contest should be chosen to provide the maximum probability of good flying weather.
2. As far as possible, consistent with priority 1 but not overriding it, dates should be chosen to allow the maximum number of people to come to the contest. There may be a trade-off here between location and date. For example, a contest site in Ontario might have an acceptable probability of good weather in May, while a contest in Saskatchewan could be held in August.
3. "Other considerations" listed above should be considered at the third level of priority.

PROCEDURES

We have a problem organizing contests on the basis of the above priorities with the majority of the soaring population in Ontario while the best contest sites are in Alberta and Saskatchewan.

Since we will always need local sponsors, competitions will be restricted basically to either Alberta–Saskatchewan–Manitoba or Ontario–Quebec, where our major soaring population exists. We could alternate between these areas so that one group or the other would know when they are expected to organize a contest, with the incentive being less travel expense for their local members and the interest generated by a Nationals. If we were to go to separate Nationals for Standard Class and 15 Metre Class these could also alternate east-west as well as yearly.

When SAC has decided on a definite policy, some active lobbying can be done to generate proposals to hold a Nationals. If no suitable offers are forthcoming, a committee within SAC should be set up to select a site and recruit the required contest managers, etc. to stage a National contest. This would most likely be a sub-committee of the Sporting committee.

TIMING

Bids to hold a Nationals should be received by 1 May of the year preceding the contest.

SELECTION

The final decision on site selection will be made by the Directors at their October meeting. Evaluation of bids received will be made by the Sporting committee who will make a recommendation to the Directors. A bid need not be accepted even if it is the only one received. If no suitable bid is received, a working group will be organized by the Sporting committee to stage the Nationals.

REGIONAL/PROVINCIAL COMPETITIONS

The objectives are much the same as for a Nationals with the addition of the following:

1. A Regional competition should provide an opportunity for maximum participation, and in particular should encourage participation by people new to competitive soaring.
2. Priorities must be the same as for a Nationals. The main object of the exercise is to fly.
3. In keeping with the above stated objective, Regional competition will be scored with handicapping as explained in the Rules and Regulations for Regional contests. This is to allow for maximum participation by pilots who may not yet have acquired the latest mark of racing machine.

RECOMMENDATIONS

1. More emphasis should be placed on finding the best possible sites in terms of operational considerations. Some parts of the country produce good conditions at certain times of the year, and we should make a determined effort to take best advantage of the assets we have.

   It is highly wasteful to develop our competitive flying skills and our enthusiasm for the sport, and invest time and money to continue to hold contests with 50% or more non-flying days simply because we have used the wrong criteria in selecting site locations and dates for our Nationals.

2. A "Competitions Committee" should be organized to:

   a Promote the establishment of contest sites (and dates) likely to produce good competitions, in conjunction with the policy regarding competitions to be decided by SAC. The committee would actively solicit local sponsors for competitions at desired places and times.

   b Provide support in terms of recruiting key personnel so that the burden on the local sponsors would not be overwhelming, eg. Competition Director, Chief Towpilot, Start Gate Chief, Field Manager could be brought in from other clubs within SAC.

   c Generate a check list type guide for Contest Managers.

3. A pilot opinion survey should be carried out among competition pilots to see how they feel about the relative priorities of choosing a site on the basis of flying considerations as compared to travel costs and dates. □

1982 NATIONALS UPDATE

If you are a contest pilot, you may already have wondered why the advertised dates of the 1982 Nationals (July 1-10) run from a Thursday to a Saturday instead of from a Tuesday to a Thursday as is the usual custom, in accordance with SAC Procedures.

When the SOSA bid was first made verbally to the Board of Directors in March 1981 by the Ontario Zone Director, it was accepted in principle, since there were no other bids. It was requested that a formal bid be submitted as soon as possible for assessment by the Sporting committee, and approval (hopefully) by the Board of Directors. The bid was first seen by the Sporting committee and Directors at the very end of August, containing the dates July 1-10.

The Sporting committee immediately requested the 1982 Organizing committee to change the dates to bring the days into line with SAC Procedures. These Procedures were set up some years ago by the Sporting committee (which is composed of contest pilots) to assist pilots making long journeys to contests — whether from the East or West. However, the Organizing committee was unwilling to make the requested changes. The SAC Board of Directors supported the stand of the Sporting committee and early in October directed the organizers to make the appropriate changes. The Organizing committee again refused. By this time it was clear that a most regrettable situation had arisen over jurisdiction. The Board had not yet accepted the SOSA bid formally and had the option of rejecting it unless it was run according to SAC Procedures and direction.

After further consultation with the Sporting committee and communication with members to the SOSA Organizing committee the Board made the decision at its meeting on January 9th based on three major factors:

1. No other bids for the 1982 National Contest had been received.
2. Volunteers from SOSA had already made their own commitments to particular dates and had put in large amount of time and effort in good faith that their club would be hosting the event.
3. The Organizing committee had previously announced their contest dates publicly.

The Board formally accepted the bid of the SOSA Organizing committee to host the 1982 Nationals on the dates July 1 -10, and deeply regrets the inconvenience to pilots who have expressed concern over those dates. The SOSA bid was acceptable in all other respects.

Russ Flint
President

THE HALLOWE'EN WAVE

… the Cowley Wave atoned for its lack of performance at the Thanksgiving Wave Camp with admirable verve — serving up to altitude-famished pilots a banquet of nine Diamond climbs and two Canadian altitude records.

The effort began on the weekend after the wave camp. Bruce Hea got a favourable weather report and had the Calgary Terminal Control Unit open the Livingstone Block*. Saturday provided only scratching exercises over the Porcupine Hills just to the east of the airstrip, but Sunday morning (Oct 18) presented four Cu Nim pilots with beautiful lenticulars to tempt us into the air.

I was first up on a bouncy tow behind the Citabria which arced around to the edge of the "Porkies" and moved slowly north of the field. At only 5800 asl, an extended surge of lift prompted me to release. Feeling a little smug about saving myself half the cost of a normal 4000 foot wave tow, I swung westwards into the lift, gained a couple of hundred feet, then promptly fell out. It became apparent that I was low down in the rotor of the tertiary wave behind the airstrip; I struggled to use every "up" bump I could stumble into but I slowly lost ground.

In the meantime, Bruce came up on the second tow and he hung on past my position while the towplane moved westward into the secondary which was about two miles to the west of the airstrip. After release Bruce radioed that he was climbing at 500 fpm at 8000 feet. Hearing the good news, I headed forward quickly, hoping that I would have enough height left to contact. With at most 1500 agl I entered the rotor area, and after a bumpy 2000 foot ride, I was on the smooth 'escalator' at 7600 feet.

The lift was not very strong, at the higher levels only 50 to 250 fpm, but it kept going, and we climbed steadily for two hours. At about 28,000 feet, Bruce called Calgary Terminal for further clearance, however, they said there would be a forty minute delay for passing commercial traffic. Well, besides frozen toes and lowering oxygen, neither of us had the patience to wait that long. We both hung on a few minutes longer then started the descent.

Back on the ground, happy and warming up, we chatted about the day's events. Bruce complained that the Calgary controllers lacked some appreciation of the limitations of glider and pilot, and said that he was going to have a talk with them during the week. He did, and as you will read, it worked.

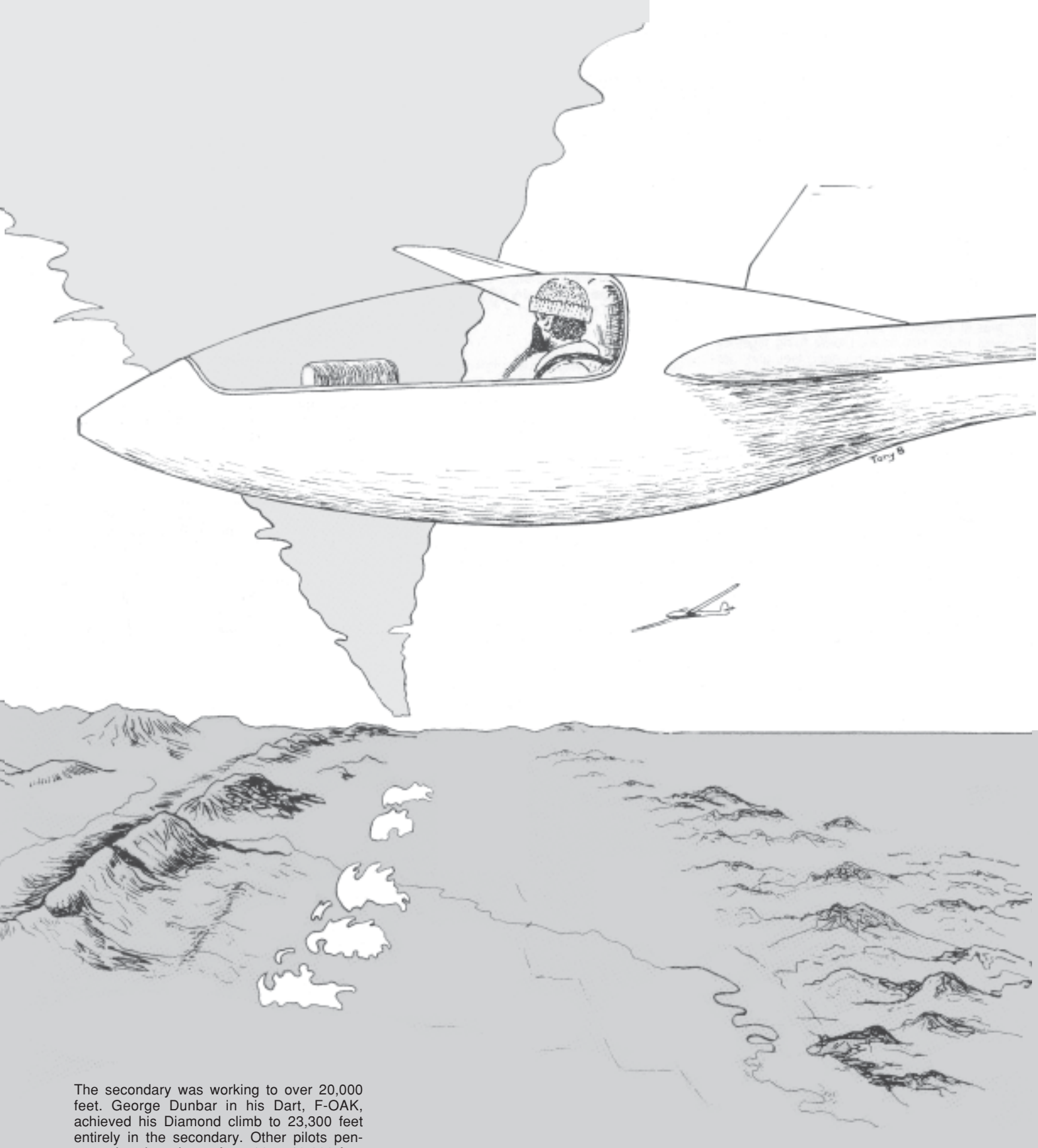
As for me, I had my best gain of height ever, but I couldn't prove it. My barograph had not rotated, and the flight trace consisted of a single arc up the foil! But I had matched the 1966 Canadian territorial record set by Wolf Mix, and it whetted my appetite for further attempts.

. . . . . .

Later, on the Thursday before Hallowe'en, Bruce called me up and said it looked like the wave conditions were going to be good again and he had notified ATC to reopen the Livingstone Block for the weekend. Was I interested in joining the party? You bet I was. All that week, lenticulars had been decorating the sky to the west of my back yard in Claresholm.

October 31. This Saturday morning presented a solid lenticular arch from horizon to horizon! Oh boy, oh boy, oh boy.... By noon, six gliders had arrived at Cowley, and at two, I was off. Once again, a tow into the secondary was the key, being shorter and much less turbulent than the primary (as Hans König was to discover later in the day).

* The "Livingstone Block" is the Transport Canada Class F (Special use) Airspace over Cowley allowing NORDO (no radio) glider flight to 29,000 feet and above that in radio contact with Calgary ATC. The airspace was first used provisionally at the 1972 Cowley Wave camp and was established largely through the direct efforts of Dick Mamini with the Transport Canada Western Region between 1971-1973.



The secondary was working to over 20,000 feet. George Dunbar in his Dart, F-OAK, achieved his Diamond climb to 23,300 feet entirely in the secondary. Other pilots penetrated to the primary from 16 to 18,000 feet and arrived above the rotor clouds with only about a three thousand foot loss. George relates, “My tow was the last, and I released over the Porcupine Hills in what turned out to be rather broken lift. However, when I penetrated to the west the lift became better, and finally when I got to about 9000 feet I left the rotor below and felt the silky smoothness of the wave. At times it would show over 10 knots rate of climb, but mostly I was registering a good 5 knots.

Because of a low point after release, I calculated that a Diamond climb would require something over 22,000 feet. I decided to continue to over 23,000 to be sure, and at that point opened the spoilers to come down. From the clock on the panel I knew it would be getting dark soon ... it was only after landing that I realized that the Dart was still flying on Daylight Time, so I really had an hour more than I had thought!

After descending some distance, I found that I was still well to the east, over the Porcupine Hills, so I pulled in the spoilers and increased the speed. It was only at 85 knots that I could see any progress over the ground. Even at

that speed I was still in the wave, and actually climbing at 3 to 5 knots, but I wondered how long that would last. I had to slow up a little in the rougher lower air, but began to worry a bit, even with four or five thousand feet above ground, if I could cover the two or three miles back to the field? It finally worked out all right, but without too much to spare."

. . . . . .

The primary wave was providing 600 fpm lift at the lower levels just behind Centre Peak, but it weakened considerably at about 25,000 for a while before a renewed pulse in the system allowed an additional climb at 300 fpm. When I was at 27,000 I finally saw Geri Moore in his DG-200 'LB' and Bruce Hea in his Libelle 'QJS' flying together directly below a few thousand feet, and I let down to join them and enjoy a little company for a change.

This was Geri's first wave flight at Cowley, and he was joyfully adding more and more metres to a Diamond climb under the arch. He says, "Ever since arriving out west recently, pilots have been whispering in my ear great tales of Cowley, home of the majestic mega-wave, the Chinook Arch. One of those pilots was now soaring beside me, on his way to a height record. He got me out of bed the night before with an excited voice telling me that the weatherman was predicting ideal wave conditions. "I'm glad I was ready for it, because high altitude attempts require a lot of careful sailplane preparation. My previous wave encounters had quickly convinced me to upgrade my oxygen system, and for once I was properly dressed, but I still need better boots and gloves. There were distinct temperature drops at 25,000 and 30,000 feet and the DG-200 got two small cracks in the canopy from the extreme cold. I also appreciated small but important things like a properly marked map after getting hopelessly lost for a while on this first flight from Cowley. The positive attitude of the pilots that weekend made it a safe event. I'm sure not used to ATC communications, and never before had I the opportunity to hobknob with a 747. I'll have to study a bit and visit Calgary ATC this winter." Geri finished the day with a 7300 metre climb to 31,000 feet.

. . . . . .

I had a cold climb. The huge lenticular arch had cut off the sun all day. Its leading edge appeared to be a few miles forward and coming off the mountains of the Continental Divide. The arch was very high, and at the top of my climb I estimated it to be at about 40,000 feet. The canopy tended to ice up quickly if I didn't keep the nose vent on my RS-15 wide open. That didn't help my toes, or the radio, which began transmitting only intermittently. The met records that day were giving -56°C (-69°F) at 36,000 and -43°C (-45°F) at 30,000.

Once again, Bruce and I were alone at the top. This time when we were approaching 29,000 we saw a commercial flight complete with contrail coming at us from the west. It passed directly overhead about 3000 feet above us on the "High Level 500" airway. I then heard Bruce request clearance to Flight Level 370 for one hour, and it was granted by ATC almost immediately.

There was a broad area behind Centre Peak that continued giving an honest 300 to 400 fpm lift, and we climbed up in great circles. With a high true airspeed, I was tending to penetrate too far forward every time I tried to maintain an into-wind heading. Winds were recorded at 88 knots at 24,000 and 74 knots at 34,000 feet.

By the time I was approaching 35,000 feet, I decided to call it a day; my toes and heels were icy, the cold was finally soaking through my gloves, my gut was inflated, the beginnings of positive pressure in the mask made breathing 'funny', and the canopy was losing the battle with the frost. All in all, it was getting a little too spooky, even for Hallowe'en. It took twenty-five minutes to descend.

Bruce had the same problems and landed only a couple of minutes behind me. He had worse visibility problems as the smaller canopy on his Libelle didn't allow for much cockpit warming or better ventilation. We both estimated that our high point was about 35,000. After calibration, Bruce's height was found to be 34,400 feet (10,485 m) for a gain of about

COWLEY DEFINED

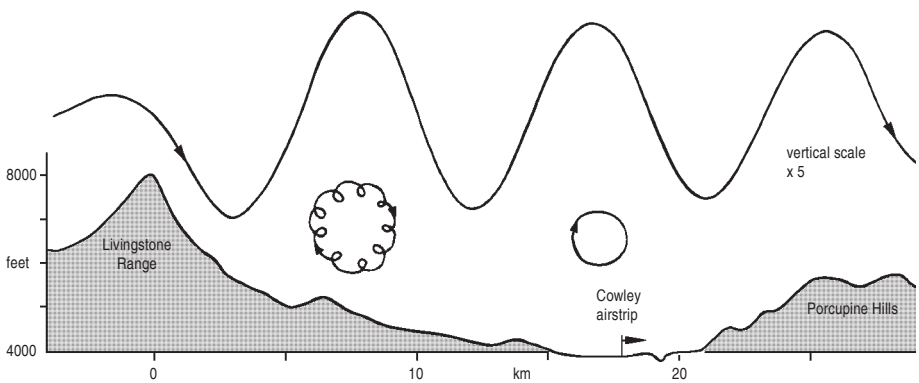
Why is Cowley? The Livingstone Range is the most southerly of a chain of mountains extending north from the U.S. border and which face the Alberta foothills and plains. The Livingstone Range is about 50 miles long and begins just north of the Crowsnest Pass; but it is the first 18 miles running up to the Oldman River Gap which is the great wave generator.

This 18 mile wall of rock is a continuous ridge over 7700 feet high marked by 8364 foot Centre Peak in, naturally, the middle. There is an initial steep, regular cliff which then transitions to a gentler slope to the smooth valley floor at about 4000 feet elevation. It is this continuous ridge, leeward drop-off, and the 'clean' topography which is well suited to wave production.

The Porcupine Hills are also a powerful influence and are well situated to amplify the wave. The Porcupines are the eastern flank of the valley, rising 1500 feet above the valley floor in a band of disorganized low hills. The normal wavelength of the Cowley wave places the tertiary wave above these hills and they seem to strengthen the secondary which will lie directly over the airstrip or a couple of miles upwind.

The tow to the secondary is therefore short with a forgiving and easily avoidable rotor; and because the field is so close, it is safe to release at a low altitude — 2000 agl is not uncommon. Transitioning to the primary is straightforward, especially if one diverts to either end of the ridge where the wave diminishes.

There is a much more severe primary rotor, which may be influenced by a small ridge right in the lee of the Livingstone Range. It is possible that it contributes to 'separation' of the airflow coming down the mountain slope, magnifying the turbulence under the primary. In any case, a 4000 foot tow to 8000 feet is necessary for safety, and it may be very difficult for the towplane to negotiate the rotor at all in strong wave conditions.



The airmass is usually dry, which helps keep canopies clear, and often the wave may not be marked by any lenticulars at all. There are certainly no problems with windows closing in, the visibility is superb, and the airstrip is surrounded by miles of wide open fields.

In general, the potential for wave on any day is excellent: top altitudes are as good as the fabled Pikes Peak wave in Colorado, and the much lower entry altitudes make Diamond climbs (to 25,000) safer, surer, and much easier on the feet and your glider. The only disadvantage now is simple logistics; a group must get organized and import all the equipment for a day's flying. Maybe when it becomes a National Soaring Site … but that's another story.

26,000 feet (7940 m), for which he has claimed the Canadian territorial absolute altitude and altitude gain records.

I will never know my true height, the baro needle ran off the top of the drum at 33,000 feet. But I matched the 1966 Canadian territorial record set by Wolf Mix, and it whetted my appetite for further attempts. Much satisfied, of course, we all helped tie down the gliders, and then headed into Pincher Creek to eat, drink, and post-mortem the day's events to death, and wait to see what the next morning had to offer.

November 1. From the motel window in Pincher Creek, lenticulars could be seen working off the mountains in Waterton National Park south of Cowley and the Crowsnest Pass. The morning was clean, Indian Summer at its best, and the day would break the high temperature record established in 1907.

There were eager and earlier starts today as pilots untied their ships and got oxygen refills. Hal Werneburg was first off in his Mini-Nimbus '24' at 0930, and eventually reached 28,000 feet. It turned out to be about all that could be squeezed out of the wave that day. The lift in the lower levels was good though, and gave sweet climbs of 700 to 800 fpm.

I launched after Hal, and at 1000 feet noticed my blinker wasn't blinking, so a quick return to re-turn the oxygen bottle valve (the PRICE oxygen system checklist works fine provided you don't shut off the tank afterwards!). Off once again, I eventually met Hal at 24,000. We topped out a half hour later and Hal descended to give Hans König a try.

Hans did "good". Getting to 27,700 feet, he made a 6416 metre gain for his Diamond altitude. Certainly it was much 'gooder' for him than the day before when nothing worked right, and he was unable to connect on two tows to the very rough air under the primary.

The secondary was cooking again to over 22,000. Bruce Anderson in his Phoebus C, F-UKY, climbed to over 17,000 in the secondary before going into the primary with very little loss of height. He made two climbs there while the wave quit at the south end of the Block, then eventually reached 27,400 feet in a three hour flight for his Diamond climb of 5900 metres. Great! The only way this weekend could have been better would be to have had more pilots there. The wave was generous to everyone taking the effort to go for it.

The sky was clear above Cowley. Below, scruffy rotor cloud marked the primary at about 12,000 feet; and to the south, gorgeous stacks of lennies still decorated the mountains in Waterton Park. Now Rob Young in his Open Cirrus, GORT, and Rick Matthews in his ASW-19 came up to enjoy the view. And they did. Rob climbed to 22,000 in the secondary and reached 26,800 in the primary. I saw Rick floating around and he gently moved over and directly under me, as serenely as one has seen an Apollo 'docking'.

"You look fine", said he ... "Thank you", said I.

Packed and heading home to Claresholm at sunset, I had to stop beside the highway, as did others, and gape at the absolutely incandescent lenticulars which finally formed over Cowley. What a finale to a memorable weekend. □

HOT SHIPS — THE ASW-22 FLIES

Excerpt from "Luftsport" Aug 1981
translated by Hal Werneburg

The maiden flights of the ASW-22, designed by Gerhard Waibel, were flown by Edgar Kremer and Hans-Werner Grosse on 8 July 1981.

H.W. Grosse said after his flight with the 22m (Australian) version: "The ASW-22 is easier to control and can be flown much slower than the ASW-17". And others say, "Great flexibility despite the extreme 24m wing span. She can turn into a clean 45° banked turn within 2 to 3 seconds from straight flight. Although without finishing touches, the ASW-22 already reveals excellent climbing abilities …"

The span of this super-bird is 24 metre, carried on an 8.1 metre fuselage. The new profile (HQ 17) offers the dream L/D of 55 through the use of turbulators. The wings are built from carbon fibre and fibreglass to give them the necessary strength, low weight and the lowest possible wing loading (for weak weather conditions). This profile is based on the successful Wortmann profile (FX62-K 131; 14.4%; and FX60-126) but modified for high Reynolds numbers, as well as for the effect of air blown out of the lower wing surface. After tests to determine the actual areas of laminar separation and turbulence occurrence, 0.6 mm holes (2 cm spacing) will be drilled to blow air out and to change the laminar boundary layer into a turbulent one, thus preventing the greater drag caused by laminar air bubbles separating from the wing surface.

In slow flight, the ASW-22 turbulator system is expected to have a performance increase of 2 to 3%, and in high speed flight by 8%. These increases are based on wind tunnel measurements.

Prior to the start of the design, thoughts had been given to using either a telescopic wing or Fowler flaps, but the better performance for a camber flapped sailplane with such a great wing span were the decisive factors in the final choice.

Through use of carbon fibre and the clever partition of the wing, the weight stayed within handling limits. The caps of the I-beam spar are carbon fibre, the web and connections glass fibre, (torsion box) structure carbon fibre, with a protective layer of glass fibre. A pure carbon fibre outer layer would be too sensitive to impact damage.

There are six wing sections. The inboard section (without water ballast tanks) weighs 60 kg, the middle section with the airbrakes 70 kg, and the wing tips 4.3 kg each. The 1 metre wing tip extensions for the 24 metre version are snapped on.

The wing centre sections are connected to the fuselage by a tongue and fork connection, and a bolt. The integrated flap and aileron controls have been copied from the ASW-20, but modified. In the range of -10° to +10° all controls are parallel. In the landing position, the inner flap deflects 45° downwards, the middle flap to +10° and the ailerons to -10°. The airbrakes extend upwards only. The aileron control operates the middle and outer flaps in such a way that the outer flaps (ailerons) deflect twice as much as the middle ones, giving the ASW-22 its good roll rate.

The weight of the fuselage was kept within design limits, the aft portion received more carbon fibre; while the front part, for centre of gravity and safety reasons, received the heavier glass fibre, which has greater impact resistance than carbon.

The cockpit is long and low, the pilot's position more reclining and the instrument panel tilts upwards with the canopy to give easy entrance.

On the pilot's left are the levers for flap control (6 positions), tow release, and air brakes, where at full pull the disc brakes of the double gear are activated. The gear lever is on the right side and positioned in such a way that before extending the main gear the tailwheel is lowered.

The trim lever is on the control stick. One NASA air vent is installed at the rear fuselage under the right wing (double the size of the ASW-20), supplying a regulating valve for direction of flow and an anti-fog valve in front of the cockpit. The only exit for the cockpit air is an opening in the elevator, which enlarges when pulled, and decreases when pushed. All control surfaces are built with Kevlar to save weight. The tow hook is in front of the left main gear and is covered by a slightly enlarged gear door, which cuts down almost all noise.

There is extremely good visibility forward and sideways, with in-flight adjustment for any desired sitting position. The batteries are installed in front of the pedals. The low fuselage design did not allow installation of a big wheel that would safely carry the 700 kg maximum weight of the 22m version. Therefore a double undercarriage with two smaller wheels has been installed. Ground clearance seems to be sufficient for 24m, even on a rough field.

It is hoped that series production can begin at the end of 1981. □

SAFETY COLUMN

Eric Newsome
Chairman Safety Committee

ON REPEATING HISTORY

Not only is he who cannot remember the past doomed to repeat history but so, also, is he who never knew in the first place. A perfect example of this is the recent casting about for a foolproof weak link, triggered by an 'overstrength' rope incident. Some members have come up with memories of shear-pin devices and stamped steel links which were to have been the ultimate answer. I have seen neither device but now, thanks to a well-stuffed file supplied by 'Chem' le Cheminant, I know more about them than I ever desired — including the reasons why they are so elusive.

The file contains engineering drawings of both devices, test reports, a selection of tested and failed steel stampings together with letters from various parts of the world where, it seems, weak links are also a continuing problem. Apparently the SAC Technical committee was given the task of designing a safe weak link in 1947 (yes, the date is correct!), and came up with a shear-pin device in which the pin was supposed to break before loads on the glider became excessive. The pin was difficult to inspect, was subject to corrosion and had an assumed life of only fifty tows. It seems that as fatigue was inevitable, the possibility of overloading would diminish as the certainty of an early release increased.

The next attempt involved stamped steel links in the tow system which had a known breaking strain. To guard against fatigue two links of the same breaking strength were fitted side by side in such a way that they would break sequentially — if an understrength link let go the other link would, theoretically, hold. Unfortunately it was possible to assemble the device in such a way as to double the breaking strength instead of building in a safety factor. Corrosion, scratching and fatigue were still problems.

In an article in the file 'Chem' asks, "Is there really a case for relying on a length of often frayed and dirty, unpredictable rope to hang on a sailplane of ever increasing monetary value?"

No, there wasn't in 1947, there hasn't been in the almost thirty five years since the Technical committee started looking for the solution, and there isn't now. But I have been dangling on the end of that unpredictable rope all season and so, I suspect, have you. And will you next season?

You will, unless we have some genius out there who can supply us with a quick answer. Perhaps we are looking in the wrong place anyway, why put a device susceptible to scratching and corrosion at the end of a rope which is to be dragged over possibly wet ground at high speed? Could it not be that the adjustment should be made to the tow hook itself which has some better chance of staying clean and dry. In that position the 'giving' strain could be matched to that of the glider itself.

Could it also be that we are expecting the wrong people to look for the solution? Where do the designers of gliders stand in this? If a rope breaks causing an early release, it is clearly a rope strength problem: if a release mechanism hangs on to the point where an 'overstrength' rope causes structural damage, then it would seem to me to be a design problem. Can it be that when gliders are checked for airworthiness there is no requirement to have the release mechanism 'tuned' to the structural strength of the point to which it is anchored? That doesn't seem right to me. □

TROPHIES AND AWARDS

Over the years, individuals and organizations have donated to SAC trophies which are awarded to individuals and clubs to recognize meritorious efforts in the fields of service, outstanding flights and competition. Since these trophies are retained in the National Office and are only displayed in other locations during the Annual Awards Banquet and at the Competitions, the average member will have little chance to view them. However, to make these trophies and the other recognitions that SAC makes to worthy recipients more familiar to the general membership we will be covering all of them over the next few issues.

THE AWARDS RECOGNIZING SERVICES TO SOARING

The Instructors Award

Each year the Chairman of the SAC Instructors committee invites member clubs to nominate candidates for recognition as "SAC Instructor of the Year". The request is usually made in December and the deadline is approximately the end of January. Clubs nominating candidates are expected to provide supporting data which should include the number of instructional flights made by the nominee, the percentage of the clubs' total instructional flights that this number represents, and details of other instructing activities carried out by the nominee (for example, running a ground school). This data is assessed by the Chairman using guidelines established over the years and the most worthy nominee is awarded the INSTRUCTORS TROPHY at the Annual General Meeting. It should be noted this award is not made simply on the basis of the total number of instructional flights but also takes into account the size of the club involved and the amount of other instructional activity.

The INSTRUCTORS TROPHY was first awarded in 1964 and has been awarded annually since.

Ball and Chain Trophy

This trophy was constructed and donated to the SAC by Mr. J.W. Ames, a former President, in 1951. It is awarded annually to the married pilot for the most outstanding accomplishment during the year. Over the years this trophy has been awarded both for outstanding flying accomplishments and for outstanding accomplishments in the field of service. The recipient of this trophy, awarded at the AGM, is chosen by the President of SAC.

Special Recognition Awards

First instituted in 1979, merit plaques may be from time to time presented to individuals who have contributed to the growth and development of soaring over a period of several years. These contributions may have been locally or on a national basis.

Life Member

This is the highest recognition that the Soaring Association of Canada can make to any of its members. When a member has contributed many years of outstanding service to the SAC, his or her name may be presented to the general membership at the AGM by the Directors for voting upon as laid out in the By-Laws of the Association. □

Acoustical
Collision Warning
System in Gliders

HEAR HEARD SEE AND BE SEEN

Thomas A. Reisner
QUEBEC SOARING

Rolling into a gentle bank as the first puff of the thermal buoys up the nose of my glider, I ease back on the stick and watch the vario needle begin its slow upward sweep. Outside the charmed cocoon of the cockpit, where I sit snuggled like some immense chrysalis, the weather is balmy, with all the temperate sweetness of a lazy, sleepy midsummer afternoon. The sun, filtered through the canopy, strokes my skin with a benign warmth, sending soft shadows and lights round and round in unending gyrations. A hint of haze overhangs the horizon already blurred with the speed of my turning, and in the hypnotic stillness of the scene a contentment, timeless and deep as the sky, steals over me like a trance. Fascinated, I am still watching the vario needle, almost perpendicular now in the gathering upswell I am riding, when suddenly — out of nowhere — a shadow looms overhead! Instantly, terror, sheer physical terror, wrenches me as I glimpse (it seems, only inches away) the metallic glint of a glider wing. Gone: the shape, only a split second ago poised above me like the executioner's axe, wheels out of sight: I am left gasping in the dumb aftershock of horror, faint, bug-eyed, incredulous. I am alive; but even as my self-possession gradually returns, I know that the image of what might have been — the image of torn metal crushed against glass — will haunt me for as long as I live. I have come face to face with the Angel of Death; he has brushed me with his wing.

. . . . .

The incident I have recounted is fiction, but to many — too many — of us who fly gliders, perhaps uncomfortably familiar.

What can be done to prevent it? The advice, trite as it is, still merits repetition: keep a sharp lookout; see and be seen. A constant scan of the airspace around us, above and below, an attitude of sustained mental alertness to goings-on outside the closed world of the cockpit are still the best means of preventing mid-air collisions. It is also useful to be able to recognize the physical and psychological factors that can adversely influence pilot performance: fatigue, nervous tension, overconfidence, anxiety — and particularly to the glider pilot: false sense of security generated by the slowness and silence of motorless flight, the constant monitoring of flight instruments and the consequent disregard of other air traffic, the paralyzing, almost hypnotic effect of circling interminably in monotonous thermalling patterns — and many others typical for this sport.

The noiselessness of unpowered flight opens the door to hitherto unused possibilities for other collision prevention devices of the auditory/acoustical kind. It is to the discussion of these possibilities that I shall devote the rest of this article.

The sense of hearing, a sensory channel second in importance only to sight, has been, for some unaccountable reason, traditionally under-exploited in gliding. Although, as flight training manuals often point out, changes in wind-noise intensity can provide warning of the approaching stall or indicate abnormal conditions of flight (the skid, the slip or the spin, for example), piloting, by common consensus, is regarded primarily as a visual art.

Despite the primacy of sight in man and its paramount importance in flying, acoustical signals have certain advantages not shared by their visual counterparts. For one thing, objects are visible only insofar as they are in the percipient's line of sight, whereas they may be audible even when they are situated directly behind him or are screened by some intervening obstruction.

Auditory perception is a passive process; given an acoustical signal of sufficient intensity, its perception is automatic (example: audio variometer). Partly because the sense of hearing *is* passive and because, as a matter of physiological fact, our responses are appreciably faster to auditory than to visual stimuli, both in man and in the animal kingdom hearing is the privileged sensory channel for the transmission of alarm signals. Lastly, thanks to the placement of the ears on opposite sides of the head, acoustical signals are perceived stereophonically, a fact which permits us to deduce their location in space instantly and without conscious effort. Although the spatial pinpointing itself is not extraordinarily accurate, it is sufficiently so to enable the hearer to direct his response as the occasion requires: ie., if the signal is one of alarm, to take the appropriate evasive action.

To sum up, both the physical characteristics of sound and the physiology of auditory perception would seem to make hearing the sensory channel of greatest potential usefulness in collision avoidance. How can it be put to best advantage in gliding? A number of possible systems suggest themselves, ranging from the simplest warning devices all the way to fairly sophisticated alarms.

At its most primitive, the system might take the form of a powerful horn installed in the glider and activated by the pilot at will to signal his presence to others around him. Light, portable klaxons of this kind, using disposable bottles of compressed air and requiring no attachments or wiring, are already widely available on the market as foghorns for small craft. The high, piercing shriek that these units emit at the press of a button might make them useful to pilots not only as a means of alerting other flyers within a radius of several hundred feet of the glider, but also as a resource for clearing runways for landing and as a distress signal during launch to towpilots.

Other, somewhat more complex devices of the interactive type are also conceivable. One such system would require all sailplanes to be fitted with external high-powered whistles oriented into the relative wind and pitched to a uniform frequency just above the upper limit of the audible range (say, for argument's sake, at 20,000 cycles per second). Each glider would also be equipped with a tuning fork or some analogous resonating device tuned to a pitch about 2% to 3% higher than the whistles (ie., 20.4 to 20.6 kilocycles) and connected to a simple buzzer alarm. As soon as the sailplane achieved flying speed, the whistle would sound its ultrasonic vibration, though this would of course be inaudible to the pilot. Should any two gliders converge on each other at a relative speed of between 20 to 30 km/h, their approach would instantly set off the alarm, warning each pilot to take evasive maneuvers. The principle of operation of the collision avoidance device is quite simple: as the two sailplanes close on each other at speed, the frequency received by the resonator of each from the other's whistle rises, owing to the Doppler effect. A 30 km/h approach velocity will raise the received frequency sufficiently to induce sympathetic vibrations in the tuning fork of each glider and consequently to trip the alarm. Needless to say, no alert would be sounded by the mere fact of the *proximity* of two aircraft (flying in synchronized formation, for instance), since their relative speed in this case would be zero; but the apparatus would be effective to signal the sailplane's approaching at the critical speed any acoustically reflective surface (such as a rocky ledge in ridge-soaring, for example). In this case, the glider's tuning fork would respond to vibrations generated by the aircraft's own whistle, bounced back from the surface in the form of an echo, on the same principle as in submarine sonar[1].

The interactive collision avoidance system I have described is not only within the realm of technical possibility, but, given the resources needed for its development, could become standard equipment on gliders in a matter of years. There can be little doubt that some such device, if it were to be marketed at reasonable cost and come into general use, could do much to improve the safety record of gliding, a record that has been anything but spectacular. Unfortunately, in these days of tight money, few dollars find their way into research and development of new products, and even fewer when the products to be researched and developed are intended to benefit an esoteric minority (as soaring enthusiasts are accounted to be). Meanwhile, till more auspicious days come, we may have to content ourselves with simpler acoustical systems to reduce the risk of mid-air collisions.

Foghorns, anyone? □

1 The critical approach speed at which the alarm would be triggered in the "sonar mode" (it may be parenthetically noted) would be one-half that in the "interactive mode". The reason is that the reflected signal undergoes two Doppler shifts — one on its way to the reflective surface and a second on its return to the glider.

THE BALLAD OF BOUDREAULT'S BOAT

WHEREIN WE ARE TREATED TO SOME OLDE VERSES, AND RAMBLINGS ON THEIR ORIGIN IN THE BEGINNINGS OF THE GATINEAU GLIDING CLUB WITH "SHORTY" BOUDREAULT.

Last March while visiting Christine Firth in Ottawa after the AGM, she dug out of the SAC archives an old verse by Barrie Jeffery. He was an active glider pilot and instructor in the Ottawa area for many years and still lived in town. Tony was excited to hear that Barrie was still kicking, since Tony got his first taste of gliding in a Pratt-Reid in 1959 at Cold Lake when Barrie was temporarily employed there. We spoke to Barrie on the phone that day to get "caught-up", and he subsequently wrote us a letter outlining the genesis of his poem and something of the early days of "Shorty" Boudreault and the Gatineau Gliding Club. Ursula

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Once upon a time 'bout a hundred years ago,
There paddled up a river an explorer named Boudreault
Who parked on Lake Deschenes and scanned the northern shore,
"By Gar," said he, "dose hills mus' be a t'ousan' feet or more."

There came a sudden sullen splash, a sudden startled yelp,
"Where are you, mate?" cried Boudreault, and Henshaw hollered, "Help!"
Young Herb had fallen overboard while resting on an oar;
For, dreaming of those distant hills, his thoughts began to soar ...

Now later on that evening, as they camped beneath the trees,
Boudreault said to Henshaw, "If a fair to middling breeze
Were blowing from the south of west along that range of hills,
I'll wager you a pint of ale against a pot of pills
That I could soar an old barn door along that ridge and back
And set it down at Lariault's as neat as crackerjack."

Herbie tried to laugh it off — ridiculous idea!
But in his sleep he muttered like an aero engineer:
"... if the hyperbolic tangent to a cyclic polar plane
Were integrated up and down, the helicoid would gain
An isentropic lapse rate humidified to suit,
With exothermal polyphase and entropy to boot ..."

The years roll by, dear reader; behold against the sky
Practical results of Herbie's dreams of how and where to fly:
Mighty bombers rend the air, and can rend a city too;
And afterburning Banshees beat their sound into the blue;
'Liners crowd the airways: round the world in half a day
From billion dollar runways controlled by GCA ...

But whatever's THAT? Above the hill... By Lariault's I swear
Was that a spot before my eyes ... or was a glider there!
Come see the happy pilot, so green and yet so proud,
Bobbing like a shuttlecock above the madding crowd ...
Boudreault's great-great-grandson discovered how to soar
For all of fifteen minutes on a modified barn door.

... To answer your questions about the "ballad" which you so kindly refer to as a poem, the junior Boudreault was, in fact, A. Ovila, or Shorty as he is always called in soaring circles. Lariault was, I guess, a pioneer of the Gatineau Hills north of Ottawa; a narrow road bearing his name wound up to the crest of the ridge near where the Gatineau Gliding Club had its origins. Herbie Henshaw was an Ottawa glider pilot who did a good deal of soaring including cross-country in the late forties and early fifties and was a mainstay of the Gatineau Gliding Club. After taking a few decades off from gliding, this cool customer recently reappeared at the Rideau Valley Soaring School, and even more recently in the last year or two bought an HP-14 and rejoined the Gatineau Gliding Club.

It is a bit alarming to think of you actually publishing that dog-eared verse, since one's written words live on when all else has disappeared, but if you are prepared to include it, feel free.

The soaring event it immortalizes was a real one — a ridge-soaring flight Shorty made in an open Dagling Primary over the southern edge of the Gatineau Hills near Ottawa in about 1944. Shorty for many years had the most sensitive "seat of-the-pants" in the GGC, but close to that was a sensitive stomach. For years this held back his attempt at the Silver C duration, but in spite of this he became the first pilot to win the Silver C in Canada. Shorty earned his "C" in the Dagling with a 9 minute flight on the ridge on 4 July 1944, and a 15 minute flight was flown later in the same summer.

Shorty joined the GGC before it started, like a sperm joining an egg. And Shorty's genes had a great deal to do with the development of the club into a turbulent youth and a responsible adult. In particular, if there was work to be done, Shorty was always there. Secondly, his flying ability was a challenging example — rather a frustrating target of achievement for us followers and thirdly Shorty's unfailing good spirits set a cheery tone that was a key to the morale of the club through some setbacks as well as in the good times. For these reasons, I am slightly repentant of the satirical tone of the dogged doggerel, but Shorty himself seems to enjoy it.

A group of young National Research Council staff members started construction of a primary glider in a basement in about 1942. They included Dick Hiscocks and Jim Simpson of the Structures Lab, the late aerodynamicist W.F. (Bill) Campbell, and others. Shorty joined the Engine Lab that year, and hearing about the project, started to lend a hand. The glider was first flown in 1943 in a field west of Ottawa now covered with apartments and the like. When the owner and cattle found they didn't like all the activity, the gliding was moved to a field at the foot of the Gatineau Hills owned by a farmer named Mulvihill. It must have been at that time that the club was named the Gatineau Gliding Club, and the fall colours russet, green, and gold chosen to represent the club. It was from Mulvihill Field that Shorty made his first soaring flights. Shorty tells me that Bill Campbell made his "C" flight the same day he made his ... Tom Mulvihill, the son of the owner of the field, worked at NRC and lent support to the club.

It was not too good in many ways at Mulvihill Field. The ground was low and in a wet spring months of flying could be lost due to the soggy ground. The members erected a hangar there for the Dagling and a winch, but the specially designed, "break-down" hangar was dismantled in record time by Mother Nature one breezy day. Shorty remembers gathering up panels from the surrounding fields with Jim Simpson, apparently the only other volunteer available. With these discouragements, in 1947 the club moved to the airfield at Carp, about 15 miles west of Ottawa, where they had the benefit of runways, hangars, airtows, and great thermals.

It is significant that when I joined the club in 1948, Shorty was, as far as I know, the only member of the embryonic group of glider builders from 1942 that was still an active participant in the group. In 1981, he is still a member. □

CLUB NEWS

DISABLED RIDE AT CU NIM

A remark on a radio program stuck in my mind: "What are you, or the organizations you are connected with, doing for the International Year of Disabled People?" At the next executive meeting, I suggested that we should provide intro flights for some of the local disabled. This was enthusiastically agreed to, and the planning began.

The most difficult part was contacting the right person in the Canadian Paraplegic Association office. The flying season was slipping away, it was September when we contacted Don Smeal in the IYDP office. Don and I met and discussed what we could offer, and what problems we might encounter. Apart from having to eliminate potential hazards, eg. people subject to seizures, I was concerned that the facilities at our field might be inadequate. (We do not have a wheelchair ramp into the outhouse). Don noted the suggested restrictions on candidates, and quickly disposed of the other concerns. We fixed for Don to visit the field, to check on conditions and to see what this motorless flight stuff was about.

After an hour soaring with our club president, Don was really exhilarated, and THE day was set for Friday, October 2nd.

Thursday evening was time to phone around and confirm that we were all ready, and the first snag appeared; the planned towpilot was unavailable. Two hours and eighteen phone calls later, Sandy MacLeod called back to say he would be towing, having convinced his boss that that was more important than exercising his geophysical talents for the day.

Everything was now set, and the next disaster didn't happen until 7 o'clock Friday morning, when Don called me to ask "Is it still on?" "Don't see why not, Don," I replied. "What about this snow, is that OK?" Hastily grabbing my glasses from the bedside table, it became apparent that the dimly-perceived early morning mist was indeed the first serious snow of the winter. How could this be, after weeks of typical Alberta sunshine? I assured Don that the weather would be OK, but I would go out to the field and call him again from there, while he rounded up our guests.

Gloom! Ceiling about 800 feet, visibility less than a mile. A call to our CFI, who was waiting in his office back in Calgary, thirty miles to the north. "Its improving here, and moving your way", was his news. Since any change would be an improvement, I told him it was improving at the field also, and we decided it was on.

When Don arrived with our seven guests, we and the weather were ready. With a lot of help from other members who came out for the occasion, Bruce Anderson and Hans König, with Sandy towing, flew with all our guests. Six were paraplegic or quadraplegic, and one was totally blind. While Derek was flying, Kevin, the blind one, borrowed his joystick-controlled wheelchair with its new sport motors. He disported himself all over the runway, being guided by his voice reflecting off the hangar, and some instructions called when landings were imminent. Wendy had been paralyzed below the waist in an aircraft accident some years before, but she was as keen as anyone to try flying again. Another guest had some previous glider time back in Ontario, before an accident (not related to flying) stopped him. None of the anticipated problems happened. The sun was shining again, people were lifted into our 2-33s, flew, and were lifted out again. It's true that Hans got stuck, standing on the back seat while lifting Don out of the front. Had our planned hoist been available, even that small problem would have been avoided.

As the sunset lit up the surrounding classic lennies with a soft neon glow, it was the end of another perfect soaring day.

What next? Everyone agreed it has been a worthwhile and enjoyable day, why should it be just once? Let's do it next year. The biggest problems are in the lack of imagination!

John Hall

WIDE SKY HONOURED

Frank Hinteregger, chief flying instructor of the Wide Sky Flying Club of Fort St. John, has this year checked out his 125th pilot on gliders since the club was formed ten years ago. To mark the occasion, he and his wife Lotte (also a founding member of the club) were presented with a large chime clock at a monumental club occasion on August 29.

The pilots checked out by Frank range from CP Air captains letting off steam on a stopover to rank novices. Nearly 30 of them were present at the ceremony along with twenty other club members and wives, some of whom flew in from as far afield as Pouce Coupe and Calgary.

"This is a tremendous accomplishment and we felt that it was time that the club showed some appreciation," commented club president Peter Vandergugten. "Not only have the Hintereggers donated freely of their time, they have also tied up a good deal of money in the club and it's this kind of dedication which has made the club what it is today."

The clock came complete with an inscribed plaque, noting the date and the occasion. A barbecue at the home of club member Ken Morrison followed during which the official club T-shirt was unveiled, a screaming eagle on the front and the words "Hinteregger's Heroes" on the back.

Frank learned to fly in Austria and immigrated to Canada with Lotte in 1950. He recalls that the first gliders he flew were single-seaters, car launched, a far cry from the sleek Blanik L-13 used by the club for training.

VOL À VOILE D'ASBESTOS FAILS

Bob Hyam of Vol à Voile d'Asbestos writes of the club's downfall: The club began operating with a Bergfalke II with winch launch. When I started in 1978,I was very enthusiastic and felt that Asbestos needed this kind of activity, being isolated from the "big" cities Sherbrooke, Quebec City, Montreal. After two encouraging years, the third year saw a sudden complete reversal as the asbestos industry took an economic beating which resulted in frequent layoffs and shutdowns. To make matters worse, one of our new solo pilots moved to greener pastures, and our other solo pilot was experiencing problems that did not allow much thought for gliding.

We attempted to stimulate interest through newspaper articles and ads and this year two demonstrations at Victoriaville, 40 km NE of Asbestos, unfortunately all to no avail. Of course the general economy has taken its toll not to mention the English/French – Instructor/Student problem.

Now as we are bound to close down, a little light had been coming across the mining hills as a newly-rated French instructor and a licensed cadet were becoming involved, unfortunately this was too late. I was hoping that the club could finance buying my glider so that the club could continue after I moved away. However, with the present tottering conditions of the mining company here, everyone is naturally feeling uncertain and not about to make any commitments.

In the final analysis, the club was a failure albeit for reasons not entirely under its control. I found the experience worthwhile and no doubt it would have been very gratifying if things would have turned out differently.

LONDON SOARING

The past summer season ended poorly; from the last week of July we have had very thinly-spaced flying days and we experienced higher than average rainfalls in August and probably in September as well.

In September, the club decided to buy a new lawnmower to improve field maintenance. The particular concern was small bumps in the runway which were causing excessive vibration for towplane and glider alike.

We are delighted with the M-C (Matthews Company) 88 inch flail mower that we purchased. The prime reason is the roller which is part of the mowing machine. It has made an immense difference to the runway surface, and has eliminated the tufts of grass which were also causing problems for the aircraft.

continued on next page

BONNECHERE SOARING

Despite poor weather we have had a fairly busy season. Six summer students from Atomic Energy kept our instructors busy. Unfortunately none reached solo status, as the weather hindered flying much too often. Our Argentinian friend enjoyed his first solo near the end of October, an air cadet with solo experience from Quebec City soon soloed again after a few dual flights, Pam Theilman achieved her C Badge, while Iver completed the Silver C Badge with height and distance flights in a Skylark 4. Congrats to all.

Our main effort in 1980 was the erection of a Fairford 70' x 70' hangar. This was made possible only by the enthusiasm of club members and a Wintario grant. The foundation was laid in July and by November the doors were on and all was ready for the winter. Last spring saw the laying of the cement floor of our new hangar which naturally has greatly facilitated cleanliness and movement of aircraft. After a suitable learning period, the club can now hangar-pack quite well and is becoming adept in avoiding hangar rash.

One area that our club feels that SAC could provide a useful service would be the setting up of a BASIC cross-country flying course. We feel there must be other clubs like ours where XC flying experience is fairly limited and who could benefit from this kind of activity. How do other clubs feel?

Our 1 -26 is available for XC flying, but its a little daunting to leave our field in a lower performance glider. Our strip has been cut out of the bush near Deep River, and one's only route out to landable fields (at Pembroke to the east) involves crossing 15-20 miles of trees, including the discouraging Petawawa military control zone.

Our Blanik has a great demand on weekends by non-owning members and passenger flying which of course helps promoting the sport, but eliminates its use for cross country. Another headache is the small membership which limits cash flow, and consequently limits us in improving our situation.

BULKLEY VALLEY FINDS WAVE

Since the arrival of our replacement Blanik in mid-August '81 we had been out at the airport every weekend, and although some good lift had been experienced, a fair amount of our time was spent on training. Then on Sunday, October 18, the beginning of the Fall wave conditions occurred. We experienced our first of the season STRONG wave day with wave starting at approximately 5000' asl and enough "low wave" and/or rotor above 3500' ASL top allow for a 2000' tow into the low wave and rotor. (The airfield is at 1700' asl).

A few words about our club and our area — our club has about 20 members, an L-13 Blanik, a Pilatus B4 and a Super Cub tow plane. The B4 and Supercub are privately owned. We fly off the grass beside the runway at the Smithers airport. Smithers is located almost in the geographical centre of B.C. and is just on the east side of B.C.'s coastal mountain range, about 150 "crow-flown" miles from the coast, and we fly with 8000' high mountains 2-3 miles to the west of us.

For weather on Sunday the 18th, we had a low in the Gulf of Alaska and a high west of Vancouver. We had westerly winds of 20-30 kts between 9000–12,000' and increasing with altitude. [This also gave good wave at Cowley, see page 10. ed.].

The first flight, a passenger flight, was to 1500' agl into violent rotor. Winds on the ground were around the compass and gusting to 15 kts.

The second flight — another passenger flight — was into the low wave and we gained 1500 feet. The towplane, however, continued to climb on power and cut back on power at 6000' asl and proceeded up to above 10,000' in short order.

The next flight saw both the Blanik and the towplane above 10,000', having towed to 2000' agl. The next few flights proceeded as above, one being a passenger flight (the Blanik was still climbing with 120 kts on the ASI), and one new member got the ride of her life to above 10,000'.

The only problem with all of this was that the Blanik had no oxygen and the towplane was often seen sitting stationary above the airfield at about 10,000' agl, nose into the wind, and no engine could be heard.

Have you ever experienced having to wait for your towplane pilot to get cold enough at 10,000' (the engine got a little cold too!) to return to the ground for the wearing business of towing the glider to 2000' before resuming his towplane soaring??

All in all, a very interesting gliding day, and — would you believe — only five Club members were present to experience it all!

82 ADVANCED X-COUNTRY COURSE

Notice of last year's course was clearly too short, and it had to be cancelled due to insufficient support. Plans for the 1982 course are tentative, and in the absence of user inputs, will be conceived with the same emphasis on contest flying and record attempts.

The probable venue is again Kars, 20 miles south of Ottawa, Ontario, airfield of Rideau Valley Soaring School.

Maximum daylight hours occur in June/July, but preferred dates must not clash with the 1982 Nationals.

Your ideas for course content will be given consideration during the planning. Send requests to:

John Firth
542 Coronation Avenue
Ottawa, Ontario K1G OM4.

18TH WORLD CONTEST ARGENTINA 1983

SAC will again support a team for this contest (see 6/81 page 5).

Gonzales Chaves is about 415 km SW of Buenos Aires. The area offers open grassland (pampa), about 95 km W of the Atlantic Ocean. Another 160 km W of the site are the 2000 foot Sierras de Curamalal, 110 km long from SE to NW, the two highest elevations are 4078 and 3727 feet. 80 km NE are the Sierras de Balcarce, a 160 km long small mountain chain with highest elevations of 1200 and 1700 feet, direction SE to NW. In an area with a radius of about 300 km NE to NW or 600 km wide, you find scattered salt lakes and a huge swamp, flooded 6 years ago.

Gonzales Chaves is a town of 6000 people, no hotels, elevation 194 m. Juarez (47 km NE from Gonzales Chaves) has 9000 people, 3 hotels, (117 rooms, 80 with bath), elevation 214 m. Tres Arroyos (41 km SW of Gonzales Chaves) with 50,000 people, 9 hotels (311 rooms, 182 with bath), elevation 107 m.

free flight will keep you informed of any further programs or achievements of negotiations with the public news media for a direct report to you from the world contest site.

1981 Schweizer Air Cadet Camp Held at Elmira

The Air Cadet League's Summer Encampment was held at the Schweizer Soaring School in Elmira, N.Y. last August. The cadets were: Mark Lawrence of Middleton, N.S., Lisa Cook of Kelowna, B.C., Vernon Lobo of Bramelea, Ont., Steve Fedyna of Edmonton, Alta, and Jeffery Edey of Ottawa, Ont. The training was conducted by Bernard Carris, the school's CFI.

For the last several years Schweizer has offered the Air Cadet Scholarship to the top cadets from the each of five major regions. Over the years, Cadets from all the regions have won the best cadet award. This year's best cadet, Mark Lawrence, is certainly a credit to the Maritime Region.

The Air Cadet League is the largest owner and operator of 2-33s in the world. Schweizer is happy to have cooperated with them over the last several years with this Scholarship Program, which is aimed primarily at moving the cadet into a soaring regime. Each of the cadets earned his 'C' Badge, and each was able to fly more than a one hour flight. They were all checked out in the 1-26E, as well.

M S C
How One Successful Club Works

Fred Rose
Montreal Soaring Council

For some years now there has been a panel discussion on club organization following SAC Annual General Meetings. In order to retain the spoken work, I asked Gordon Bruce, President of Montreal Soaring Council, and long-time member of that club, after his proposals at the Sunday panel discussion, to compile his views and knowledge on the subject that we could pass on "for better or worse".

Together with MSC free flight correspondent, Fred Rose, he initiated (hopefully) a series of contributions on club efficiency for the benefit of the rest of us. I invite every club to share its capabilities and knowledge, and/or flaws, as I wish to continue presenting articles on club organization and efficiency. — Ursula.

Anyone who's gone soaring south of the border, taken tows costing $20 and more, paid high glider rentals and pondered the differences with home, has realized that in many parts of Canada we're blessed with gliding clubs that make life far more comfortable. Clubs provide not only inexpensive gliding but friendship and good times as well. Still, making sport, fiscal competence, and operations fit together isn't always an easy task. Through decades, many good times and a few bad, the Montreal Soaring Council has kept those pieces in place. It's a clear success. What follows isn't intended to toot a horn, but rather to encourage some thought about the club system that so many of us enjoy. I'm indebted to Gordon Bruce, President of MSC, for his thoughtful views:

"There's a simple truth about a club: we're a volunteer organization. No paid hierarchy sets out a system of command. What's needed", says Gordon, "are objectives . . . that may sound like motherhood, but it's important". At MSC the philosophy is simple. The objective is to provide equipment and facilities for members to pursue the sport of soaring in a friendly atmosphere, at reasonable prices.

In the beginning, life at MSC was certainly friendly. And, by today's accounting, flying was cheap. But the facilities were a tenuous matter. For instance, the giant cow pasture rented by the club in the early 1960's went up for sale. Would the next owner permit flying operations? There was only one way to be sure, and some $17,000 was put up to buy the field. "It took a lot of courage for 45 members to raise that much money in those days", notes Gordon.

Today, life is far plusher. A hangar has been built, and a clubhouse adds greatly to social life. Flying equipment has grown from the rudimentary level to enough machinery to take a pilot through the Gold Badge level. As a result, the Montreal group has one of the largest club fleets in Canada, with two each of 2-33's, 1-26's, Blaniks, Astirs, as well as an LS-1, and a Twin Astir. Three L-19 towplanes are used and belong to the club as well.

That fleet and its operations are supported by a set of firm financial principles that keep MSC on a sound footing. Membership fees are used to cover fixed costs that includes depreciation calculated annually at 10% for aircraft, 15% for land and buildings, and 5% for other equipment. With the fleet and facilities paid for, flying fees cover flying costs, including insurance and a healthy club surplus. Tow fees are done on a break-even basis, while glider rentals provide the surplus. Club equipment is purchased from these surpluses and largely on a cash-on-hand basis.

If these financial practices seem as dull and dour as a Montreal banker's, they are, and expensive, too. "Our fees are high", concedes Gordon, with a twinkle in the eye, "about as high as my wife's smoking expenses". The basic membership fee (1981) at MSC is $170. To this, an aircraft overhaul and replacement fund adds another $40 and SAC fee another $45, bringing the total to $255. Moreover, there's a returnable flying member's deposit of $100 and initiation fee of $170, non-refundable and payable over three stages. While these dollars are real, the result is a well-financed and well-equipped club of some 200 flying members. Moreover, the kind of money required isn't so high as to make MSC a rich folks country club but high enough to assure serious membership involvement.

Like any club, meetings at MSC can be lively, even spicy. But one rule predominates: advance notice must be given for all motions that are to be made at the annual meetings. This encourages members to make well-thought-out and well-documented proposals that can be debated in a clear and meaningful fashion. It's a rule that "stops most off-the-cuff decisions", says Gordon,

And between general meetings, MSC has a large board to spread the load of the hundreds of details from clipping the grass to overhaul schedules for aircraft. There are a dozen elected directors, and thirteen appointed officials have distinct responsibilities. That means that one in every eight flying members of the club has some executive responsibility. Only one of these positions carries a stipend, that of the all-important treasurer.

With day-to-day duties carried out by directors and appointed officials, there of course remains work to be done. Like any club, MSC needs the efforts of all its members, and like any club, there are some at MSC who work harder than others. "It's a question of leadership", notes Gordon. "People have to know how to ask others to help. I don't think we have any magic formula. I must say that any time you need people to do things, you always get them". But it's a constant battle.

One useful mechanism is the purposeful choice of a large board of directors "to spread the load", Gordon notes.

Moreover, participation and concern from all members is encouraged by a democratic say in the club's future. The key is the five-year plan. If this sounds Stalinesque, far from it. Much thought and many contributions go into it, as well as detailed financial projections and cost estimates. The Montreal club's first five-year plan ran from 1975 to 1980, and with that success in hand, MSC last March approved its second plan at an annual meeting. Debate and a vote at that meeting came only after a number of detailed alternatives were circulated and discussed by the membership and an information meeting in advance of the general meeting.

The 1981 to 1986 plans include the purchase of two 15 Metre sailplanes, one to replace an 11-year old LS-1, and another to improve the glider/membership ratio to the 1:10 rate approved as a club objective. As well, a three year airfield development program will improve field drainage one year, pave a 1000 foot centre strip a second, and rework and reseed the grass portion in the third year. Legislatively, five-year plans are approved at MSC as an initial principle. Capital expenditures outlined are authorized annually, to allow for any variation between the plan and existing circumstances.

The result of these systems, of an objective, a set of plans, and a bankerly financial approach, is an active and contented club at MSC. "There were a lot of strong and very capable people when this club started out, and that was luck", Gordon maintains. True enough, but the organization laid down after them has smoothed the way for their capable successors. □

. . . LITTLE CLUBS, BIG PROBLEMS . . .

Little clubs often have big survival problems — sometimes roping in only five more members is the difference in keeping operations active and ledgers black.

This is another plea for increased communication. I believe it would help if small clubs who have tried ideas which worked for them in increasing the awareness of the sport in the local population, would let others know about it. For example, Wide Sky Flying Club in Fort St. John, B.C. have been very successful in getting club news, gliding events, photos, etc. printed in the local newspaper. Small papers are happy to use the copy.

This club is successful and active even though they draw on a fairly small population base.

FAI BADGES

Dave Belchamber

The following Badges and badge legs were recorded in the Canadian Soaring Register during the period 4 Dec. to 8 Feb. 82.

DIAMOND BADGE

39	David Hennigar	Winnipeg

GOLD BADGE

183	George Couser	Montreal
184	John Brennan	SOSA

SILVER BADGE

602	Chris Thompson	Windsor
603	Doug Gerard	Bluenose
604	David Metcalfe	Winnipeg
605	Allan Kirby	Kawartha

DIAMOND GOAL 300 km (186.4 mi) O&R or Triangle

Michael Davies	SOSA	334 km	Mosquito	Narromine, Austr.
Eric Durance	Windsor	314 km	Pik-3C	Dresden, Ont.
John Brennan	SOSA	506 km	ASW-20	Rockton.Ont.
Hans Berg	Windsor	312 km	RHJ10	Dresden, Ont.
Colin Tootill	SOSA	306 km	Pik20D	Rockton, Ont.
David Miller	London	302 km	Ka-6CR	Embro, Ont.

DIAMOND DISTANCE 500 Km (310.7 MI.)

Peter Schwirtlich	SOSA	506 km	Std. Libelle	Rockton, Ont.
Michael Davies	SOSA	507 km	Jantar	Narromine, Austr.
David Hennigar	Winnipeg	526 km	HP-14T	Pigeon Lake, Man.
Andy Gough	SOSA	506 km	Mini-Nimbus	Rockton, Ont.
John Brennan	SOSA	506 km	ASW-20	Rockton, Ont.

GOLD DISTANCE 300 km (186.4 mi)

George Couser	Montreal	300 km	Pik20	Hawkesbury, Ont.
John Brennan	SOSA	506 km	ASW-20	Rockton, Ont.
Colin Tootill	SOSA	306 km	Pik20D	Rockton, Ont.
David Miller	London	302 km	Ka-6CR	Embro, Ont.

SILVER DURATION 5 hrs

Chris Thompson	Windsor	5:34	Ka7	Dresden, Ont.
Doug Gerard	Bluenose	5:10	Skylark 4	Stanley, N.S.

SILVER ATITUDE 1000 m Gain (3281 ft)

Walter Mueller	Grande Prairie	1300m	1-23	Grande Prairie, Alta.
Chris Thompson	Windsor	1143m	Ka7	Dresden, Ont.
Doug Gerard	Bluenose	1768m	Skylark 4	Stanley, N.S.
Michael Basford	Winnipeg	1981m	1-26	Pigeon Lake, Man.
Allan Kirby	Kawartha	1112m	Pilatus B4	Omemee, Ont.
Richard Zabrodski	Cu Nim	1222m	Pilatus B4	Cowley, Alta.
Mike Howard	Gatineau	1125m	Skylark 3B	Pendleton, Ont.

SILVER DISTANCE 50 km (31.1 mi)

Walter Mueller	Grande Prairie	93 km	1-23	Grande Prairie, Alta.
Chris Thompson	Windsor	80 km	Ka8	Dresden, Ont.
Doug Gerard	Bluenose	51 km	Skylark 4	Stanley, N.S.
David Metcaife	Winnipeg	96 km	1-26	Pigeon Lake, Man.
Allan Kirby	Kawartha	68 km	Pilatus B4	Omemee.Ont.

C BADGE 1 hour duration

Walter Mueller	Grande Prairie	1:55	1-23	Grande Prairie, Alta.
Eileen Tomalty	Rideau Valley	1:24	1-26	Kars.Ont.
Chris Thompson	Windsor	5:34	Ka7	Dresden,Ont.
Doug Gerard	Bluenose	5:10	Skylark 4	Stanley, N.S.
Ken Schykulski	Winnipeg	1:21	1-26	Pigeon Lake, Man.
Hank Glogowski	SOSA	1:35	1-26	Rockton.Ont.
Bruno Begin	Quebec	1:39	Blanik	St. Raymond, Que.
Eugene Begin	Quebec	2:05	1-26	St. Raymond, Que.
Phillip Wroe	Wide Sky	1:15	–	Grande Prairie, Alta.

NEW FAI AWARDS CHAIRMAN

BORIS KARPOFF
24-1/2 Deloraine Ave.
Toronto, Ont. M5M 2A7
(416) 363-3423 (B)
(416) 481-0010 (H)

RECORDS

Russ Flint

Congratulations to BRENDA HISTED for making a new feminine O&R record. On 22 July 1981 she flew from Hawkesbury to Portage du Fort and return, a distance of 315 km, in an LS-1, C-FLSA.

And congratulations also to BRUCE HEA for establishing a new territorial absolute altitude record of 10,485 m (35,400 ft). The flight was made at Cowley on 31 October 1981, in a Libelle C-FQJS. He is also claiming the gain of altitude record, subject to confirmation of the low point.

It is also interesting to note that Lloyd Bungey and Dave Lovick's multi-place straight distance flight of 253 km, mentioned in the last issue of *free flight*, replaces the longest standing record on the books, a 235 km flight by Alby Pow and Jack Leadbeater in 1957!

NEW – 3rd Edition PROCEDURES BOOKLET for FAI BADGES and RECORDS

The new third edition of the FA! Badge and Records Procedures Booklet is now available from the National Office or the FAI Awards Chairman. It incorporates all the changes in the 1981 FAI Sporting Code, and other new information of value to OO's and pilots.

Official Observers are required to be familiar with the contents of the new Sporting Code and the Procedures Booklet. Clubs should consider making bulk orders for their members. Price $2.50 each.

STOP THE PRESS

All soaring clubs in Canada flying under SAC Insurance Policy are urged to read it carefully and react immediately!

We received the new 1982 SAC Insurance Policy in early December 1981, Endorsement #1 and #6 implies that towpilots must 1; have Glider Pilot Licence; 2. 250 hrs as P1; 3. 25 hrs on type.

If your towpilot does not meet these qualifications, you are flying without insurance. Our club probably would not be able to continue to operate if the requirements of endorsement #1 and #6 are not substantially changed for this season!

We have already written to the SAC Board of Directors and Wyatt International Insurance Agency.

Simon Davies
London Soaring Society

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Mr. Oskar Estebany,
921 St. Auban,
Montreal, Que. H4M 2K2

FOR SALE

COMING EVENTS

Mar 19-21, **SAC Annual General Meeting**. Airport Ramada Inn, Montreal, Que. Details see page 2 this issue.

May 22-24, **Innisfail May Meet**. Hosted by Edmonton Soaring Club at Innisfail Airport, Alberta. Contact Lee Coates, 2216-32 Street SW, Calgary, Alberta T3E 2R5 (403) 242-3056 H.

May 22-24 – May 29-30, **Annual Mudbowl Contest** held at SOSA, Rockton airfield. For more information contact Colin Tootill, 815-41 Antrim Crescent, Scarborough, Ont. M1P 4N4, (416) 292-8920 H, (416) 751-6522 B.

May 31 - Jun 4, **Erin Soaring Flight Training Week**. A five-day intensive training course of flying training for pre-solo glider pilots. Contact Jack Dodds, Erin Soaring Society, Box 523, Erin, Ont. N0B 1T0 or phone (416) 451-3155. Visiting pilots welcome.

Jun 12-19, **Eastern Basic Instructors Clinic**, hosted by Gatineau Gliding Club at Pendleton Airfield, Ontario. Contact Wolfgang Weichert (613) 836-1318.

Jun 28-Jul 2, Flying Week, Winnipeg Gliding Club

Jul 1-10, **Canadian Nationals.** SOSA Gliding Club at Rockton Airfield, Ontario. More page 24 this issue.

Jul 4-10, **Western Basic Instructors Clinic**. Hosted by Edmonton SC at Chipman. Contact Garnet Thomas 16623-93A Ave., Edmonton, Alta. T5R 5K1.

Jul 12-16, **SSA 50th Golden Anniversary Safari**, Heber, Utah. Contact Rick Matthews. Details see 6/81 page 19.

Jul 16-Aug 15, **Kawartha Flying Weeks**. Please drop in, they love to see more ships visit. For details call Graham McKay, (416) 668-3313, or write 1707 Dufferin St., Whitby, Ont.

Jul 17-25, **Annual Soaring Weeks**, hosted by London Soaring Society, Box 773 Stn B, London, Ont. N6A 4Y8.

Jul 18-23, **Advanced Instructors Course**. Host Winnipeg Gliding Club. Contact Frits Stevens.

Jul 24-Aug 2, **Cowley Summer Camp** at Cowley Airfield, Alberta. Hosted by Alberta Soaring Council. Contact Ken Palmer, 23 Baker Crescent NW, Calgary, Alta. T2L 1R3 (403) 284-1396 H.

Aug 14, **Kawartha "Roast"**. They extend an invitation to all. More under Club News this issue. For details call Graham McKay (416) 668-3313, or write 1707 Dufferin St., Whitby, Ont.

Oct 2-3, **SAC Directors Meeting**, Vancouver, B.C.

Oct 9-11, **Cowley Wave Camp** at Cowley Airfield. Hosted by Alberta Soaring Council. Contact Lee Coates (403) 242-3056 H or Ken Palmer (403) 284-1396 H.

Jan 9-29 1983, **18th World Gliding Championships**, Adolfo Gonzales Chaves (450 km SW of Buenos Aires).

WANTED

Classified ads (above) & back page omitted