

# PRESIDENT'S MESSAGE

2 June 1982

Two items of news have just come to me over the telephone. By the time you read this, the situations will have changed of course, but both are topics of continuing interest for SAC.

Dave Marsden, Chairman of the SAC Sporting committee, has just reported to me that Argentina has withdrawn its sponsorship of the 1983 World Soaring Competition. For many Canadians, the Falklands conflict is an unfortunate world event which can be viewed more or less dispassionately on a TV screen. For some, expatriate British or Argentine citizens, the issues are closer to the heart. But to the Soaring Association of Canada the trouble held a very specific concern in that we were planning to send a team of a dozen or so soaring pilots to Argentina in January to compete in the World championships. The question growing in our minds covered many aspects — moral and ethical — the question of the safety of our team, the question of government support, whether in fact the event would take place at all, the position of other competing nations, and so on. Now that this question is answered, we are left with a sense of relief, and more questions.

Who will host the event and when? Australia had bid for the competitions, but six months lead time is not much to prepare for a world contest; what about January 1984? Italy had bid, and being in the Northern hemisphere, the event could be scheduled for summer 1983.

Dave Marsden is in regular contact with Bill Ivans, President of CIVV, and will keep us informed of any progress.

My second message was from Dave Puckrin, Chairman Publicity committee. The proofs of the 1983 SAC calendar are ready, and we have a world-class product. Dave has put many hours of his own time and expertise into this project and is producing the calendar for us at minimal cost through his own publishing company. The calendar will be ready for distribution at the Nationals, and will also be available through your club by the end of July,

I encourage everyone to promote soaring through sales of the calendar to visitors to your club, to friends, and through your local gift and card shops (many such outlets will take a dozen or more calendars "on consignment"). A good product such as this can benefit soaring both through its publicity value, and as a fund raiser. We should make the most of it.

Have a good soaring summer

Russ Flint President

Russ Hint



# free flight

4/82 Jul-Aug

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

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## Cover

Not all "local" flights get home! But a young cross-country pilot-to-be and a crowd of apprentice crew can still get an education from it. Hans König sketches an incident last year at Cu Nim.

## Centrefold

The calendar photo is of the ASW-15 of Oscar Boesch and is a still from the movie "Silent Sky".

# EXECUTIVE DIRECTOR'S NOTES

# Jim Leach

**An Appeal To All SAC Members** — Since our last AGM approved the mailing of *free flight* first class in its own envelope, we have had 14 returned to us for the usual various reasons such as — *Moved Address Unknown!!* To date this represents a very measurable loss of \$8.40 postage plus the cost of the envelope and the labour to fill, address, lick, stamp and mail our magazine to people who will not receive them. *PLEASE* take the time to send us your change of address or at least let your club secretary know. While clubs are very good on advising member change of addresses, the responsibility is really with the individual.

**Membership** — As of this writing (22 June) we are (70) seventy members over what we had for the same period last year. Bluenose, Huronia, Toronto, SAGA, ASTRA and Alberni Valley have exceeded 1981 totals. Based on these early indications, dare we be optimistic that our goal for a planned 5% growth will be realized?

Insurance — To initiate claim procedures please contact Wyatt International Insurance Inc. direct. Their phone number is (416) 223-1118 or write to 6015 Yonge St., Willowdale, Ont. M2M 3W2. Based on recent conversations with the staff from Wyatt Insurance, our 1982 claims are getting perilously close to our total for 81. You know what that means — higher rates for 83. CFI's take note and please act accordingly.

**World Contest** — As stated in the President's notes, the 1983 World Contest will not be held in Argentina. This in noway lessens the need for a concerted effort to raise funds to send our National Team. See update p. 19 — ed. Please heed the comments of Oscar Estebany and support your National Team either individually or as part of a club sponsored program.

Instructors School — East & West — From 14-18 June, 14 enthusiastic members participated in the 1982 SAC Instructors School (East) at Gatineau GC. The Course Director, Tom Bell, advises that there were (10) ten graduates. To date we have 10 candidates for the Western School at Chipman.

**Instructor Certification** — Effective immediately, the National Office will be processing instructor certifications for SAC Class 1 to 3 instructors. CFIs are requested to respond to lan Oldaker's letter of 26 May and update your instructors list. For more info please contact us here at the National Office.

**Recognition for Volunteer Work in Soaring** — On 20 April 1982, Hazel Flint received a certificate of recognition for outstanding volunteer work from the Lieutenant-Governor of Manitoba. This award was as a result of a submission made by the Manitoba Soaring Council to the Manitoba Sports Federation for Hazel's work in organizing the 1981 SAC Regional Championships and the Manitoba Provincial Championships. I'm sure all SAC members will join me in congratulating Hazel for this achievement.

# A Trophy for YOUR Mantle?

Not all SAC members know that there are six annual trophies for soaring flights, in addition to those for contest winners. Several are for special categories, but there are three trophies awarded for soaring exploits by SAC members. These are scored on the basis of flights made during the year, and the trophies are presented at the Annual General Meeting. They are the BAIC, the Canadair, and the "200" trophies (see 2/82 page 7).

A problem relating to these trophies in the past few years has been that *there hasn't been* as many applicants as there should be, considering the number of good flights being made. It would seem that many of our members may not be aware of these trophies, or the rules governing them. This year copies of the application forms will be distributed to all Canadian clubs, and each club will be urged to have their members record all their flights on the forms. It is suggested that one member of each club should be asked to volunteer to encourage general participation, and to collect and send in forms on a regular basis. The forms will be kept as simple as possible, so please get in the habit of using them.

Suggestions are also being made to the Directors of SAC to make several changes in the scoring system, to make the points awarded more equitable, and to encourage certain types of flights. For example, a Diamond distance flight of 500 km is now awarded 500 points for a straight distance flight, or 750 if it is a triangle. However, Diamond altitude flight receives only 100 points. A gain of height of 5000 m in a wave flight may seem easier than a long cross-country flight, but surely a ratio of five or seven to one is too great. It is suggested that an altitude flight should receive about half as many points as a distance flight of the same general level, eg. qualifying for a Diamond.

Another suggestion made is that additional points should be awarded for speed around a triangle. It seems only fair that a 300 km flight at 100 km/h should count more than the same flight at say 70 km/h.

Finally, it is proposed that a premium, or extra points, should also be awarded for any flight which breaks an existing Canadian gliding record, and also that the scores be modified by the glider handicap (particularly for the "200" trophy). As these are still only proposals, we can't say for sure at this time what scoring system will be used for 1982 flights. However, if changes are made, they will be circulated to all clubs as quickly as possible, and, of course, the same set of rules will be applied to all flights made in 1982. Any suggestions re scoring will be welcomed either by the Directors or by the writer. But the main message is: START COMPLETING AND SENDING IN THOSE FORMS!

# George Dunbar, Trophies & Statistics chairman

# The SOARING ASSOCIATION OF

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 FAIrelated 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.

The contents of free flight may be reprinted; however, SAC requests that both free flight and the author be given acknowledgement on any such reprint.

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

President Dr. R. W. Flint
Vice President T. Burton
Secretary-Treasurer Dr. K. H. Doetsch
Executive Director Jim Leach

SAC National Office 485 Bank St., 2nd Floor Ottawa, Ont. K2P 1Z2 (613) 232-1243

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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

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.

free flight PERSONNEL

EDITOR Ursula Burton (403) 625-4563 Box 1916 Claresholm, Alberta T0L 0T0

COMMERCIAL ADVERTISING & STOP-THE-PRESS Jim Leach (613) 822-1797 (H) (613) 232-1243

LAYOUT & GRAPHICS Tony Burton

ASSISTANT LANGUE FRANÇAISE Pierre Lemaire

PROOF READING Fred Rose

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# **OPINIONS**

# THE INTRO FLIGHT . . . OR FRIGHT

The whole purpose of the introductory flight is to introduce people to gliding so that hopefully some will get interested enough to join your club.

#### It is NOT:

- a chance for free flying at the public's exnense
- a chance to brush up on the old acrobatic routine
- · a chance to show off the pilot's dazzling skills
- · the first flying lesson

It is however an important part of your operation and all members can observe if it's being done properly.

# For example:

... Did the pilot doing the intro ride have a good look and a bit of a conversation with his passenger or say, "Aw, just hop in?" Our "customer" is an unknown quantity, could be on drugs or booze, have clog shoes that may jam in the rudder pedals, a camera around his neck that may jam the stick or fly up to the canopy in turbulence. Is he under or over the C of G limits for the aircraft. DON'T FLY ANY-BODY OR ANYTHING YOU HAVE DOUBTS ABOUT.

... Has he requested "the full routine — what ever that is — I can take it?" That's not a future club member, that's a thrill seeker. DO NOT OBLIGE.

... Is our pilot giving a great explanation of the panel? The merits of a well compensated vario? WHY? There will be lots to see outside the aircraft than having the passenger trying to focus on and follow the dials. He'll get airsick — tells you how the members of the club generally fly as well.

... Is somebody telling the passenger he can release the tow and how he's to do it? THAT'S VERY FOOLISH.

... Is the passenger being given a quick flying lesson before the takeoff? Why? This is an INTRODUCTORY flight. The passenger should not touch the controls. This is the first flying contact that the club has with this individual. When you go for a ride in a limousine, does the driver offer you a turn at the wheel? Besides, all it will prove is that a guy who doesn't know an elevator from an aileron has no idea what he's doing in trying to fly the aircraft. So pinkies off the controls and levers. The passenger will be much more happy if he is allowed to be just that - A PASSENGER with his hands on his knees. The pilot then is free to escort his charge through the gentle joys of gliding, and the passenger has more of a chance to relax and absorb what's going on around him.

... Is the flight smooth with gentle turns? The passenger will be more impressed after his 20 minute flight which, with a serene pace, will seem to last longer than the 40 minutes you blast him around the sky.

... Does the pilot wind him up a thermal? DON'T BOTHER. He'll be impressed, but his stomach will tell him he didn't enjoy himself. One more potential pilot lost to the sport forever.

... Aerobatics? YOU'RE CRAZY! That covers that.

... Are you a pilot who is too busy with the circuit, other traffic etc. to be able to carry on a conversation with the passenger at the same time? Or from 800 feet to the ground is there an icy silence; the poor passenger wondering what's going on, but too afraid to ask and distract you? If so, DON'T CARRY PASSENGERS.

... Do you ensure that the passenger is helped out of the glider with as much care as he got in? If not, YOU'RE ASKING FOR THE GLIDER TO BE DAMAGED.

... Finally, do you allow the passenger's friends to mill around and wander through your operation before and after the flight?

If the INTRO FLIGHT is kept simple, the PAS-SENGER who is putting his life in your hands — somebody he just met — will be much HAPPIER. Fly for his benefit. If you've done lots of intro flights but never one for somebody who then became a member, you're in need of a re-examination of your intro flying technique. If the club has a wrong approach, or allows intro flying as a sloppily run sideline to the main operation, don't be surprised if it doesn't generate members.

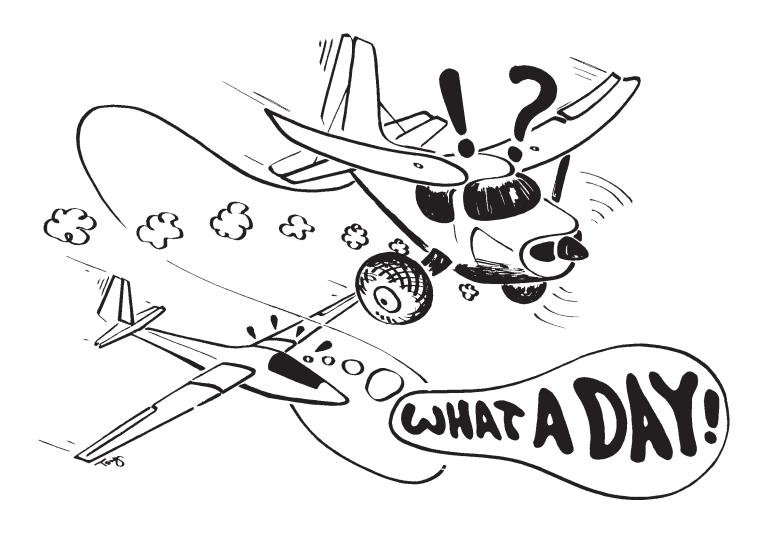
Stephen Newfield

## **'SHEAR NONSENSE'**

The articles on aerobatics in *free flight* 2/82 made interesting reading. Reference was made to the rapid acceleration of modern gliders and this reminded me of a letter written to *Sailplane and Gliding* several years ago. The writer pointed out that in a dive an older style wooden glider would accelerate at essentially the same rate as a modern fibreglass ship. I had expected that this would generate some controversy, however the only reply was one of agreement. This would seem to indicate that pilots should be very careful when doing aerobatics in low performance ships, such as the 1-26, which have a low Vne.

The major concern with glassfibre gliders is, as mentioned in the *free flight* article, that they will reach high speeds without a great deal of noise, also they will do so at a shallower angle of descent.

With regard to the angle of descent, could one of *free flight's* mathematically minded readers explain what happens when a glider flies through a wind shear? I presume that if a constant angle of descent is maintained, then the airspeed will be regained, however I wonder what sort of time span is involved. Is it just the normal time to accelerate or do other factors come into play.



# John Bandorf

Winnipeg Gliding Club

This May day looked like the perfect day for that long awaited and planned cross-country flight to make some of the Silver C requirements. Dick and I had talked about going towards Gimli; that's where the wind was blowing, but I rather liked the Carman–Morden area from my previous unsuccessful flight a year ago. So we decided to try for Morden about 95 km from Pigeon Lake.

I took off first in my Duster, notched the barograph after release, found this glorious thermal, and after reaching 7000 feet felt secure enough to head out towards Elie. That's about where we cut the umbilical cord. But towards Elie there was nothing but sink, so I turned around and just made it home, back to the good old thermal waiting for us. I gained height again and advised my daughter Karen (she was towing) that I would not go but just stick around the field.

Everything is relative. The first cross-country flight is downright scary, especially in your own home-built machine, because you are away from the safe place where you know every landmark, tree and power line right to

the gopher hole on the field; and all the stuff that has to be done! Radio messages to get TRSA clearance, reading maps, concentrating on thermalling and looking out for other traffic.

Well, I really was too "chicken" to try again but after my daughter's continuous nagging over 123.3, she made me feel like a jerk and I got up all my courage and left again for Elie to follow my friend. Hallelujah! I found lots and lots of lift.

Elm Creek and Carman came up fast. In between there was a stubble fire, with thousands of feet of lift, giving out lots of turbulence and scaring the wits out of me — I don't think I will ever fly the wave and rotor. The lowest I ever got was around 4000 feet. Getting high I could see Morden and Winkler way ahead of me. Well, so much for great navigation. This was not as difficult as I expected. In no time I arrived at Morden and informed my air retrieve crew that I would land at about 6:30 pm. For another one and-a-half hours I explored the area between Winkler and Morden to make up at least five-and-a-half hours. In the meantime, I heard my partner announcing his arrival and intentions to land at Morden. It looked to me like he was waiting for the local welcoming committee since he kept circling and circling the airport. Nobody showed up, and he landed anyway.

It was time to descend. I had my last peanut butter sandwich, a last sip from the bottle, pulled the spoilers and made my own way down. This was the first time I had ever landed my Duster on a paved strip. I kept the tail skid off the runway as long as possible as I figured the noise would be terrible, and it was. Sure beats a bumpy grass strip, however!

My partner was kind of restless. His retrieve crew was still figuring out which way Morden was. Pretty soon my retrieve plane arrived and after a short picture taking session, with my partner running the wing (leaving him for a few more hours of lonely vigil), we got the show on the road and with tail skid roaring and sparking, off we went. After a climb to 3000 feet and levelling out I thought this was just great and radioed the towplane "This is the greatest!"

I was just sitting there behind and enjoying the view. Well, here we go. I really don't know what happened. Was I daydreaming? Sud-

with his boys arrived. They were very excited about all this traffic on his strip (ex-glider pilot and air cadets). Well, he wished us well and with the boys signalling and the farmer running the wing I took off with the solemn promise not to deviate from the course and watch out and not fall asleep.

Everything went fine until we reached 3000 feet, but after levelling out for awhile my wingtips seemed to catch TOW's vortices and I had a hard time keeping my balance. Now I really got frustrated. I always was able to work my way out with a student when trying to teach him tow, and going from left to right and up and down. I was going left to right - now slack rope — tight rope, dive brakes in — out. This kind of rubber band affair got worse instead of better; I was gaining speed on the towplane. Nothing helped, so all I could do was fly beside it and wave to Karen, who was now not believing her eyes and figuring her "old man" must be going senile. So, we had this beautiful 'U' in the rope and radio messages like, "Why don't you guys fly faster to get the slack out?" didn't help. We started to go in a big circle. I actually was pulling them around. They thought my rudder was stuck. In the meantime I was watching the tow rope and it moved closer and closer to my tail. Well that's it, I had to release, if the rope would catch my tail, "Goodbye".

Now all these goings-on over our glider frequency were heard at Pigeon Lake, our glider-port. They must have thought, "Boy, there are some nuts out there!"

I thought, "How can we ever make it home releasing each other?"

Luckily for me, Carman Friendship Field was near and this time I was able to land with a proper pattern. By now I was drained of all my energy and just happy to be unharmed. Since it was now 2015, we decided to tie the Duster down. TOW went to homebase; Karen got the car and picked me up. So I had enough time to ponder this whole situation. What in heaven went wrong? Maybe the small glider in level flight needs so little pull that a small jerk forward gets you into this situation. The only remedy I could think for aerotow is a doublelength rope and low tow. This way one can bleed off speed by pulling up. We were home by midnight, safe and sound, exhausted and tired, but alive with a complete Silver C.

## WHAT A DAY!

Postscript

I tried level tow later in the summer around the field. I had to release after similar problems of slack and tight rope, keeping wings level, etc. I just could not manage to stay behind.

OK, all you hotshot pilots who believe there is nothing to it, when was the last time YOU ever had a level tow? I'll bet there's not three people in all of Canada who has done a DESCENDING tow. Do you want to practise it for the first time when the rope won't release? Why don't you arrange a test with your towpilot during one of your next tows. A photo of John and his Duster appears on page 22 of the SAC Soaring Instruction Manual. ed.

denly I found myself about 150 feet above the towplane. Naturally I could not dive down and develop all that speed; using the spoilers, or yawing did not help, asking the towplane to climb was not working either because I was already pulling its tail up. The situation got worse until I heard this big bang. I thought they must have rammed me! There was frantic radio conversation with CF-TOW. TOW had released me (what a nice daughter I have - no respect for her old man — Karen was towing). I had the rope dangling from me like an anchor. I was about 1600 feet agl. So all I could do was fly along the highway and try to find a suitable field with all the facilities for another take-off.

Would you believe it, just straight out I spotted a small farmer's strip! I just had enough height to make some kind of small base leg and then head straight in. Well, the field was small alright, just about wingtip to wingtip, that's all! After pushing and pulling the Duster to the side, I was at the end of this "gigantic" strip already; I radioed my fearless retrieve crew, "it's OK to land on "super-strip".

It did not take too long for TOW to land, and pleasantries were exchanged when a farmer

# CIVV MEETING

26 Mar 82

David Marsden Sporting committee chairman

#### **NEW SPORTING CODE**

A second printing of 1000 copies of the current Sporting Code has been made. There were some minor corrections. Some additional explanation was added to section 5.3 General Conditions. The following sentence should be added. "Even though another course is declared a flight may always count for free distance." This means that the pilot has the option of claiming free distance instead of his declared course.

# WORLD CONTESTS

Fred Weinholtz presented a report with statistics and a financial statement for the 1981 World Championships at Paderborn-Haxterberg.

Presentation of bids for the 1985 World Championships were made by Italy for a contest at Rieti, and by Australia for a contest at Benalla. Rieti was chosen for the 1985 World Championships to be held in late July-early August. The feeling of the meeting was that we should not have two consecutive World championships in the southern hemisphere. However, the Australian bid is very attractive because of their excellent soaring weather. The committee voted, with no dissenting votes, to accept the Australian bid for 1987.

# FIRST EUROPEAN GLIDING CHAMPIONSHIPS

The first European Gliding Championships will be held at Rieti in Italy in late July-early August of this year. All three FAI championship classes will be represented.

# **BARRON HILTON CUP**

Helmut Reichmann announced a new competition to encourage cross country flying in Europe. The competition is similar to our BAIC Trophy with points given for distance. Competition is in five categories, two-seaters, the three FAI classes, the Club class. A handicap factor is applied based on sailplane performance. First prize in each category is a gold medal and an expense paid trip for two to the Hilton Flying M Ranch in Nevada for a flying holiday.

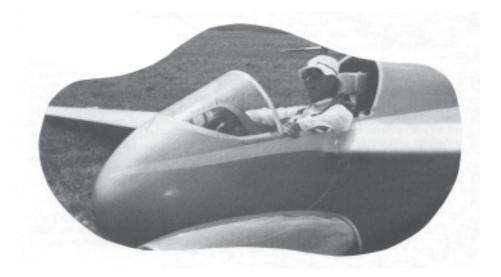
# **1981 LILIENTHAL MEDAL**

George Lee, Great Britain, has been awarded the Lilienthal Medal for his three consecutive victories in the Open class in international competitions.

# 1983 CIVV MEETING

The next CIVV meeting will be held in March 1983 in Reno, Nevada — running parallel to the SSA Soaring Convention. □

# A WIDER WORLD BEYOND



# Kemp Ward

Missisquoi Soaring

"From my point of view", my wife Mary said, "most of the excitement comes before the competition. Why don't you write about the anticipation, the pouring over charts, the interchange of phone calls with Tom."

I lived with Mary between weekends, and had just finished reading her account of my last summer's gliding experiences. "Okay", I thought, "a new angle is always worth trying," and I set to it.

Some time later it was clear that this approach was being crowded out by the REAL story, the pre-flight frenzy should be described by the crew. So here, for the pilots who haven't tried competitive flying yet, is an account of two novices in the "big time".

In the spring of '81 Tom and I worked over my homebuilt Pioneer II, GUMY, and its trailer until we were confident we could manage assembly alone. The radio had been repaired, the wings smoothed. As for flying we had been practising together over Mansonville. We seemed to be ready.

Weather before the meet was superb, and we pulled into the MSC grounds under a cumulus filled sky. A stocky man dressed in shorts, a T-shirt, and a golfer's hat was cheerfully mowing burdocks near the driveway. "Thought we'd spruce up a bit", said President Gordon Bruce, "glad to see you." GUMY was assembled with help from MSC members, and pulled to the field. We were ready to fly.

Before our arrival I had been told stories about L-19 tows (vertical) and buzz-saw gaggles, tales designed to destroy sleep, but from this first day everything went smoothly. After take off and release, a quick climb to cloudbase

brought to view a panorama of fields, a novice XC pilot's dream come true. I could hardly wait for tomorrow and Day One.

Next morning Tom and I hurried to the field and wandered about admiring glass beauties until the pilot's meeting in the hangar. Each team received a navigator's kit, and instructions Lindberg would have appreciated. The Sports class (a Libelle, a Ka6, and GUMY) was cooly instructed to fly to Buckingham and back. Good God! 110 km over rivers and forests through a cloudless sky — impossible! Tom and I pretended nonchalance however, while the other pilots spoke of crossing the Ottawa River to higher ground and proceeding directly to the turnpoint. "No sir", I thought, "I'll stick to the safer side and cover some distance at least before trying to cross the river towards the dam. If I were lucky I'd get a photo at least."

Oh, the excitement of being part of a starting grid! Ten years of reading about it in *free flight* or *SOARING* was nothing to this. First a Kestrel lumbered off, then others, and soon I was bobbing up there amongst the rest. With fewer than twenty gliders over the field none of the thermals was crowded, but to a country pilot used to plenty of space there seemed to be white wings everywhere.

We were all circling near 4000 feet, waiting. The others swept around, seemingly covering five times as much distance as GUMY and I, and before the gate opened my head must have twirled like an owl's more than once, keeping a lookout. Then a flurry of "IP's" and "Mark's" indicated that the race was on. I sat in my observation bubble impressed as graceful aircraft flashed downwards towards the start line. One flew past my nose, over the field,

and out on course until he was a speck in the distance — still at my altitude. Incredible!

When the stampede was over, I ventured across the line and plodded away into the empty sky. It felt like being on a high diving board for the first time. I didn't want to disgrace myself by flopping down after a straight glide, and three miles later a thermal wafting up from the wire factory lifted GUMY. I was grimly trying to centre when the Libelle abruptly appeared below me. I had imagined everyone else half way to the turnpoint by this time. He swept in, climbed around me, then zoomed off on a beeline over the Ottawa River, leaving me still climbing and envying his "savoir faire".

Time stopped. There was only the slowly changing landscape below, the endless feeling for thermals, the sun swinging above as we circled. Over Alfred a hawk joined GUMY. He was company in a lonely sky. By the time I had reached a point almost opposite Thurso, about 40 km from the start, the lift from the low land below was weakening. Being well

Another gem from the quill of the master versifier. You must remember the lucid quatrains published in *free flight* 2/79 which so clearly demonstrate the genius of the man.

Who can forget ...

Lettuce is good Cabbage is yummy. It's hard to find The rhyme to GUMY.

or

Roses are red, Violets are blue. Trust you used Quality glue.

Any homebuilder will appreciate the essential truth so eloquently condensed in these few lines. ed.

Perceptions ... perspectives — my noble captain, Kemp Ward flying his fine homebuild Pioneer II, sees things from a loftier view than this earthbound writer, this pragmatic toiler — his crew.

A perception, how it may be interpreted depends upon the position, the location, the perspective of the observer. From field level with two feet glued to the ground and rotting with envy, Kemp's crew tells all...

over the river I changed plans, took a chance, and turned downwind towards the town. Surely there would be a thermal over the pulp mill. Crossing at an angle to the wind seemed to take forever. Finally arriving over Thurso at 2000 feet, I beat over the wide parking lot (full of confidence), then the mill (surely here), then even over the smokestack (prayers) searching for lift to carry on. — Nothing!

Well, where to land?

That field under the transmission lines west of town looked green and faced the wind, but perhaps there were other lower wires. Turn around and look east. Nothing level enough.... Cattle in that one.... Getting low, time to decide .... there.... it's flat and big enough. Forget the wind direction, just get in! Over the pine trees on approach, open the brakes.... wait for it.... thump to a stop.

Phew! I shakily looked at my watch, 1:50 pm. Down and safe, that was the main thing. When my heart had settled I opened the canopy and breathed in the scents of the hay field and the

forest 30 feet away. Behind the glider the paper mill smokestack seemed comfortably near. No cattle anywhere. A light breeze only. Getting GUMY home should be easy.

I started walking through the sun-soaked field towards town and a phone. Twenty minutes later I was nursing a cold "50", MSC had been called, and my partner was probably tearing out of the gate and down the highway. Afraid of missing him on the main street I left the cool dark and strode down to Rue Principale, ready to flag Tom when he appeared with the trailer.

Three hours later the intimate details of life on Main Street, Thurso had been burned into my mind. Everyone else seemed to have a purpose, but I was reduced to mooching along here or there, wherever there was a seat or shelter from the sun. Under the maple trees in front of the Catholic church I slumped in the shade. Overhead the cirrus had drifted away and two late-afternoon cu floated mockingly. When the police car stopped and a cop scrutinized me lounging half a block from the bank, I got up and plodded back to the

Chinese restaurant to watch the flow of traffic. Discouragement is not falling out of the sky; it's slowly cooking, waiting on Rue Principale, Thurso, forever, hoping your partner really is coming to your rescue.

My legs felt like poles before a gold-painted Maverick pulled into sight, white trailer behind. I was a castaway sighting a sail! In no time we were bouncing over the hayfield towards the glider. Half a mile from it we came to an unfamiliar gate. Confidently we walked over to open it. A huge padlock was chained to the frame.

Tom gave me a fishy eye implying there had been time to see to this before he arrived.

Leaving the trailer behind we back-tracked to find the owner of the field. A nearby having crew shouted over the rattle of their tractor that it was Monsieur Touchette who owned that field. "Non", he didn't live nearby, but five miles out of town. "Demandez à la troisième ferme à droite", they shouted. Thanking them we sped hopefully through the countryside to the third farm. No luck. Two boys and a dog recommended going back one farm. Actually we didn't mind doing this as it might give us another glimpse of the golden nymph in the bikini chatting with a friend by the roadside. You can measure our enthusiasm for cross country soaring by the fact that after passing the same spot three times we were still enjoying ourselves.

Several farms later we approached our goal. At a neat house overlooking a valley and the forest we met the equivalent of Florence Nightingale. Marie-Rose Carrier, an attractive mother of four happy children, invited me into her kitchen where I sat under a two-foot crucifix while she phoned her landlord, the elusive Monsieur Touchette. Not surprisingly, he was four miles on the other side of Thurso haying for elderly Monsieur Tremblay. Madame Carrier called her son in to keep the baby company while she drew an accurate map (still in my log book), then smiled us on our way. No glider pilot could imagine more helpful people than Marie-Rose and Monsieur Touchette, who when we found him loading hay bales into a barn, simply fished out the important key and asked us to drop it off on our way back.

The rest of the day's flying was routine. A few photos of the glider, a slow retrieve across bumpy ground, through the infamous gate, a late supper in Thurso, and a quiet drive back in the dark brought our first day's competition experience to an end. Eight hours after the outlanding we stepped into MSC's club house just in time to hear the director say, "Anyone hear from GUMY?"

Two days later on the drive home to Mansonville after the meet had ended Tom asked, "What about next year?"

"Tom, we'll both be in it."

And we're planning for Quebec now. Too many years have been spent circling within sight of the field. Only cross country flying in competition can give the excitement of new skies, the test of our skills, the comradeship in the evening after a challenging task. We have entered a wider world of soaring. See you there.

# . . . few crew . . .

flush riveted metal carbon and glass disdainfully circle what's still on the grass

Kemp's glider is made of wood, fabric and glue – to those in the know it's a Pioneer 'Two'

a nod of command crew jumps to obey preflight all done he's off and away

sigh of relief tyrant's off on the trail time for a brew or a long cool tall ale

doze and relax with nothing to do ... my captain breaks in with "landing in two"

we do it again but this time for real (the first time, of course was just for the "feel")

again he's away away and aloft the hayfield's nearby so sunny and soft...

warm breezes blowing this crewing's for me an hour drifts by then two and then three soon he'll return telling wonderful tales his obedient crew awaits without fail

dreams shatter like glass a message, you say? he's down in a field? some distance away?

the rest is a blur of images past some fences, some farmers, a fair country lass

a little wee field in a field on a farm a sailplane at rest (it came to no harm)

dismantle, retrieval down cliff and cross bog mosquitos, wet shoes the peep of a frog

through gates, over ditches hot, wet, hungry, weary — (despite all discomforts stout crew remains cheery)

at last at the club and to crew's infinite sorrow my brave captain says "there's always tomorrow"

Thomas R. Matthews February 3, 1982

# **Tony Burton**

There have been many times in the past when pilots have said "It was a '500' day for sure — if only I had been ready to go!" Well, there is much to be said for a little incentive, most of the time it will achieve wonderful results. On June 12, six pilots flying from Cu Nim completed 3773 kilometres of cross-country tasks. Two Canadian records are being claimed, plus a Diamond distance ... it was the best single day of accomplishments in Canadian soaring history.

A stretch of fine soaring weather had settled into southern Alberta on Wednesday, Thursday and Friday; and the weather office was predicting more of the same

for the weekend. Hal Werneburg and Willi Krug were busy trying to mesh turnpoints with record triangles on their respective maps within their respective basements ... others were plannina too.

When I arrived at Cu Nim at 0830 Saturday morning, rigging was already occurring at a remarkable rate, and soon the Daily Task Board on the flightline advertised the most awe-inspiring "wish-list" anyone has ever seen in a Canadian club:

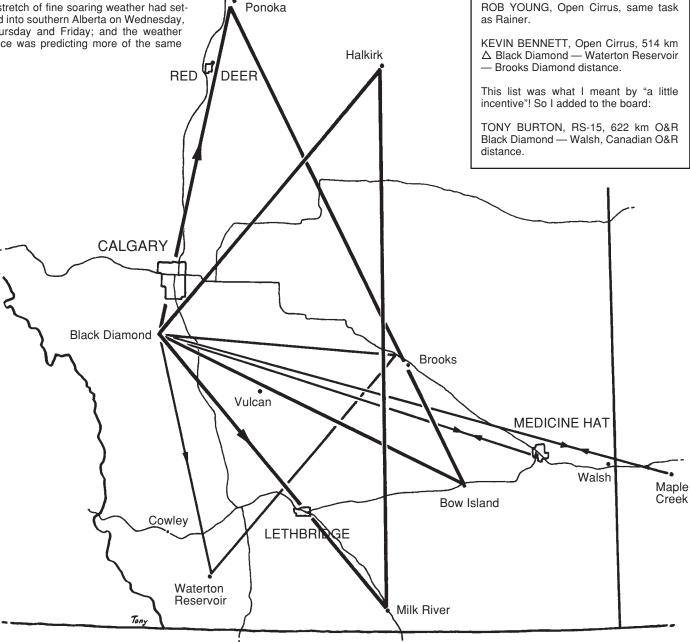
# DAILY TASKS — RECORD ATTEMPTS

HAL WERNEBURG, Mini-Nimbus, 804 km △ Black Diamond — Milk River — Halkirk Canadian  $\triangle$  distance and 750 km speed.

WILLI KRUG, Ventus, 785 km A Black Diamond — Ponoka A/P — Bow Island Canadian  $\triangle$  distance & 750 km  $\triangle$  speed.

RAINER ZIMM, Std. Cirrus, 706 km O&R Maple Creek, Sask. Canadian O&R distance.

ROB YOUNG, Open Cirrus, same task



# A GLIDING AVIARY

My courseline was close to Rainer's and Rob's; I didn't think I could keep up with them, but I could tag along for a while.

Everybody was ready by 1030, but the thermals weren't. Beautiful looking cu had developed to the west over the mountains and east of Highway 2 going north-south through Calgary. Black Diamond retained its blue hole for another hour. Finally, with everyone glancing repeatedly at wristwatches, launching began about 1130 - slowly as only one towplane was serviceable. As it was evident that I wasn't going to get airborne until about 1220, I shortened my task declaration to Medicine Hat Airport and return for 516 km. I didn't want to have Ursula retrieving me, with both of us missing the evening barbeque and beer and possible recounting of great deeds done.

The day was not spectacular, but it lasted until almost 2100. The first couple of hours gave 3–4 knots to about 4500 agl and improved in the late afternoon to 6 knots and 7000 agl, with some large blue holes to add spice to the homeward legs. The winds were light, about 5 knots from the SE.

## The results??

Willi arrived at 1855 with 108.6 km/h, claiming two records for a short time until Hal got home at 99.5 km/h, taking the distance from him ... Kevin is determined to earn every badge, Silver to Diamond, in one season: he completed his task at 82.3 km/h. Good luck in the Cowley wave this fall... Rainer. Rob and I were all out at the far ends of our tasks at 4 pm, I made Medicine Hat about then and turned west, happy that I didn't have to go to Walsh. Rainer reached the Saskatchewan border and could see Maple Creek some 40 km ahead but realized the goal was out of reach for the amount of day remaining. A few minutes later, Rob passed over Irvine, just west of Walsh. Both abandoned the task and headed for home.

A large area was beginning to go blue west of Medicine Hat. The terrain is totally uninhabited short grass prairie — a bit daunting if you're low. I crossed, using a few cu as stepping stones, and got back to Cu Nim at 1845 with 82.6 km/h for the task. Rainer arrived at the now bigger hole an hour and a bit after me and had a much tougher scrape getting home, arriving at 2045 and completing 628 km. That's twice now he has beaten the O&R distance record without being able to claim it (last year his barograph failed). Rob elected to go south of track a long way to stay with the best looking cu, but eventually he had to turn NW for home and was unable to connect with anything useful and landed at Vulcan, completing 526 km.

The day was an inspiration and a prod. Usually, once a good task is completed for the first time in an area, it seems many do it. Mostly, it's a matter of will and preparation... Willi was heard muttering, "I could have done a thousand," I believe him.

by Eric Newsome

The Oozle bird is reputed to fly backwards to keep the dust out of his eyes. 'Aeronauticus Stifnecticus' flies forwards but sees only where his instruments tell him he is going. With the fledgling of the species this is a matter of confidence and in this he resembles the learner driver who is afraid to move his eyes from dead ahead in case someone should steal the

road from under his wheels. For all the glider instructor knows, sitting in the back seat, the fledgling's eyes may be moving from side to side, or even revolving rapidly in opposite directions but his neck muscles never even twitch. The instructor's admonition, oft repeated, to look around is answered by a flick of the head, out and back in, so swift as to be unbelievable.

# AERONAUTICUS STIFNECTICUS



# SAFETY COLUMN

# GETTING THE BACKWARDS...

Eric Newsome Safety committee chairman

Pilots who have accidents share the common characteristic of being profoundly unimaginative. I say this because in reading acres of accident reports, power and glider, nowhere is the dullness relieved by any spark of originality. Increasing aircraft sophistication has in no way diminished the crudity of a pile of accident junk. The Wright Brothers could have crashed just as effectively as we do — AND FOR MUCH THE SAME REASONS. We don't

One of our main problems seems to be that of always looking at accidents from the wrong end — backwards into the past after the accident has happened! We are great investigators and confirm with monotonous regularity that the cause of any given accident is one of a standard handful. It was so in the past, it is so in the present, and it will be so in future unless we do something to break the dismal chain.

We are all capable of getting into situations which we don't expect or understand; we share the human trait of forgetfulness. Ignorance and forgetfulness together are probably the root cause of the largest proportion of glider accidents and if that is so we are dealing with accident causes which can be removed before an accident happens. The antidote to ignorance must surely be education — a steady persistent attempt to supply missing information. The antidote to forgetfulness must surely be reminders, steady and persistent.

We have difficulty with the steady and persistent part in the press of other time demands, and we tend not to plan ahead very effectively unless forced into a position where it cannot be avoided. So that we can develop rational safety programmes, perhaps we should build in 'anti-backsliding' devices such as club requirements to have a Safety Officer appointed annually, before the season begins and require him to come up with a comprehensive plan of safety action before the season begins.

Knowing the common accident causes, particular local conditions which create hazards and the club history of accidents and incidents, it should be possible to devise a useful prevention scheme that orders the priorities, identifies the means by which the messages are going to be delivered, and as far as possible identifies who will be involved and when. It is vital that the Safety Officer becomes an effective coordinator; not only will he lack the knowledge to carry out the entire safety programme but it is also extremely important to get as many people as possible involved so that they too will have

a personal stake in the success of the programme.

A wise and experienced old teacher giving advice on how to teach said, 'First you tell them what you are going to tell them, then you tell them, and then you tell them what you have told them.' Modern TV commercials do the same thing and if it works for them perhaps it will work for our safety programme. How many ways can you get your message across? Films, articles, notices, cartoons, discussions, lectures - if you can imagine it and can do it or, better, bully someone else into doing it for you, every little bit will help. But above all get a plan of action, concentrate on highly probable accident causes, and persist. Look ahead also - the time, for example, for getting out information on wave flying is now — not two weeks before you head for the hills.

I may be wrong, but experience leads me to think that the Club Safety Officer is often unknown to most club members, has a great facility in blending into the scenery, and does not become active until after something has gone wrong. He should be the best known club member, should be highly visible and should be active in promoting a programme which will prevent things from going wrong.

If you have details of safety programmes that have worked for you please share your ideas with us. We can all learn from each other.  $\ \Box$ 

Since the rejuvenation of *free flight* I have been quite delighted by the actual numbers of people who have sent in something for the Safety Column. The initial appeal for articles seemed to me to be something of a forlorn hope — that it turned out not to be that way is very encouraging.

I also include a note of thanks to a few people who have shown some response to past articles. Nice to know someone out there is reading.

# ALCOHOL AND FLYING

Dr. Wolf D. Leers Medical committee chairman

'Alcohol and flying don't mix'. Unfortunately, alcohol and nicotine are socially accepted drugs. I personally think they ruin your life and your intellect. Alcohol destroys cells of the central nervous system, which can not be regenerated at any age, in contrast to some other cells in the body. Whatever is destroyed, is lost forever. Loss of memory and lack of concentration are early signs of the fact that you may have lost more brain cells than you realize. If you are a pilot, and want to fly for many years to come, you better be careful with alcohol consumption.

According to Canadian air regulations, you are not allowed to fly within 8 hours after any alcohol intake. This assumes, apparently, that

the alcohol is burned off in the system and the pilot is sober. Not so? You may well have enough alcohol in your blood after 8 hours to be "impaired" according to the Canadian Criminal Code.

An example of such abuse is presented in the following hypothetical situation. A healthy pilot, weighing approximately 65 kg, decides to spend a portion of the evening in the company of friends where alcohol is being consumed. His preference for the evening is bottled beer containing approximately 4% alcohol. He has his first drink at 2000 hours at night and drinks at an average rate of one bottle every twenty minutes. After finishing his fourth bottle he has consumed sufficient alcohol to bring his blood alcohol up to a level in excess of 0.08%, which is the level set in the Canadian Criminal Code for the legal definition of being impaired for automobile driving. If he continues this rate of drinking until 2240 hours thereby consuming eight beers, he will have a potential blood alcohol level in excess of 0.20%. Now is the time to call it guits and go home to bed as tomorrow is another flying day. He will definitely be feeling the effects of booze and is in no shape to safely drive home; however, he still has over nine hours to sleep it off before the hangar door opens next day. If this average man metabolizes his alcohol at the rate of 0.015% per hour, he may find himself at the flightline the following morning with a blood alcohol level of over 0.065% and may be in the air with a blood alcohol level of 0.030% two hours later. At this point you may ask, so what? He is not legally impaired, at least not at the legal definition of a blood alcohol of 0.08%.

It is very important to emphasize here that this definition of impairment is based upon road motor vehicle operation and must not be applied to the piloting of an aircraft.

A recent study, conducted in the USA on the effect of alcohol on the ability of experienced pilots to perform the task of flying a single engine aircraft under simulated instrument approach conditions, indicated that an "endanger limit" was reached at a blood alcohol level of 0.02% in some subjects and that none were predictably able to safely perform their task with blood alcohol between 0.04% and 0.05%.

It has been stated before, by other investigators in the same field, that the skills necessary for piloting an aircraft are measurably degraded by one quarter the amount of alcohol required to produce a measurable decrement in performance with a road motor vehicle. In reality, there is no acceptable blood alcohol level compatible with flight.

In summary: If you do not feel "all right" for whatever reasons, including the ones I described in the last issue of *free flight*, do not fly! Especially if you are instructing and are responsible for your student!

From H.D. Madill, "Drugs, Alcohol and Flying", COPA Flight Safety Bulletin, No. 81, October 1974.

continued on page 15

# OPINIONS.....

From watching landings made when wind shear is present, I cannot help thinking that some of the problems involved are pilot induced. What seems to happen is that as the pilot flies through the shear his groundspeed increases and this causes him to ease back on the stick. At the same time his touchdown point starts to disappear under the glider's nose and therefore the brakes are opened a little more, causing a further reduction in air-speed. The end result is a marginal airspeed, the shear has played a part in this, but I do not think it is the sole cause of the pilot's problems.

When making landings in wind shear conditions it would seem to be safer to make a steep approach with lots of airbrake, rather than a shallow approach at the same speed, if for no other reason than that closing the brakes will produce instant acceleration. Perhaps someone would comment whether this is correct or whether it is just sheer nonsense.

Dave Miller Ilderton, Ontario

#### **ANOTHER DAVE ANSWERS**

The first question in Dave Miller's letter could be labelled the "feather and rock" problem. A physicist will tell you correctly that the initial acceleration due to gravity is the same for both. However, as soon as they have developed a little airspeed a drag force will appear opposing the motion. Further acceleration will depend on whether the gravity force exceeds the drag force.

In the case of a sailplane, the flight path is inclined "downhill" and drag is balanced by a component of the weight for steady flight. To a first approximation increasing the weight will result in a flatter glide path, hence the use of water ballast. A decrease in drag will also result in a flatter glide path.

The new pilot graduating from a 2-33 to a Nimbus will be most impressed by the relatively small change in pitch attitude required to change speed, as well as the increased speed range available. Some sailplanes have very small stick-free stability in pitch. This means that from trimmed flight at cruising speed the aircraft can be pushed up to high speed with no change in stick force. The aircraft responds correctly to stick movement but is quite happy to stay at high speed (or even go faster) if the stick is released. These aircraft are a little scary for the novice because they tend to change speed so easily, but they are a delight to fly when you get used to them. They always seem eager to go.

On the subject of wind gradients, safety demands that sufficient airspeed is maintained on the approach so that the unavoidable loss in airspeed due to wind gradient won't drop the speed below the stall speed. The SAC Instructors Manual recommendation of stall speed + 10 mph + 1/3 of the wind speed has to be followed religiously.

In a normal landing the aircraft approaches at a steady speed with a steady rate of descent. In the round-out maneuver the pilot rotates

the aircraft, momentarily increasing the wing lift, and this checks the descent. The glider is now flying level just above the ground, and since it is no longer getting a forward pull due to gravity its air drag will slow it down. This decreases the lift and it gently settles onto the ground.

When descending through a wind gradient the glider will tend to keep a constant ground speed due to inertia and its airspeed will fall off. Since it is trimmed for approach speed it will try to regain airspeed by exchanging height for speed. The pilot gets that sinking feeling. He can only check his rate of descent by carrying out a flare maneuver to increase wing lift. If he has some reserve above stall speed this will work. He will touch down a bit short but at least will land gently. However, if the aircraft is at or near stall speed due to speed loss in the wind gradient, wing lift will not be increased by the flare maneuver and it could even decrease. In that case the glider will continue its original rate of descent and touch down with the correct two point attitude but rather heavily.

The best way to avoid problems with wind gradient is to maintain adequate airspeed on the approach and not aim to touch down too close to the approach end of the runway.

Retracting spoilers will help if you are quick enough, but moving the spoilers during round out will make it difficult to judge the landing correctly. Some sailplanes have very powerful airbrakes. A steep approach will require a large rotation for round out that is hard to judge correctly, and extra speed will be needed because the spoiler has increased the stall speed. The spoiler should be used early to adjust the approach so that the final round out can be made with about half spoiler.

I hope this isn't "sheer nonsense."

David Marsden

# A NEW MAGAZINE TO BRIDGE THE COMMUNICATION GAP

Being one of the participants at the last World championships in Germany I often heard foreign visitors and pilots discuss the communication gap between different gliding nations.

Trying to make a first step in solving this problem, some Belgian gliding enthusiasts are planning to start publishing an international gliding magazine. The first issue of GLIDING INTERNATIONAL is scheduled to be printed in October 1982 and will circulate to gliding clubs and glider pilots throughout the world.

We have already contacted many pilots from different parts of the world and they have all reacted very enthusiastically and promised to help us. Among our contributors we already have some notable names such as Ingo Renner, Helmut Reichmann, George Lee, Karl Striedieck, and many others.

In each issue we'll seek to reflect all aspects of our beautiful sport. For subscriptions send US\$15 (airmail extra US\$5 for one year, 6 issues) to Gliding International, Subscriptions, Box 55, B2400 MOL, BELGIUM (Bank BBL 320-0266639-56 Post: 000-1165295-34).

Yours sincerely, Eddy Huybreckx, Belgium

## **PILOTS MEDICALS**

When the letter-to-the-editor "Glider Pilot Medicals" 2/82 page 4 had been published, the author realized that a vital part of his argument was missing, it turned out that the entire first page of his letter had not been sent to *free flight*.

Here is the letter in its entirety:

In "Report on CIVV Meeting" *free flight* Sept/ Oct 1981 p. 17, Mr. David Marsden hopes for possible changes in medical requirements for glider pilots.

The present system in Canada requires a medical examination every five years by a DoT Medical Examiner with an EKG for those over 40 years of age.

I feel this is the absolute minimum standard for a glider pilot. The statement of a pilot, required in the USA, that he is "fit to fly" and has no illness or injury that might impair his ability to fly a glider is, in my opinion, not sufficient. To quote an extreme case: a pilot who has a drinking problem may not have the insight to admit that he has a problem which would impair him and therefore he may consider himself to be in good health and fit to fly.

There are diseases, which may be in the early stages, and the pilots may not be aware of them. Examples are: diabetes mellitus, coronary artery disease, elevated blood pressure with slight lapses or cerebral ishemia and others.

Glider pilots are allowed to take passengers. It is difficult for me to understand that an impaired or unfit pilot should endanger the life of another person by flying with him. An impaired glider pilot on tow would also be a hazard to the towpilot.

I am in close contact with the Department of Transport Aviation Medical Officers who now understand that glider pilots are not "private pilots" for which stricter medical requirements are necessary. I have had the privilege to show the Aviation Medical Officers our operation and took them up for a flight. They were impressed with the discipline and safe operation of our gliding clubs in Canada.

The fact that there is a "restricted license for glider pilots", which do not fulfil the requirements for a glider pilot licence, enforces the point that the DoT looks at glider pilots in a lenient way. A restricted glider pilot licence is to be renewed at a yearly interval and allows the pilot to fly without the privilege to take passengers.

I wish to have it on record that I am strictly opposed to lifting the current medical requirements for glider pilots in Canada. They are necessary for our own safety and that of others.

Wolf-D. Leers M.D., Ph.D., F.R.C.P.(C). Dip. Bact. C.P.H. Transport Canada Civil Aviation Medical Examiner

# CHAMPLAIN

# **Robert DiPietro**

Looking back at our yesteryears of club activities and growth plans, the conclusion is the familiar ... "Surely there must have been a better way."

#### THE HISTORY OF CHAMPLAIN

Champlain was incorporated in 1965 and for many years served well its initial purpose in basic soaring flight with rented flying equipment. In my first year with the club, I was quite surprised when the fiscal report tabulated over one thousand flights in a sole 2-22. It was quite an accomplishment, but we had a high loss in membership at the start of the following season. This was the direct result of lack of equipment and too long a waiting period for the instruction cycle. A 1-26 was available for the "advanced" solo. Something had to be done!

The movement began in the fall of 75, when our club then decided to fulfil its fate: to purchase rather than lease our own gliders and a suitable tug. Thus our first contact with the outside world — SOSA — where we liberated from this group two faithful 2-22's. A Cessna 150 equipped with a 150 HP engine had been proved (Soaring '75) reliable, economical and efficient in the past, and it filled our terrain and pilot's requirements perfectly. With further financial assistance from within the club, we even managed to purchase that once leased 1-26. We were on our way.

# THE SITE

A controlled airport with limited reserved soaring space, traffic, and numerous unmentionables forced us to search for greener pastures. St. Antoine-sur-le-Richelieu had temporarily given us a peaceful rented spot. Yet we were searching for just the right piece of land, at an affordable price, a job which can keep you quite busy for quite some time.

Over a year ago, we signed on the dotted line for that great piece of land on a conditional agreement: ability to operate a soaring club as submitted to and be accepted by government Land Protection and Green Zone clearance for non-agricultural usage. In this location the Green Zone covers all areas except for bodies of water, mountain tops, and intown future shopping sites. Need I say more!

"Heaven help the soaring pilot!" With all this in mind, one has to be completely out of one's mind to accept the inherent struggles. It would be easy to drop everything and join an established club, but somehow it does not seem right.

#### THE ADDITIONAL EQUIPMENT

The club has steadily grown in equipment, especially the private ships. A Pirat appeared (again from SOSA); a Duster that had the misfortune to lose its tailfeathers and give our favourite member, Paul Dorion, a crash course in skydiving; another Duster that proved very reliable after a tail modification had been applied; a Jantar; and recently a Libelle (should I mention that the Libelle came from SOSA).

The club sold a 2-22 to L'Aeroclub des Outardes and replaced it with a Blanik from MSC. The grin-and-bear-it situation of the past has already been forgotten, for we have prevailed thus far, but our roots are not yet anchored securely.

# THE FUTURE

Now it is time for more planning towards the future to attain the goals we have set. It seems that the next most important phase, aside from updating and increasing club ships, would be to obtain our own 'home site' - land where l'Association de Vol à Voile Champlain can lay out its plans .... additional space for proper runways. The present ones are a security problem as a result of the ever-increasing amount of equipment and members .... hangars to protect the equipment now tied down outdoors.... a clubhouse where one can carry on the part of being human.... storage space for records and their easy access.... a meeting room and so forth to fulfil basic needs for our growth in soaring.

# THE CLUB RESPONSIBILITIES

As human factors prevail, logic is cast aside and the pride within our own organization has us under its spell to grow and mature in time to a responsible and well established soaring club.

The members are quite devoted to the Art of Soaring, self-perfection, instructing (6 instructors), the beginnings of cross-country training and encouraging the participation of competitions to the ready and willing. (We hope to have four ships in the '82 Provincials). It might seem that one is forming a distinct group but in actuality, it is the direct result of the encouragement and technical assistance of the larger clubs in what seems to be an overall fulfilment to promote soaring by diversifying in different areas.

# **SHARING AND PARTICIPATING**

I personally am proud to see the Québec and neighbouring Ontario clubs taking an interest and participating in local events and Provincial championships. Inter-club activities seem to do wonders for that much needed 'get involved' attitude.

The Champlain guys and girls have had that inter-club ball rolling for a couple of years now where the entire club (30 members) has its three to four day excursions of soaring at different sites such as Québec, Club des Outardes and Sugarbush. An interesting thought is the more frequent visits by airborne sailplanes taking pictures of the club as a turnpoint. André Pepin did such a run last year in the Jantar by snapping a picture over St. Raymond, St. Antoine and St. Gabriel for a 350 km run.

# A CLUB OUTING

Coming back on track to the more moderate involvements of club activities, a sniffer weekend came about to investigate the feasibility of organizing a club outing at Sugarbush. It proved to be quite interesting as André, my partner, and myself racked up 15 hours of soaring in two days in thermal, ridge and wave lift. We were sold for that future gathering and a date was set for mid-September.

So it was, a caravan of five gliders quietly placed itself at the Sugarbush campsite on a late Thursday night. The Friday morning sun helped to encourage the members and the rigging chores began. A briefing from the area CFI was well appreciated and the three day venture was carried in the normal club fashion and running parallel with the local club operations. Eager faces were apparent as members were anxious for area checks and a little taste of mountain soaring as compared to the flatlands of the St. Lawrence Valley. The first day was good with thermal and ridge conditions that put a smile on many, but the best was still to come.

On Saturday, the first flight began early and most got a taste of broken lift and bouncy situations that still managed to keep you aloft for hours. The southerly winds gave erratic conditions, but some of us found some wave above nine thousand and enjoyed the silk-smooth air.

On Sunday morning, we were again blessed with blue skies but the wind direction came directly from the west and wave soaring was on. A three thousand foot tow brought you directly into the wave and a course parallel to the Sugarbush mountains kept you in constant lift for miles. The radio was filled with good reports as pilots related conditions at locations as far as thirty miles out at 13,000 feet elevations on cross-country wave flights. Caution has to be emphasized for it's easy for the uninitiated to the area to lose themselves as all mountains look alike. It certainly seemed to have done wonders to motivate the members where they get an opportunity to fly in different conditions, absorb the knowledge of more experienced pilots and sophisticated equipment, and most important of all to obtain a good general knowledge of how challenging soaring can be for a lifetime to come

## THE ASSOCIATION OF QUEBEC CLUBS

The grouping of Québec clubs has certainly come about in an unusual way. After initial failure, the request from SAC to establish provincial sponsored clubs in order to retain their federal grants was almost an overnight affair and the Québec clubs united their efforts. We are now officially existing as "La Fédération des Sports Aériens, sector Vol à Voile".

The assistance of the provincial grants has already disbursed funds for the training of qualified instructors at the SAC school in Pendleton and York. Club funding was also provided for the first Provincial Championships to the Québec club at St. Raymond and the '81 Provincials at Hawkesbury. For the National championships, Québec area pilots received grants for competing in the '80 Nationals in Claresholm and the '81 Regionals at Pendleton. Enrolled clubs also received a modest amount to defray small expenditures.

Directors of the Fédération are trying to work out details on more basic needs such as club equipment, tax exemptions on purchases, publicity, etc. The additional individual \$20 dues to have access to funding has kept the membership low, and hopefully this will be resolved in a manner that will not burden, but assist, the soaring pilot in this ever increasing costly world. If low membership continues, I fear funding amounts will dwindle, and as a result new demands to help defray basic club expenditures will be difficult to obtain (food for thought).

# THE COMMUNICATION FACTOR

With every new issue of *vol libre* I am always on the lookout for articles where individual clubs comment on their activities and efforts, whether materialized or not. I do believe that many goals were put aside in thinking of losing a fighting battle when many more clubs are doing the same exercise. It takes only one breakthrough to encourage the others to 'press on'.

One example is the answer we are awaiting on our land approval. Is anyone out there in the same boat? Another example is our towplane problem. We have been advised that the tow limitation on a Cessna 150/150 is 917 lbs. Involvements with the SAC Technical Committee, CESSNA AIRCRAFT and various individuals have enlightened this problem with Cessna's new soon to be introduced tow limit increase to 1223 lbs. Last year, an area club closed its operation because of the limitation.

So all you clubs out there — keep talking! □

# LAST MINUTE ODDS 'N' ENDS

#### 1982 MANITOBA PROV CONTEST 22 - 24 MAY

Last year the first Manitoba Provincial Soaring Contest was run in conjunction with the Western regionals; this year the contest was organized to run on two consecutive weekends, the May long weekend and May 30/31, with the following weekend as rain days. Five ships entered the "Competition Class", three the "Sports Class". All scoring was handicapped.

**DAY ONE** dawned fair with a light southerly breeze; Norm Taylor, our met man, forecast moderate soaring conditions with blue thermals to 5000 feet. With wind stronger than expected, thermal conditions were better than predicted. **DAY TWO** was going to be weaker, so the task committee set a longer task. Perhaps yesterday's fast finish gave them more confidence. This was a good day for the Sports class, the first real competition in two years.

**DAY THREE.** When the cloud cover finally began to break up, a 100 km triangle was set and the day turned out to be better than expected: one-and-a-half hour of cumulus flying, and good blue thermals later on.

The next two weekends we didn't fly. That in itself is an indication of the weather and if it wouldn't have been for the competition, we probably wouldn't have flown at all. Small scale contests are simple to set up, they get us going on those marginal days that provide a challenge if we look for it.

**TOTAL** 

1	Russ Flint	Std Ci dry	2343
2	Jim Oke	Std Ci wet	2333
3	Taylor/Tinkler	Astir CS	1271
4	Hennigar/Pederson/	HP-14T	849
	Tustin		
5	Stevens	RHJ-8	248
SPORTS CLASS			
1	Fred Kisil	K7	933
2	Amyot/Maskell/Proskiw	Pioneer 1	802
3	Dittbrenner, Gerhard	SF-27	600

# **MORE GLIDERS DAMAGED**

- 1-26 WGC, destroyed Low release and 180 degree turn to a downwind landing
- LS-1 VSA, destroyed stall/spin while ridge soaring

COMPETITION CLASS

• Std. Jantar, VSA, extensive gear damage

No pilot was seriously injured.

We're having too many accidents this season! Let's tighten up our Airmanship now!

SAC SOARING EQUIPMENT SUPPLIER DIRECTORY. A listing in this Directory (at a very low fee) advertises your business and products to the only market of your buyers — all glider pilots who read free flight! How would we know of your services if you don't tell us about them? Your listing is invited for the 1/83 Jan-Feb issue, deadline 25 Nov '82. For more information, suggestions, and comments, please contact the editor.

# **NEW FACES**

BOB CARLESON

Directorat-Large



In the summer of 1968, I had the occasion, on the recommendation of Walter Piercy, to find the SOSA Gliding Club. Wynn Thomas, a fine pilot and a gentleman, confirmed to me (a perfect stranger) that he would introduce me to soaring. So we met, the introduction was conducted, and after the usual wait, I had a flight in a Blanik with the master pilot Herbie Langenscheidt. That's how my soaring started.

Today, fourteen years later, I find myself just as entranced with sailplanes and soaring as I was in 1968. During these past years, I was fortunate enough to receive a company transfer to Australia, where I earned my PPL and learned the joy of soaring in New Zealand. My work also gave me the opportunity to travel through the whole of Canada, marketing composites for aircraft, missiles, satellites, cordage, heavy electrical equipment, and others.

My first exposure to great responsibility (beyond my job) were two years as President of SOSA Gliding Club. I am especially interested in competition and badge flying, encouraging excellence and flight safety, expanding our membership base and gaining the maximum freedom for all soaring activities within the regulatory framework of the Aeronautics Act, and I hope to expand these goals to the members of SAC as a Director-at-Large.

With good fortune and a bit of planning with my work travels, I hope to be able to visit clubs from New Glasgow to Port Alberni — to see, listen, and learn.

## FOR SALE

# New & Used Security 150's

Repair & Repack FAA Rigger Service

ABBOTSFORD PARA-CENTRE 5112 Gladwin Road Matsqui, B.C. 327-JUMP or 854-3255

# **CLUB NEWS**

#### YEAR'S FIRST 500 AT CU NIM

On 15 May, Hans König and Mini-Nimbus "24" claimed the first 500 km this season: 512.3 km, Brooks — Twin Butte — Black Diamond A/P, 6 hours.

The first 154 km leg began under scratchy skies and after an early struggle for one-anda-half hours, thermals of 5 to 10 knots associated with a SE wind of 20 knots carried pilot and machine swiftly to turnpoint 1 and for some distance down the second leg. Cloud base was 13,000 feet asl, and dolphin flying with water ballast promised a good time as this triangle had also been declared for a speed task. But soon severe sink pulled Hans earthwards and his barograph trace almost touched baseline, and he lost a lot of 'sweat ballast'. Towards the end of the second (200 km) leg, a large overcast coming in from the west was releasing snow and rain. The remaining 158 km home would be difficult, if at all possible.

Kevin Bennett and his Open Cirrus were on their way to a 50 km Silver distance when they met Hans at the second turnpoint. Flying together home ought to be more encouraging.

The course under promising cu east of the Porcupine Hills proved to be a poor decision as the "lift" did not work at all and threatened Hans with imminent landing. The only other alternative was a 500 feet agl squeak over the pine-tree covered Porcupine Hills in the hope of reaching the partly sun-lit west sides. A meagre 100 fpm was all that could be milked out of the dissipating lift source; and with greatest perseverance and "hours" of cold sweat and blood he finally reached the Chain Lakes, 70 km northbound, and 50 km short of home. There, man and machine found 7 knots to cloudbase of 12,500 asl. Then a straight glide home through rain showers to a happy hug and champagne to celebrate Hans' third Diamond.

Kevin landed about 20 minutes earlier than Hans, claiming two legs of his Silver badge.

On 30 May, Kevin continued his badge efforts with a Diamond goal flight of 314.8 km from Black Diamond to Standard and return.

Cu Nim's program this season calls for intense XC training greatly assisted by the executives. Enthusiasm is spreading ... if all our pilots would only declare their long adventures westwards into the faces of the mountains, or eastwards over the huge plowed and seeded fields of the prairies.

Ursula

# **COLD LAKE**

Our club is among the few which operate from a military base, which makes our operations a bit different from a normal gliderport. There are also numerous good and bad side effects from being closely associated with the military.

Our membership has been steadily increasing over the last few years. As late as 1978 the club was almost non-existent. Since then we have increased our membership by 8 or 10 each year and we hope to continue this growth (maybe 30 members this season). We purchased the newly-recovered K7 this winter, and it is a valuable addition to our fleet. We flew Joe Wood's bird all of last year and were very pleased with its performance. We would like to replace the present canopy with a "blown" canopy to increase head and shoulder room and improve the view from the back seat

Our Bergfalke is being refinished and should be flying this week. A new skid has been built and hopefully it will survive my first landing (I was blamed for breaking the last one but the 300 landings before mine probably contributed to the failure).

One of our pilots received his instructor's endorsement last year, and we were fortunate to gain another one through a transfer to our base last fall. Well, this should reduce the workload on Joe Wood who did 80% of the instructing last year (and his wife didn't divorce him!). We also have 3 or 4 members who will be attending the SAC Western Instructors School in July so we should have an "abundant supply" of these fine souls.

We have now many licensed pilots who are eager to attempt badge flights and cross-country flights, following last year's extensive student training only. I'm anxious to write you news on our new and exciting explorations.

Besides, we have become an international club: a Dutch exchange pilot and an American exchange pilot joined our group. Both have Canadian licences.

Rob Minchin

# **REGINA MOVES**

The big news in these parts is the move by our club to its new home at Odessa (Saskatchewan — not Texas or USSR). We had looked forward to it with some misgivings, and also a tinge of regret because we had been treated so well at Indian Head by the owner, Everett Potter. However, this was the beginning of a new era and for the first time we would have our own airport.

Two weeks ago the move started when it was too windy and rainy to fly. Everett offered to help us move the flight shack to the new field with his trusty Massey tractor and flatbed trailer. He masterminded the jacking, blocking and loading with about 15 club members as pseudo-helpers. Some of us doubted the trailer could actually carry such a load; but all was well and the process was reversed at Odessa as the clubhouse came to rest at its new home.

Last weekend on 22 May, our able CFI and our trusting President mounted the 2-33 and were airborne by 9 am. Shortly after they radioed back "We're here, the eagle has landed!" (Actually "duck" would have prob-

ably described their bird better). The 1-26 was towed over next and the rest of the gang brought over assorted trailers, tow bike, and miscellaneous supplies.

It was incredible! Instant airport! Mere days before it was only a pasture. Now we were here; training yet! Everett dropped in with his 1-72 to have a look and a chat. Shortly after, another planeload of "fam" flighters came out from Regina for the day. There was good lift and lots of soaring. It was like we'd always been there. There was a good feeling all around that "this is ours, we're going to make it!" Let's hope this new-found spirit continues.

Just a few words about our new field. It's grass of course, quite flat (of course — ed). with two runways laid out; one NW-SE, and the other E-W; both about 1/2 mile long. We have set aside an area for camping but so far it's pretty rugged. It does have grass and trees but so far we don't have water. We are told that a well point at shallow depth is quite feasible so we've got our fingers crossed. We can't afford hangars this year but optimistically we should be able to get something running next year. We have a long way to go, but with enthusiasm running high we are sure we can make it. If you're out this way, drop in.

Harold Eley

# THE TRIBULATIONS OF SMALL CLUB MANAGEMENT

For the third time in one year I have written requests for club news (some maybe a bit more "imperative" than others), in addition to the regular exchange of letters. The result from such a large scale program launched in the foresight of a thin free flight issue has been most discouraging to me as editor of YOUR national soaring magazine. As usual, some faithful — always the same — souls reply; at one time, only one answer arrived several months later.

Why are the rest of the clubs so inattentive in their support to this journal, and enrich it with their own activities, thoughts, plans. I recently received this letter explaining why they had a hard time corresponding ... Ursula

We would like to aid you with our stories, but... We have asked different people to do this, for a couple of years, but our requests have fallen on deaf ears. My husband and I feel that we can't take on any more tasks. The last couple of years the both of us, and before that mostly he, have kept the club going. It's a small group which always seems to be in the process of building. Instructors are trained and then get transferred, leaving us again to do the instructing, towing and teaching. As a result we have very, very few flights of our own to enjoy a booming thermalling day. The club members expect us to be there every weekend, whether they're there or not - they might have something else on, but just may decide to come. It doesn't occur to a lot of them (not all though) that we might like to be doing something else too, every now and then. We are field treasurer, he's CFI, I'm the secretary, we look after getting the ships under cover for the winter and their cleanup in the spring, the Transport Canada paperwork, and all the other "go-fer" tasks for the club. Because of this, soaring is no longer a joy for us, it's work!

We've told our members for the last time, "either pitch in, become instructors, and help — or we're closing down the operation." Now, things are looking up somewhat so hopefully this won't happen. We can enjoy flying again as well as have time-off for our many other interests and friends; and you will hear from us from time to time. But at this point, our club is not boring, it's exhausting!

Hopefully Happy Soaring for us all!

Name withheld — ed.

#### **WIDE SKY**

The Wide Sky Flying Club was formed in the Spring of 1972 and they will certainly celebrate their tenth year of operation in August.

With a small population base to draw from (about 70,000), the charter members wisely decided that a pure gliding club would have a very rough time surviving. They therefore decided to represent all segments of aviation and they started up with four "wings", a gliding wing, a power wing, a parachute wing and an aeromodelling wing. Eventually the parachute and modelling wings had to be eliminated for lack of instructors.

Frank and Lotte Hinteregger are some of the few original charter members left, still concerned with steady growth and proving the validity of a mixed operation concept in an area of small population. By 1977 the gliding wing had three gliders operational: the Blanik, a 1-26, and a Pilatus B4.

Apart from growing locally, the Wide Sky Flying Club was instrumental in the birth of two other soaring clubs. In 1976, Doug Carson of Smithers, BC asked Frank Hinteregger if he could assist in attracting publicity for a soaring club in Smithers and shortly thereafter the Wide Sky Flying Club took a towplane and the Blanik to Smithers for two weekends of joy flights. This was enough to get the Bulkley Valley Soaring Club formed. Similar activities at Grande Prairie, Alberta in 1977 led to the formation of the Grande Prairie Soaring Club.

1977 was also the year that the Wide Sky Flying Club attempted to establish a BC Soaring Site by holding a two-month long gliding camp at the 108 Ranch. Although a success in terms of activity, it did not prove to be a draw card for other clubs in BC so the experiment has not been repeated.

The club has remained about the same size from 1977 to 1981 and the club fleet is essentially the same (Blanik, 1-26, Pilatus, Citabria as main towplane). The power wing has several more aircraft and these are available as towplanes if the need arises.

Frank, CFI, logged 1500 hours instructing flights, accumulated in 2300 flights during these years.

Excerpt from BC SOARING

# SAFETY COLUMN . . .

# 2 ACCIDENT REPORTS

# Winnipeg 2-33

**Weather** Clear sky, winds less than 5 knots and variable from the east occasionally changing over 180 degree from N to S; thermal gusts were observed, unstable air with strong up and downdrafts aloft.

Runway Final approach to Rwy 18 over a deep drainage ditch between Hwy 26 and threshold. "No Parking" signs along the highway and on the field itself. Power lines along the south side of the drainage ditch were put underground. Recommended approach height over the highway: two pole heights.

**Pilots** All licenced pilots at WGC receive a minimum of two "pre-season" check flights. This was the first check flight for a relatively low time pilot who trained with the club in 1981 and obtained his licence in one season. The instructor giving the check flight is one of our senior instructors with over 2000 glider flights. The instructor had attended our beginning of the season Instructors' Weekend and was current.

Flight and Accident During the check flight (approximately 1 hour) the pilots climbed in thermals to 7000 feet asl (6200 feet agl), and practised most of the prescribed air exercises including stalls, incipient spins, full spin and recovery, side slip, steep turns and spiral dive recovery procedures. The intent was to enter the circuit with sufficient altitude to practise a side slip on final. An approach speed of 50 knots was agreed upon. Due to severe sink, considerable height was lost on the downwind leg. The circuit was otherwise normal and the turns on base and final were made with sufficient height to allow a safe glide path with touchdown in the usual landing area on the runway. Although their glide path would have placed them below the recommended two pole altitude over the highway, neither the pilots nor eye witnesses anticipated any difficulty with the landing at this stage.

When the glider was about 100 feet (horizontal) north of the runway, an eyewitness observed the glider nose pitch up slightly, come back momentarily to the original approach angle and then pitch forward quite sharply. The resulting steep glide angle (30 degree to 40 degree) remained constant as the glider hit a "No Parking" sign on the south side of the highway with its left wing followed shortly by the nose of the glider impacting on the south bank of the drainage ditch a foot or two below the runway level.

Damage to the glider was extensive; the nose of the glider was pushed inward nearly to the canopy, the left wing pulled out of its rear fittings and swung forward, the canopy was totally demolished, the fuselage was buckled and the right wing showed extensive ripping. The pilot in the front seat broke his left wrist (holding the spoiler handle) and his right ankle as well as having a superficial cut to the forehead. The instructor in the rear seat suffered a longitudinal shin bone fracture and possible knee damage.

Possible causes of the accident During the final approach the speed had dropped to 45 knots and both the instructor and pilot being checked were aware of this. Although the instructor and an eyewitness on the ground do not think that the glider stalled, the pilot being checked reports "The nose suddenly disappeared from under him." His reaction to this was to push the stick forward. The instructor hollered NO and grabbed for the stick to pull it back. Because of the low altitude, they had already hit the "No Parking" signpost by this time. They then held the stick full back hoping to lessen the angle of impact. There is no evidence that the glider ever responded to the stick-back action, probably because of inertia.

It is evident that stall recovery procedures as taught at altitude are not suitable when one is very close to the ground since there is insufficient height for proper recovery.

Frits Stevens, CFI

# Cu Nim Blanik L-13

Sunday, 16 May 1982 C-GTEG our "new" Blanik was seriously damaged. Luckily the pilot, flying solo, sustained no severe injuries and is currently close to 100%.

In a nutshell, the situation developed as follows: Congestion of glider traffic on the ground, a poorly planned circuit, and inexperience on type combined to turn what would have been a normal landing into disaster. The pilot elected to extend his base in order to execute an off-field landing south of the two plywood hangars on the SW corner of our strip. Although observed slightly low and somewhat slow, it appeared to be a good approach.

The pilot failed to realize that power lines obstructed his glide path. The Blanik caught the cable with its right wing, spun horizontally, and came to rest on the ground about 160 degree from its flight direction. A power pole was shattered and the wires broken. The fuselage buckled significantly on impact and is considered to be beyond repair.

At a Special Instructors' Meeting called immediately after the accident, the following observations were made:

The accident is attributable to pilot error in misjudging circuit entry, assessment of traffic on the ground — a normal landing on the airfield was possible, and failure to consider ALL important aspects during the off-field landing.

Contributing factors: low time on type compromised confidence and performance, and pilot chose to ignore CFI's instructions for minimum dual flights required prior to solo in Blanik.

Hans König, CFI

# **NOTICE TO PILOTS**

By now, some of you out there have had incidents you should be letting us in on. Tell the whole truth to free flight, so that we all may benefit.

# HANGAR FLYING

## WORLD CONTEST

Regardless of the present uncertainty about the site of the next Internationals, we will continue our fund raising campaigns in order to be ready when the break comes.

First, we ask each SAC club to run fund raising events, best suited for the nature and ingenuity of each club, to support the Canadian International Team. This can be dances, picnics, fly for Canada, or shopping centre shows.

Secondly, we ask each Provincial Gliding Federation to apply for provincial lottery licences (this is strictly a provincial domain for licensing) and run a draw in this very lucrative field. Whatever support you need to organize these events, drop me a line. I can probably help you to tee off.

Have you heard: the '85 Internationals will be in Rieti, Italy, and the '87 in Benalla, Australia. Then in '89, if we play our cards right, they can be in Canada!

Oscar Estebany World Contest chairman

# **NEW TYPE APPROVAL**

After much paper-thrashing, the ASW-20FLP has received Canadian Type Approval in early June. This sailplane is manufactured by CENTRAIR in France, and features both, extended wing tips or winglets. Two of these 20's with winglets flew in Paderborn in the last World contest and placed well in the standings. Mike Apps of Edmonton will be taking delivery of the first one in Canada and it should arrive this summer.

If you see Mike, ask him about the Type Approval process — but get him in a good mood — it would make a stone weep!

## **EUROPEAN CHAMPIONSHIPS**

27 July to 20 Aug 1982

The First European Championships are being held in Rieti, Italy, site of the future World Soaring Contest. The organizer is the Aero Club Centrale de Volo a Vela under the patronage of the Aero Club d'Italie. Three FAI classes will compete. 70 pilots of 14 countries have applied already for participation (85 sailplanes will be allowed to compete, ie. 6 sailplanes/country, 4 pilots in each class).

from Le Planeur, BENELUX

# **DIMPLES WORK WELL**

Baer Selen's air bleed holes on his ASW-19 caused great attention and discussion before the International contest in Paderborn last year. More tests were carried out at various

Universities in Holland and Germany and others to find the best answer for improved L/ D on our sailplanes. Today it appears that an air turbulator tape installed on the underside of the wing may give similar positive results. This tape is made of plastic with a line of little dimples raised upon it to add energy to the boundary layer. This controls the position of the separation point, and prevents the formation of a thick laminar bubble.

from Le Planeur, BENELUX

# **COMPETITION CHANGES**

As a result of the recent articles on the competition scene in Canada (1/82,2/82), a workshop discussion at the AGM in Montreal (3/82), and a poll of competition pilots, the Sporting committee under Dave Marsden has prepared a final proposal for reorganizing Canadian competitions and team selection.

This proposal will be sent to all pilots on the team seeding list for final comment before being forwarded for SAC Board approval.

It is expected that the approved competition plan will come into effect for the 1983 season. It will NOT materially affect current plans for contests next year, although the name may change. More details will appear in *free flight* later this year.

# A FRENCH MOUNTAIN GLIDING PARADISE

There is a place in France called Saint Auban. a gliderport if you wish. They have a few hangars, one packed with 13 Januses, complete with wing covers, canopy covers, not a speck of dust; the usual instruments, Bohli compass, radio, oxygen, modern vario systems; another hangar stuffed with three LS-1s, eleven Cirrus', two LS-4s, four ASW-20s, one Nimbus 2, one ASW-17. In another one, seven Rallye 235CW and one Robin 180CW, two Fournier RF-9 motorgliders. Then there is a huge repair shop; spotless, wonderful tools, paint shop, parachute packing bay, radio repair shop. A large garage with five Citroën trucks for retrieves; tractor with runway brush, two trailers for each type of glider (except when there was only one glider of that type).

Their courses: only experienced pilots, 100 hours and over 18. In summer 36 course members, in winter 24. Twelve instructors. Training for competition, cross-countries, mountain cross-country, training of instructors. Three pupils per instructor in summer, two in winter, under his supervision throughout their course.

The first three days in the Janus, no matter what experience; soloed in the Janus, then given a single-seater, whatever glider the instructor decides. Once solo, a radio conversation every half-hour to the personal instructor. Another instructor in the tower and all radio conversations taped. Accidents? Same

as for the rest of the country. Not satisfactory, but they are working hard on improvements.

Hotel accommodations: beautiful bedrooms with showers, but only for use of course members; families to find accommodation in local hotels! Games rooms, TV room, lounge. A superb restaurant and menus! Everything you can dream of.

Prices: FF1500 for two weeks with a maximum of 40 hours flying; if you fly more you pay for it. Write to Centre National de Vol à Voile, Aérodrome Saint Auban, 04600 France. They send you a form and if there's a place for you you'll be accepted. May, June, July, August, a 100 applications for 30 places — other months easier. Winter wave. Closed December and January.

Rhoda Partridge excerpt from *Sailplane & Gliding* Feb-Mar 1982

# **NEW POWERED VENTUS**

Now, after we have finished the work on our 15m ship – reaching a glide angle of nearly 45 – and after we have started the production line of the Nimbus 3 with 24.5m span (80.4 feet), with a maximum L/D of definitely over 55, using spoilers on the wing tips for best maneuverability and having the ability to carry nearly 650 pounds of water, we feel that we are very close to the upper limit of possible performance for a suitable amount of money. Labour is getting more and more expensive, and reaching a slightly higher performance needs exponentially higher labour costs.

The self-launching motorglider seems to be the way to combine everything, but we find that's not the way to go for glider pilots. We found that the self-launching system is:

- far too complicated and expensive, with an additional price of US\$14,000 to \$18,000.
- too heavy, because of the strong engine, the long propeller and resulting cg problems, the heavy battery for the starter, and a lot of fuel (altogether about 150 to 180 pounds).
- too noisy.
- not safe enough, because pilots can make too many mistakes in a critical situation (several PIK-20E, Nimbus 2M and Janus CM accidents attest to this).
- last but not least, it's no longer a normalto-fly glider for everyone.

With this experience in mind, we consequently tried to solve the problems, starting from different positions. The main idea came from a German glider pilot, Professor Claus Oehler from Berlin. He asked for a very light engine system, producing only a slight rate of climb, just to leave the field early in the morning after a low tow, and to reach it safely in the evening, from a distance of 100 miles or more. From this basic idea, a successful prototype was built and flown, a Ventus-a having a small "sustainer" engine.

What are the main features of the "Oehler System" suitable for a production glider?

- the extra weight for a 15 Metre glider should not exceed 50 to 60 pounds.
- the rate of climb should be around 150 fpm.
- the system should need no extra battery, no electrical starter, no throttle, no extra instruments, just one handle (like the gear handle) to put the engine out and in, and an ignition switch.
- the engine should run at its best performance all the time with a fixed carburetor setting.
- the engine should start by itself by extending it and accelerating the glider to 75 to 80 knots; it should stop when reaching close to the minimum speed of the glider and switching off the ignition.
- putting the engine in or out should not take more than 10 seconds, without worrying about propeller position and without having changed the CG position much.

All these demands could be solved with the Oehler System, in which the small engine has a four or five blade self-foldable fibreglass propeller with small diameter (27–30"), working like a windmill at high speeds (for starting the engine) and producing high drag at low speeds (for stopping the engine). This system could be used, since the efficiency of the propeller system needs to be reasonably good only at a certain speed just for climbing. An additional advantage of this blade system can be seen in its low noise, since the tip speed of the blades reach only

two-third or less of the normal propeller tip speed.

We finished the test flights with two new engines. The engines completed the LBA demanded 50 hours running, and we have started to build the first prototype for the production version of the Ventus-bT (Turbo). When in production, it will be available with removable wing tip extensions to 16.6 m span in order to compensate for the extra weight in weak conditions. Suitable engines for the installation into the Nimbus 3 and Janus C are in progress and will be tested in these gliders, as soon as the Ventus bT goes into serial production.

It may be of interest for you to know that our German LBA (same as your FAA) is going to allow the German pilots to fly this simple Turbo glider with a normal Glider Pilot Licence, since they themselves confirmed by their own test flights with the prototype that:

- the pilot cannot make any serious mistake,
- the extra weight is far below the weight with normal water ballast,
- the drag increase with the extended not running engine is so low that the pilot is able to land the glider in a normal manner.

They feel that the safety factor of the system in preventing dangerous out-field landings is worth the rather low extra effort for the pilots.

Klaus Holighaus part of a presentation given at the '82 SSA Convention.

# START GATE SOLUTION

Contest flight strategy is governed by the contest rules. The start gate has imposed itself onto the task in an increasingly high risk manner, is in itself responsible for much of the gaggle flying which is 'perpetrated', as many George Moffats would say, and greatly complicated contest organizing.

Lloyd Bungey, in a letter to *free flight* in 2/82 page 4 issue, told us more of the clock-camera which is being considered as a solution to the start gate problems. An article that first appeared in *AUSTRALIAN GLIDING*, gives a very thorough discussion on what is wrong with the present start gate and how a free height start with clock-camera could be a good answer. The article includes objections to the new idea and rebuttals. The June '82 issue of *SOARING* magazine has reprinted the article, and all you competition pilots should get your hands on it somehow and give it a close read.

# **DITTEL RADIO TESTED**

The June '82 SOARING also has an interesting test report on two new radios on the US market from Germany – the FSG50/60M from Walter Dittel GmbH, and the ATR-720 from Avionic Dittel GmbH (two separate companies). These 720 channel radios are good for glider installation, being small and having quite low standby current drain, among other attractive features.

AIRBORNE ELECRONICS AD



AD

# FAI BADGES OO PROGRAM

**Boris Karpoff** 24-1/2 Deloraine Avenue

M5M 2A7 (416) 481-0010 Toronto, Ont.

The following badges and badge legs were recorded in the Canadian Soaring Register during the period 29 March, 1982 to 28 May, 1982.

#### **DIAMOND BADGE**

Denis Roy

42 G.H.U. (Terk) Bayly Toronto Soaring World No. 3137 43 Richard D. Robinson SOSA World No. pending

# DIAMOND DISTANCE 500 km (310.7 mi)

Quebec

501.5 km HP-14T Ridge Soaring, Penn. Richard D. Robinson SOSA **DIAMOND ALTITUDE** 5000 m (16,404 ft) G.H.U. (Terk) Bayly Neil A. Macdougall Black Forest, Colo. Black Forest, Colo. Toronto S. York 6431 m 1-34 1-34 5669 m Cu Nim Mini-Nimbus Cowley, Alta. Hans D. König 6416 m **GOLD ALTITUDE** 3000 m (9842 ft) Independent 3383 m Black Forest, Colo. Erich K. Arndt 1-26 SILVER ALTITUDE 1000 m (3281 ft) T. Macartney-Filgate SOSA 1452 m Ka6CR Sebring, Fla. C BADGE 1 hour duration 1:29 Elmira, NY T. Macartney Filgate SOSA 1-36

# NOTE TO BADGE PILOTS AND OOS

SAC asks for some documentation on badge claims beyond the minimum required by the Sporting Code. Additional information such as a portion of a map showing the flight course line and prints of turnpoint photos is intended to help the OO or the Badge chairman audit the claim in cases where the flight was unusual, the turnpoints obscure, or the photo negatives difficult to interpret, etc.

2:04

1-26

St-Raymond, Que.

Such additional information is not NORMALLY required to be sent in with a claim for "milk-run" badge legs like the SOSA — York Silver distance and other common trips, or with un-ambiguous turnpoint negatives. However, the OO or the Badge chairman have the right to ask for additional information if they feel it is necessary to fully document a claim.

# 83 WORLD CONTEST UPDATE

As of 17 June, the CIVV has received firm offers from South Africa and USA to host the 1983 World Championships. All members of the CIVV have been asked to report by 30 June in a telex vote to choose between them. If South Africa is chosen, the contest would be held in Feb '83, if the USA (at Hobbs, New Mexico), sometimes in the summer. Hobbs was chosen: 20 June to 10 July, 1983.

# 2 RECORD CLAIMS FROM ESC

12 June DAVE MARSDEN, Std. Jantar 2 speed around a 100 km  $\Delta$  (territorial) 109.6 km/h

13 June MALCOLM JONES/DAN PANDUR, Gemini multi-place, speed around a 200 km △ 61 km/h

> free flight is most grateful to Dave Puckrin for the centrefold calendar that he has donated to SAC. Dave also mails these fine prints to every club for distribution everywhere you can think of!

# Tony Burton

As you all know, there has been considerable discussion recently on problems with the entire business of badge claims and Official Observers. In part, the problems are associated with the growth of SAC membership and the strain this has caused to operating by the old system.

The major problems which exist are the following:

- Since the OO Application Form is one-time only, SAC has no idea who are **CURRENT** OOs or how many we have.
- FAI Badge chairman's workload is reaching the saturation point. Just the basic paperwork on complete and correct applications consume much of the chairman's time during the busy seasons. The overload is making the job unattractive for more than a year or two at a time and it will become very difficult to find good volunteers for the job.
- There is no on-going "control" of OOs regarding their currency of knowledge or competence. No direct interest in the importance of the OO by SAC has helped to generate some clearly incompetent OO workmanship in many badge applications.

Andy Gough at SOSA has taken on the task of preparing a plan for SAC Board approval which will correct the flaws in the present system. Although details have not been worked out yet, it is likely that the plan will contain these major points:

- A complete cancellation of ALL OOs followed by a re-registration in order to generate a new SAC OO Register which can be kept current (The New Zealand Gliding Association was having similar problems, and was successful with a re-registration of OOs).
- OO privileges to expire after a certain time limit (5 years?)
- The establishment of "Senior OOs" at the club level (also with a time limit) who would act as the Badge chairman's right-hand-man at this level (Alex Krieger has acted in much this fashion in his club for some years, and the double-check provided to badge applications from Quebec has been obvious and much appreciated by past Badge chairmen). The establishment of the Senior OO position would greatly lighten the Badge chairman's job since only a few claims would be audited at SAC level rather than most of them; and the need to ask for additional documentation, the number of bounced or disallowed claims, and the speed of processing, would all be reduced to everyone's benefit.

The Senior OO would provide the control the SAC requires to maintain OO standards in the field. The Senior OO could vet completed claims from all new OOs and a sampling of experienced OOs until he was satisfied that proper standards were being maintained. He would ensure that all club OOs remained current, were aware of rule changes and their practical effects, and had current Sporting Code and SAC Procedures Booklet and Application Forms.

· The provision of an OO examination paper, self-administered for the individual OO and badge pilot's benefit.

If you have any suggestions which would aid in upgrading the OO program, get in touch with Andy as soon as possible at (416) 639-5939, 3225 Spruce Avenue, Burlington, Ontario L7N 1J1.

# AN APOLOGY

In John Firth's article "An Unusual Wave System" in the last issue, the three diagrams were originally done by Christine Firth for John's OSTIV paper. In order to make these diagrams more reproduceable and to resize them to fit the layout of the article, I completely redrew and reinked new figures. However, I should not have added my 'mark' to the corners of this new artwork, since it would infer that I also conceived the drawings. I would have no right, and of course had no intention, to claim credit for this. My apologies, Christine.

Tony

# SAC DIRECTORS

#### PRESIDENT & DIRECTOR-AT-LARGE Russ Flint

96 Harvard Avenue Winnipeg, Man. R3M 0K4 (204) 284-5941 (H)

#### VICE-PRESIDENT & ALBERTA ZONE Tony Burton

Box 1916 Claresholm, Alta. T0L 0T0 (403) 625-4563 (H)

#### PACIFIC ZONE Harald Tilgner 90 Warrick Street Coquitlam, BC V3K 5L4 (604) 521-4321 (H) (604) 525-2211 VSA

# PRAIRIE ZONE Dave H. Hennigar

404 Moray Street Winnipeg, Man. R3J 3A5 (204) 837-1585

#### ONTARIO ZONE

Al Schreiter 3298 Lone Feather Cr. Mississaugua, Ont. L4Y3G5 (416) 625-0400 (H) (416) 926-1225 (B)

# QUEBEC ZONE Alexandre W. Krieger 1450 Oak Avenue Quebec, Que. G1T 1Z9 (418) 681-3638 (H)

(418) 656-2207 (B) MARITIME ZONE

# George Graham 1-125 Hospital Ave. New Glasgow, NS BOK 2A0

(902) 752-3803 (H)

# DIRECTOR-AT-LARGE

Bob I. Carlson 57 Anglesey Blvd. Islington, Ont. M9A 3B8 (416) 239-4735 (H) (416) 362-5621 (B)

# **OFFICERS**

# SECRETARY-TREASURER Dr. Karl H. Doetsch 1610 Apeldoorn Ave. Ottawa, Ont. K2C 1V5 (613) 224-1470 (H)

(613) 993-2110 (B)

**EXECUTIVE DIRECTOR** Jim W. Leach 485 Bank Street Ottawa, Ont. K2P 1Z2 (613) 822-1797 (H)

(613) 232-1243 (B)

# COMMITTEE CHAIRMEN

AIR SPACE David G. Tustin 581 Lodge Avenue Winnipeg, Man. R3J 0S7

FINANCIAL PLANNING Vacant

FREE FLIGHT Ursula Burton Box 1916 Claresholm, AB T0L 0T0

HISTORIAN Christine Firth 542 Coronation Avenue Ottawa, Ont. K1G 0M4

INSTRUCTOR Ian Oldaker 135 Mountainview Road N Georgetown, Ont L7G 3P8

INSURANCE Al O. Schreiter 3298 Lone Feather Cres. Mississauga, Ont. L4Y 3G5

MEDICAL Dr. Wolf-D Leers 4-4889 Dundas St. W Islington, Ont. M9A 1B2

**MEMBERSHIP** 

PROVINCIAL ASSOC. Vacant

PUBLICITY Dave Puckrin 35 Mill Drive St. Albert, Alta. T8N 1J5

RADIO Frank Vaughan Box 113, RR 1 Kanata, Ont. K2K 1X7 SAFETY

131, 13710 - 67th Ave.

Surrey, BC V3W 6X6

Eric Newsome

SPORTING Dr. Dave Marsder 3920 Aspen Dr. W Edmonton, Alta. T6J 2B3

FAI AWARDS Boris Karpoff 24-1/2 Deloraine Avenue Toronto, Ont. M5M 2A7

FAI RECORDS Dr. Russell & Hazel Flint 96 Harvard Avenue Winnipeg, Man. R3M 0K4

CONTEST LETTERS Robert L. Barry 542 Rouge Rd. Winnipeg, Man. R3K 1K4

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

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

TROPHY CLAIMS James W Oke 551 Bruce Ave. Winnipeg, Man. R3J 0W3

METEOROLOGY Sepp Froeschl 1845 Brookdale Avenue Dorval, Que. H9P 1X5

WORLD CONTEST Oscar Estebany 921 St. Auban Montreal, Que. H4M 2K2

# SAC PROCEDURES MANUAL

The long-awaited SAC Procedures Manual is finally out. It is an inch thick document in a blue loose-leaf binder to allow for easy amendment and updating.

At present, every club president, SAC committee chairman, and director has been issued with a copy.

The book describes in complete detail the SAC organization, the terms of reference and duties of every position in SAC; rules and procedures for clubs regarding insurance, statistics, voting, trophies, etc; details of badge processing, descriptions of SAC-related organizations such as the FAI, and much more. Everything you ever wanted to know related to the SAC is right here in this book!

Club Presidents! Make sure that this manual is available to your members and is handy at every meeting for study and reference. Everyone is encouraged to propose corrections and additions to the book — it won't be any good if it is not up-to-date, useful, and relevant.

Many thanks to Walter Piercy, who has worked over three years to compile the information for the Procedures Manual.

# **NEW FACES**

**OSCAR ESTEBANY** 

World Contest Chairman



Oscar joined the Canadian gliding movement with MSC in 1952 which at that time was flving out of St-Eugene. As ex-military pilot, he says it was the Pratt-Read that lured him into gliding; it was a large and heavy aircraft, but quite responsive and with good soaring capabilities. He soon became involved in club organization, and over the years has held many positions; he acted as instructor, towpilot, maintenance director, CFI, chief towpilot, president, and yes SAC director. Oscar has towed with just about every aircraft type used for towing in Canada, and was instrumental in getting MSC and several other clubs to switch to L-19's. Moreover, he earns a living in the aerospace industry.

In his early gliding years, Oscar flew in contests, but as his interests and involvement in club operations grew, his contest participation took form in contest organization, such as the Nationals at Hawkesbury, and the 1967 Nationals/Mini-Internationals that hosted pilots from several nations with military towing assistance. Oscar crewed at four world contests.

# **COMING EVENTS**

Now is the time to announce your winter programs! 6/82 deadline: 5 Oct; 1/83 deadline 5 Dec. Please allow six weeks for the various printing stages, plus the time for the postal delivery.

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,

Jul 18-23, Advanced Instructors Course. Hosted by Winnipeg Gliding Club, at Pigeon Lake Gliderport. Applications to National Office. For info contact Frits Stevens, 302 Boreham Blvd., Winnipeg R3P OJ6, (204) 837-8128 or (204) 888-1345 H.

Jul 24-Aug 2, 10th Cowley Summer Camp at Cowley Airfield, Alberta. Hosted by Alberta Soaring Council. Contact Ken Palmer, 23 Baker Cr. NW, Calgary, Alta. T2L 1R3 (403) 284-1396 H.

Jul 31-Aug 8, Championnats Provinciaux du Québec à l'aéroport de St-Raymond, Les modalités sont toujours à l'étude en vue d'avoir une classe "compétition", avec handicaps, et une classe "sport", où les activités pourraient être plus "légères". Les détails suivront sous peu. Pour informations contacter CVVQ, CP 9276, Ste-Foy, Qué, G1V 4B1.

Aug 2-6, Flying Week, Winnipeg Gliding Club, Pigeon Lake Gliderport. Contact Frits Stevens, 302 Boreham Blvd., Winnipeg R3P OJ6 (204) 837-8128 or (204) 888-1345 H.

Aug 14, Kawartha "Roast". They extend an invitation to all. More under Club News 2/82 page 23. For details call Graham McKay (416) 668-3313, or write 1707 Dufferin St., Whitby, Ont.

Aug 21-29, Fly Week, New Brunswick Soaring at Havelock, NB (35 miles W of Moncton). For info contact Marilyn Dougherty, 6-15 Suffolk St., Riverview, NB E1B 3H2.

Sep 3-6, Fourth Annual SSA Homebuilders Workshops. Highlight of the workshops will be the Homebuilt Sailplane Design Contest Fly-Off. Entries will compete in the fly-off and be on display.

Western Workshop - Skylark North/Fantasy Haven Gliderport, Tehachapi, Calif; Central Workshop - Texas Women's University, Denton, TX: Eastern Workshop — National Soaring Museum, Elmira, NY. For details call SSA (213) 390-4447.

Oct 2-3, SAC Directors' meeting, Vancouver, BC

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

Mar 4-6, 83 SAC AGM, Calgary. Hosted by Cu Nim. Details to follow.

# CORRECTION

The introductory paragraph to the "Hammerhead" article 3/82, page 12 was mine, and NOT the author's, who is a qualified aerobatic instructor — Ursula