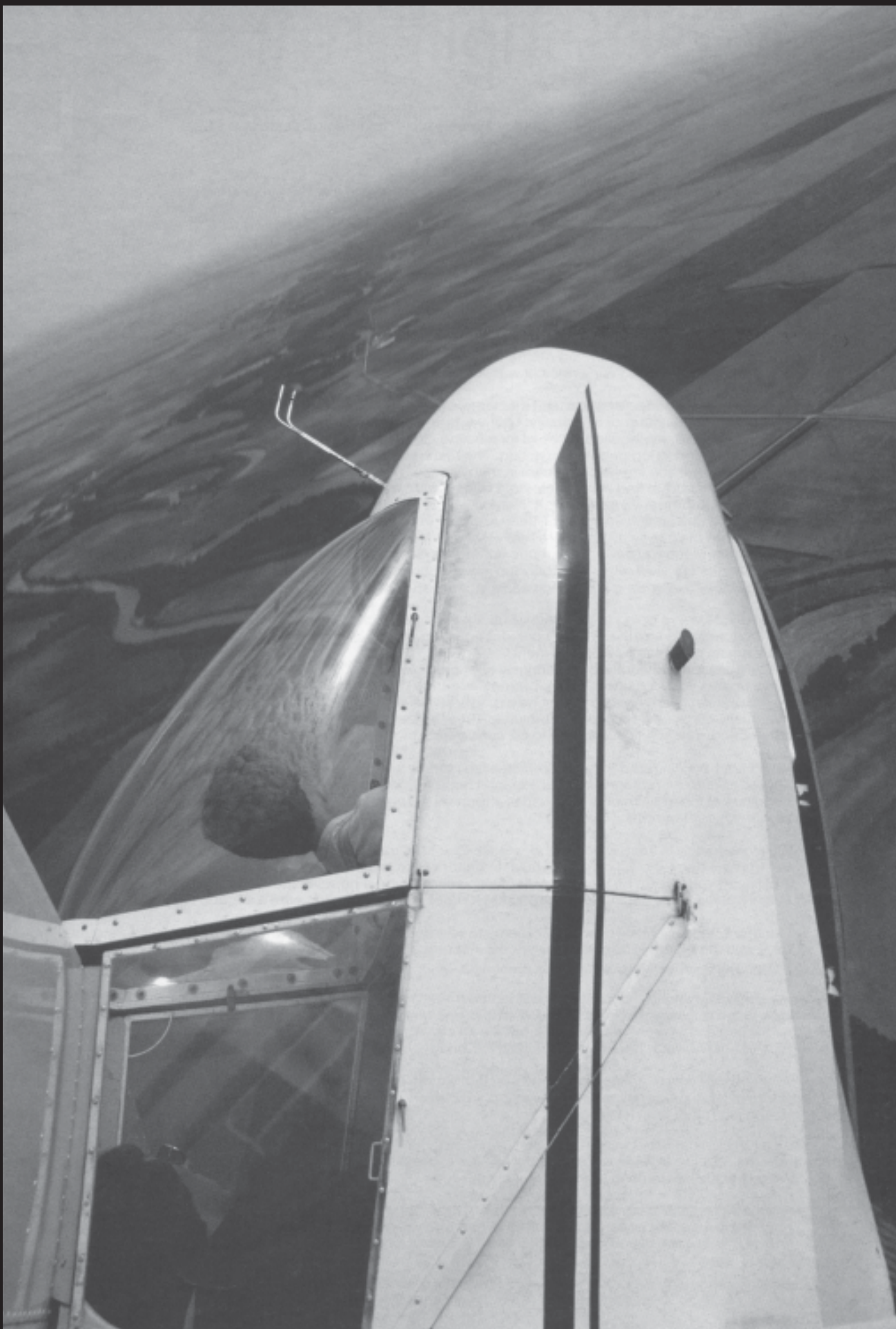


# free flight • vol libre

6/84  
Nov-Dec



# MUSINGS

We had our fall Board meeting in Saskatoon at the end of September. Nice weather complemented a good meeting and the company of members of the Saskatoon and Regina clubs at the Saturday reception. It was enjoyable.

Your Board asked me to focus my comments on a subject that has caused some, if not many to experience significant frustration. The subject is the delivery of the 1984 insurance policy. Many want to know why it has not been delivered — when we're almost through the season! Why does it take so long? The answer, I'm sorry to say, is quite simple: several member clubs have just now (in September) paid their premiums. As I write the checks are said to be enroute.

Because our policy is a joint (SAC and the clubs) and group (the clubs) contract, **everyone** has to pay before the contract is complete and the insurer can issue the policy. It's all in or nothing out. Now I can already hear cries of "ridiculous", "stupid", and so on. It isn't really. Consider the following actual case: Club A sent in a check to the National Office on 1 April; the amount contained insurance and membership fees, but there was no list of individuals or membership class, aircraft type or numbers, or even third party liability levels. Moreover the amount did not match last year's aircraft inventory, member, or liability levels using either last year's or this year's rates. It was, from our perspective, a random number.

While correspondence began to get the necessary details, something had to be put on the record to give an indication to the insurer of his liability. Last year's club list is a good start but people move or leave; aircraft are bought, sold, mothballed, or used for kindling. Jean has conscientiously sent out lists to clubs to speed the process and to jog people into action. The response ranges from helpful to outrageous — "How can we be so stupid," is the implied comment in many cases. Well folks, we do the best we can with what we've got. What the inaccurate and incomplete data does is cause massive delay. There is also real risk that we will overlook or improperly value aircraft. Naturally all of this normally unnecessary work takes time — about five months as you can see. In fairness, Jean and Susan make honest mistakes too. Remember that they have had to learn the hard way that there really is a difference between a Ka6CR and a Ka6E, and that MU100 is not shorthand for 100 cows. Sophmoric humour aside, most clubs are gems, but enough clubs and associations are slow payers to delay the issue of the policy and receipt of the \$9000 bonus for safe flying in 1983 (which, by the way, is costing us lost interest as well).

What to do? We're going to get tough. Subject to a final decision at our January meeting and advice from our Insurance committee, we are considering either or both of the following:

- a) Financial penalties for slow payment,
- b) Cancellation of insurance for seriously offending clubs.

If this upsets you, consider that the prompt, accurate paying clubs are subsidizing the slowpokes because the insurer isn't earning the interest **he** expects on the premiums. It is simply not fair or courteous, and it eventually costs us all in higher premiums. There is also a great risk that the innocent will be penalized or overlooked. The solution is simply to be considerate of your fellow pilots. Let's try, shall we?

Your Flight Training and Safety committee isn't happy with the low submission of accident reports either. Those reports are required and necessary. I hope we don't have to make submissions of those reports a condition of claim payments. It is just as important to share the cause of our mistakes as it is to share the reason for our triumphs. "Nuff said?"

While insurance is fresh in your mind, please look at "Crocodile Corner". The beasts are hungry and are being fed. I don't know if club gliders taste better or are just meatier — they sure seem to be popular fare. Tipping towplanes up on their propellers also seems to be a popular sport, especially at Cu Nim this year. Nevertheless, if the claims stay at about their present level we might earn a second bonus of around \$8000. Our improved loss ratio [over 1982] seems to be attracting other underwriters (two are sniffing around I'm told) with the potential benefit of lower cost insurance and better benefits. Safe flying does pay, so keep at it, remember — starve the crocodiles.

If there was ever evidence that the competitive spirit has benefits, at least within the aviation community, look at the publicity that the Marsden/Apps (Apps/Marsden?) flight has received in foreign journals, and now in "Canadian Aviation" with Lloyd Bungey's article. Again, well done, guys. Keep at it — it sure would be nice to have a world free distance record in Canada.

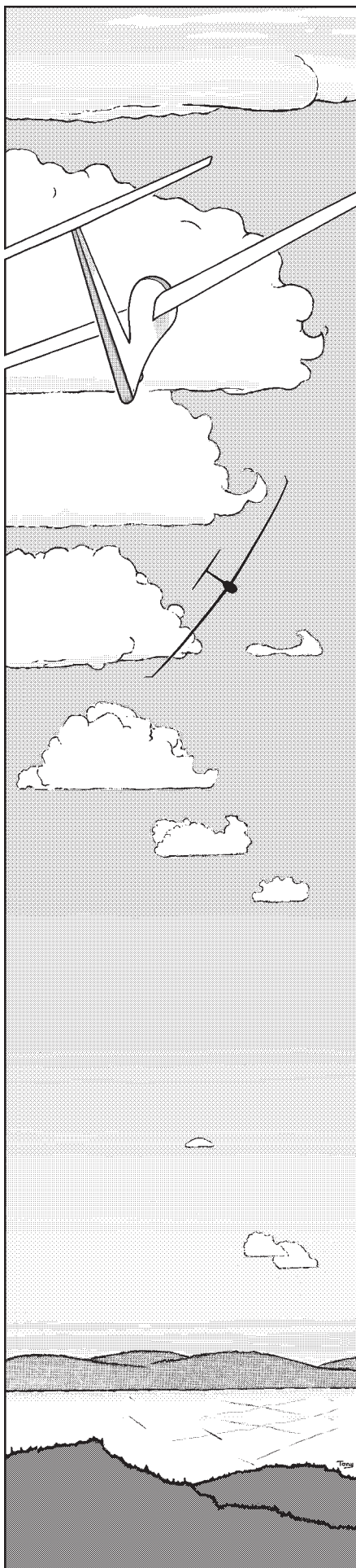
A quick note now to acknowledge the fact that we are having mailing list problems. It seems to relate to address label preparations; we're working on a fix, and we hope to have our own computer system soon to do the job rather than farming it out.

As a next to final note I must report that Don Dunn, our Treasurer, who retired from his Ottawa job a while ago, is now really going to retire to Yarmouth, NS. — he loves the lobster and scallops. Don has resigned as Treasurer. We regret his leaving and thank him for his services.

When this issue is in our hands, many of us will have snow on our runways and we will be in the "dream-and-plan" phase of our sport. I hope that you all have had and will continue to have rewarding flights. Ruth and I also hope and wish that each of you, and your families, will have an enjoyable holiday season and prosperous New Year. Do take care.

Fly safely, fly often, and above all fly well.





# free flight • vol libre

Trademark pending • Marque de commerce en instance

6/84 Nov-Dec

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

ISSN 0827-2557

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## Cover

Mike Maskell of Winnipeg gets his second cover in a row. In this photo, he records a 2-33 rollercoaster ride for a youngster in a warmer season.



# FINDING (AND KEEPING) THE REWARDS OF GLIDING

## Stewart Midwinter

Editor of "The Flypaper"

Journal of the Alberta Hang Gliding Association

*Stewart's message to the hang gliding fraternity speaks very clearly to soaring pilots also. Tony.*

As I approach the tenth anniversary of my entry into the sport of hang gliding, I am saddened once again by learning of some friends' decisions to give up the sport. I confess that I am sometimes at a loss to understand why anyone would willingly give up flying, but I realize that there may be a number of motivating factors leading someone to make such a decision: a lack of time to devote to the sport due to demands of family or work; a feeling that the rewards are no longer worth the devotion of time required; fear of flying, due to a personal accident or the gradually accumulated toll of long experience; gradually decreasing number of contemporaries still in the sport; increased interest in alternate, competing activities; burnout from too many competitions, or too much volunteering work; lack of personal satisfaction due to inability to keep up with the 'experts'; and so on.

While one way to make the sport grow is to increase the rate at which new students enter the sport, another is to lessen the rate at which pilots leave it. In the former, but also in the latter, we can help ourselves and those around us to stay.

If you don't have the time to go flying every time the weather permits, don't aim for the same goals as more devoted pilots. Enjoy flying when you can, but don't give up — many people, for instance, ski only a few perfect days a year. Similar thinking applies if your rewards don't seem worth it any more. Eliminate the marginally rewarding days or types of flying, and concentrate on a few good experiences. And if other activities begin to crowd out flying, apply the same strategy.

If fear is turning you away, be aware that fear is a major factor in the sport, and that all experience it to some degree. Step back to a simpler level of flying until confidence returns. Also, admit to yourself that you do have fears. Fear from a personal accident can only be beaten by getting back at it, though at a lower level you can easily deal with it with greater confidence.

Always measuring yourself against the achievements of others can lead to disappointment if you don't keep up. From the other point of view, always trying to outdo your flying companions, and reminding them of it when you do, can also frustrate them. Also, if you find fewer of your old flying buddies still around, cultivate new friendships. Take a newer pilot "under your wing" and help him or her to improve. The thrill of teaching another pilot new skills helps you relive the thrill you yourself felt while learning.

Burnout can be cured by altering focus in the sport. Sick of competing? Take up aerial photography. Sick of cross-country? Use cross-country flights to explore the terrain below for new hiking trails. Sick of the politics? Give up volunteering for a year, or take on a small project. Sick of ridge-soaring? Try thermalling.

A final word on making flying an activity to last a lifetime: You have to get more out of the sport than just the enjoyment of the mechanical aspects of flight. If you can use your flying as a window on the world, as an aid to experiencing new ideas and points of view, you will find the sport endlessly enriching.

Taking up hang gliding can help you to learn about weather, climate, and micro-meteorology, about geography and map-reading, about history and geology, aerodynamics, physical conditioning and competition in general. Getting involved in volunteer activities in the sport can teach you many skills, depending on the task you choose. It certainly will teach you how people get along, and how to get along with them. You might even say that taking up flying is like taking up life itself. There's so much to see and do in, and related to, the sport, you may find little time to do any flying itself!



## The SOARING ASSOCIATION OF CANADA

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

free flight is the Association's official journal.

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

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

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

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

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

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

vol libre est le journal officiel de l'ASSOCIATION.

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

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

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 adressé au directeur régional dont le nom apparaît dans cette revue.

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

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

Pour changements d'adresse et abonnements aux non membres de l'ACVV (\$18.00 par an) veuillez contacter le bureau national.

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# OPINIONS

## COWLEY KUDOS

The August 1984 soaring camp at Cowley was a delightful and memorable experience. I want to thank all the towpilots, organizers and others who worked so hard to produce a safe and smooth operation.

Being an uninvited guest to the event, I was particularly appreciative of the friendliness from all, and the special help from Bruce Hea.

You have a special and unusual soaring camaraderie in Canada which can only be encouraged and nourished.

Thanks again for your excellent hospitality.

Bob Matheny  
San Diego, California

## STANDARD INSTRUCTION GOOD, USE THE PATTERN

I enjoyed reading the article on the Eastern Instructors Course kindly provided by John Wiseman. It appears that a good and worthwhile time was had by all that completed the course. Certainly that was a report of Alex Diakiw and Byron Bolt, the two candidates from Bluenose Soaring.

John mentions the demonstration tape that was prepared by the Course Director, Ian Oldaker. A copy of an early version of this tape was kindly given to me by Gordon Waugh, and I had a chance to listen to this quite carefully over the long winter night that occurs here at Resolute Bay.

I am most impressed with the care and quality that went into the preparation of this tape. I was concerned, when I first heard of the tape, that the "pattern" of each lesson would be too lengthy for a winch-oriented operation such as we have at Bluenose, but not to worry: Ian has reduced the pattern to a minimum, without missing any point of value. This is of cardinal importance, since many of us instructors talk too much to allow the student to absorb the intended experience of the flight. And when our mouths are moving, our instructor hands often grab the stick, even when they have little reason to be there, Ian's pattern on "the effect of controls", for instance, takes 3 min 20 secs, including demonstration and student practice. Needless to say, this can easily be done on a flight from a winch launch.

I feel that the verbatim use of the pattern on Ian's tape will provide real benefits to the instructor, the student, and the club. To the instructor, because once the job of learning the pattern is over his work will be far easier, since he will not have to create each time the sentences used in instruc-

tion. Further, he will not miss some vital point, and will be much less likely to wander outside the lesson in progress.

The use of an established pattern will benefit the student because he will be taught in clear, brief language. There will be periods of instructor silence, giving the student time to think and absorb; and he will be given plenty of hands-on practice. The pattern that Ian has developed illustrates this. But more importantly, the quality of instruction will be lifted to a common level, making the instructors equal in ability, and the instruction consistent in content.

The club will benefit from the use of an established instruction pattern because the students will progress faster due to the reasons above noted. This could result in less student drop-out. There are few enough people interested in our sport — why drive them away with poor or inconsistent instruction? Since the use of pattern will provide a similar quality of instruction across the instruction team, there will be less demand on the former so-called "better" instructors; thus the instruction load will be more evenly distributed. Also, an improved rate of student learning will reduce the total load on the instructor team. Additionally, the CFI's task will be greatly simplified, especially in the sense of quality control of the instruction.

In the end, then, clubs will have more and better students arriving at solo status in a shorter length of time, all for a reduced investment of club energy. This will increase the amount of soaring time and increase the demand for soaring equipment. More pilots to become instructors, and more pilots to be involved in the competition of which Bob Carlson so excellently speaks.

I do see one bad thing in all this, however: very soon the "Trading Post" would not display the excellent choice of sailplanes that is currently available.

George Graham,  
ex CFI, Bluenose Soaring

## BLUENOSE DREAMS

Regarding the "Nova Scotia Dream" story in Clubs News last issue, it's nice to get in print. The locals were amused, and no repercussions from the Cape Bretoners — yet. Gen. John Cabot Trail is a "real" imaginary character from CBC Radio here who does a piece fairly often about Cape Bretoners and their folkways. It really is the only place on earth where you can meet a person who speaks only Gaelic.

Dick Vine

continued on page 19

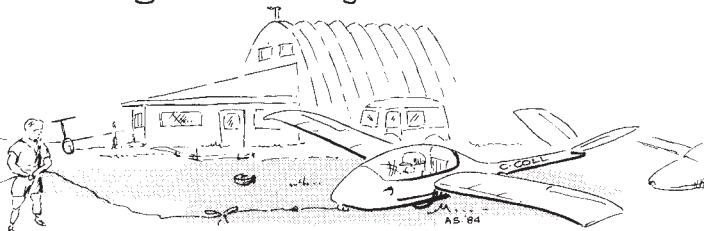
# THE 1984 ONTARIO SOARING CHAMPIONSHIPS

Graphic comments by Albert Seaman.

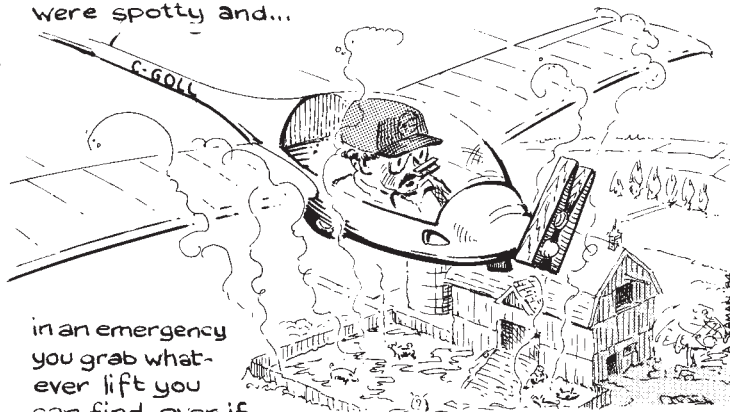
Sid Wood  
SOSA

What am I doing here??? I hadn't felt this nervous while awaiting a launch since my first solo. The situation itself was not new to me but the circumstances surrounding it were. I was about to participate in my first soaring contest.

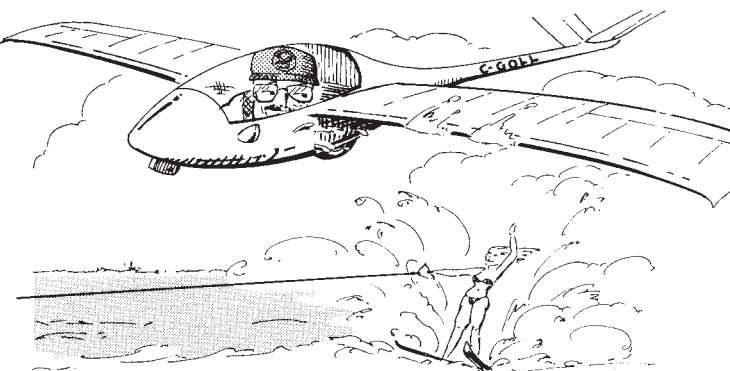
The weatherman co-operated, and after the usual SNAFUs were dealt with, the first day's events got under way...



Jim and C-GOLL took off, soon to discover that thermals were spotty and...



in an emergency you grab whatever lift you can find, even if it is over a pig pen! At another time (Jim staunchly maintains), C-GOLL insisted on examining the surfers



etc. on Belwood Lake ~ at close quarters.

Having been the Field Manager for the 1982 Nationals hosted by SOSA at Rockton, I was not completely unfamiliar with contests, but this was my first opportunity to take part as a contestant. For the past four years SOSA's annual Mud Bowl contest had been rained out. Perhaps the weather wizards were trying to tell me something.

As soon as I heard about York Soaring's intentions to host the First Annual Ontario Soaring Championships, I applied to SOSA's Board of Directors for permission to use the club's Hornet in the contest. The preparations: crew, trailer hitch, etc. would have to be taken care of early because my employers had informed me that I would have to go to San Francisco. I would return by August 31, with the contest due to start the next morning, September 1. One side benefit of the trip to California was that I got my first taste of ridge soaring from the Air Sailing organization at Fremont, about 30 minutes south of Oakland.

The luck of the draw placed me number three on the contest grid, but once on tow the anxiety level subsided somewhat. Now I had to wait for about 45 minutes for the start gate to open. The conditions were weird, with 3 knot lift interspersed with huge areas of horrendous sink. To make it worse, the modest 150 km task covered terrain I had never flown over before. At least I was not the only one flying over new territory.

When the start gate finally opened, I decided now was the time. I had been struggling to maintain altitude (3000 to 3500 feet agl) in the general area of the identification point. I informed the gate that I was coming, and with that transmission the cockpit got much quieter — dead battery. By the time I crossed the start line and cleared the field I was down to 1200 feet agl. Twenty-five minutes later I crossed the line again, this time at about 4000 feet and started out on course.

I was amazed, and pleasantly surprised, that of the two dozen gliders launched in about 30 minutes, I was unable to spot more than six at any one time. I expected large gaggles but never had to share a thermal with more than two others. My spirit soared a bit more when I saw three gliders in the same field near Luther Lake. At least I would not be in last place!

Near the first turnpoint at Dundalk, I received another lift in the form of recognizing two familiar gliders. If these two experienced glider pilots, in SX and T2, were not outdistancing me at this point, then I must not be doing too badly. It did not take Walter and Paul very long to leave me far behind on the second leg to Alliston.

As I neared the second turnpoint at Alliston airport, conditions deteriorated rapidly. The wind off Georgian Bay had turned Alliston blue. While struggling to maintain height west of the turnpoint, I decided that my chances of getting in and getting good pictures and getting out to the workable lift again were not good. I had seen power traffic at the turnpoint and decided that I would rather land on the runway there than in the unknown of a plowed field. I snapped my photos from about 1000 feet, entered the circuit and landed.

After phoning in my landing position and pulling the Hornet to an easily accessible spot for de-rigging, I spent a relaxing couple of hours convincing people that I was not lost, had not crashed, and yes, the glider would indeed fit into a trailer. I saw only two more gliders approach that turnpoint. Both of them circled overhead to take their photos and then proceeded back toward Arthur, only to land immediately afterward within sight of the turnpoint.

As it turned out, I had not done too badly for my first contest. I finished near the middle of the pack (11th of 19) and learned a great deal. For example, it is not a good idea to leave a working thermal and head into the unknown before Walter in SX decides to go. He'll soon pass by at a great altitude and with considerably more speed.

I think it can be said that I've caught the contest bug. I look forward to the opportunity to compete again in a low-key type of event and eventually to try my hand at a National contest. □



# LA COMPÉTITION

Bob Carlson, President, ACVV

Ce mot sinon l'idée elle-même sont devenus, depuis quelque temps et pour quelques-uns de nos membres, presque des expressions pejoratives. C'est inacceptable, et cet état de choses ne devrait pas être entretenu. Je crois fermement que la compétition est l'âme de notre sport.

Berthold Fischer et Hans Gutermuth depuis 1911, ensuite Oscar Ursinus et sa bande depuis 1920, se réunissaient à la célèbre Wasserkuppe (aujourd'hui encore le voisinage de l'usine A. Schleicher — Ka6, ASW-20) et cherchaient à voler leurs planeurs longtemps, le plus longtemps, le plus loin, le plus haut et le plus rapidement possible. Ou serions-nous sans l'ambition de tous ces pionniers du vol à voile? Toujours au stage du deltaplane primitif de Lilienthal? Notre progrès sur la pente, dans le thermique, dans l'onde est dû à la compétition entre pilotes, concepteurs, Akafliegs et fabricants des planeurs pour produire la performance suprême.

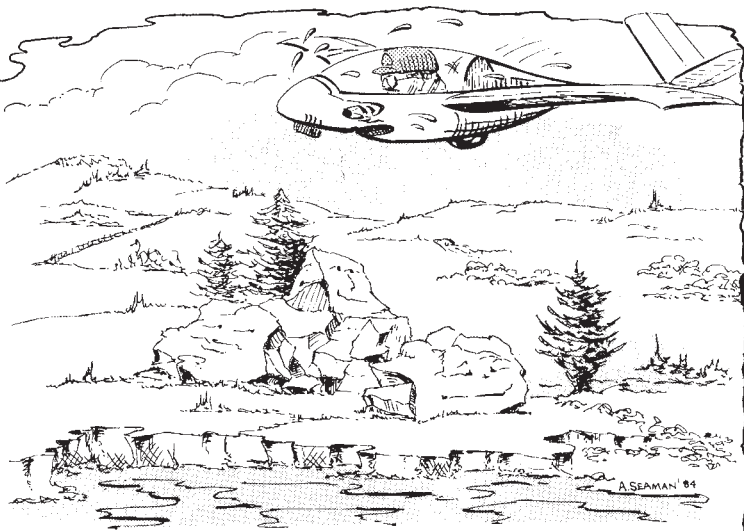
Pourquoi alors, depuis des années, tant de critiques visent les pilotes vélioles canadiens dont l'ambition est de se comparer aux meilleurs? Les finances de l'ACVV n'en sont affectées que depuis un an ou deux. Personne ne croit plus au mythe que les compétiteurs internationaux profitent d'un congé gratis. Et néanmoins cet antagonisme existe depuis des années. Est-ce dû à notre nature non-compétitive, est-ce par jalousie envers un compétiteur? Les réactions à nos récents succès olympiques semblent écarter ces hypothèses. Je n'ai pas de réponse, seuls des soupçons et des pensées — en enchaînant mes réflexions antérieures concernant nos objectifs dans l'ACVV. Je crois que l'origine du problème aussi bien que la solution se trouve au niveau du club et non à celui du membre individuel.

Notre association aura 40 ans l'année prochaine. Pendant des années le but des efforts de chaque pilote ou élève-pilote était de construire ou d'acheter et ensuite de voler un planeur ayant comme base un champ ou aérodrome convenable. Les clubs se formaient et se développaient parce qu'ils rendaient cette tâche possible ou plus facile. Pendant ces efforts prenaient du temps et en laissaient peu pour le vol lui-même et peut-être aucun temps pour la compétition. Il fallait survivre, et même aujourd'hui la survie reste le but principal pour beaucoup de clubs. Quelques pilotes rares participaient aux compétitions, ici et ailleurs et parfois sur un autre continent. Mais leurs exploits et succès n'attiraient que peu d'attention de la plupart des clubs ne maintenant qu'un contact occasionnel avec les autres pilotes. Dans ces conditions une tradition de compétition est difficile à créer.

Présentement l'existence de plusieurs clubs est assurée, le minimum nécessaire de matériel et organisation a été établi. Les efforts et l'énergie libérée des soucis quotidiens peuvent et devraient s'appliquer à la compétition. En résumant, reconnaissons que l'ambition des clubs en croissance était, au début, de survivre, et ensuite à poursuivre la croissance jusqu'à un niveau d'existence assurée. Ceci pouvait satisfaire les vétérans ainsi que les membres nouveaux. Ce niveau étant atteint, l'effort vise le confort — piscine, tennis, parc de roulotte, et la satisfaction minimale — vol au visiteur genre "taxi". Le feu sacré s'éteint. Nos ambitions et notre esprit se calment — c'est pourquoi la compétition est indispensable — pour ranimer l'esprit et rallumer et recharger le feu.

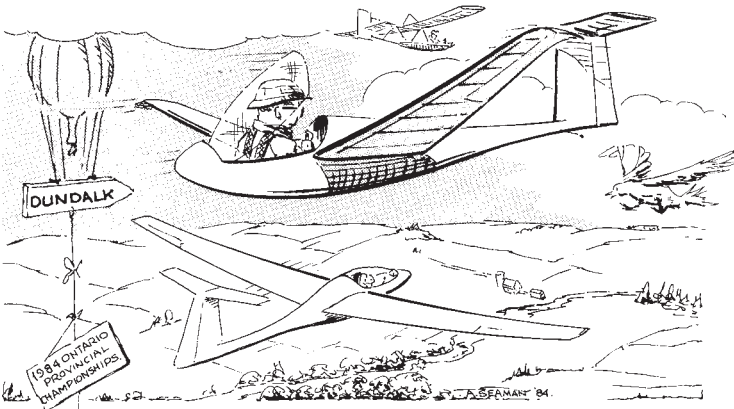
Personne n'est obligé à compétitionner. Il y a les insignes. Il y a le perfectionnement. Il y a les records à battre. Il y a la satisfaction d'être, tout simplement, un bon pilote, ou bon instructeur. Chacun de nous, individuellement et comme membre du club et du sport, doit avoir son but particulier. Mais chacun devrait fournir un effort minimum pour supporter et encourager nos camarades ayant l'ambition de la compétition, qui veulent participer à quelque compétition que ça soit. La joie de la réussite se communique aux autres, elle aide et même assure la croissance et le succès et elle attire de nouveaux membres, des membres enthousiastes. Ce genre n'est pas attiré par un club stagnant, mais c'est le feu qui les attire. Moi, je veux fournir l'étincelle, c'est à vous à souffler la flamme et le feu.

□



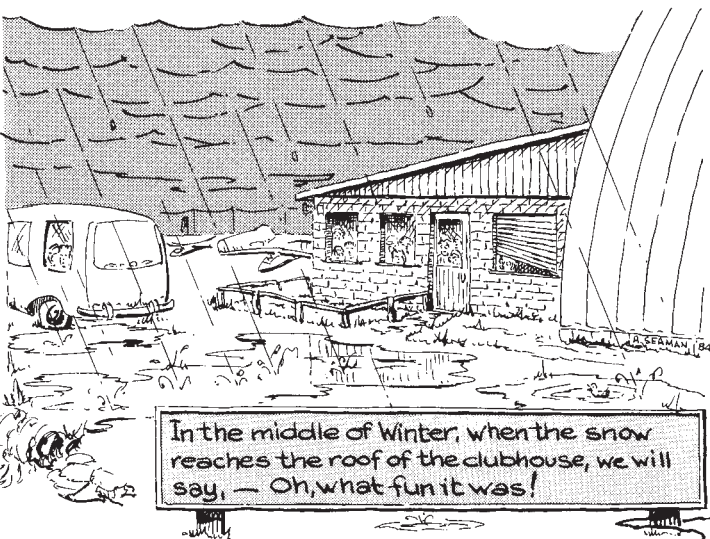
And then there was some metaphorical nail-biting when an out-landing seemed likely over the most uninviting terrain. But all was well. Jim made it back to Arthur.

Meanwhile, it is reliably reported that one Sports Class



competitor, in an AS-W20, flew the course backward; and Seth Schlifer, in an SGS I-35, buzzed rocks and treetops all the way back from Alliston to qualify for last spot in the speed category, with under 3 minutes to spare.

But it was decided somewhere that one day's fine weather was enough. Sunday and Monday turned in wet and there was no more contest.



5

# Bumble and the Gremlins

Eric Newsome

## Part 6 The Case of the Rising Ground

Bumble was at last flying solo. No one quite knew why. Perhaps it was a combination of his own persistence and a marked lack of desire on the part of instructors to occupy the back seat of his glider any longer than could be reasonably avoided.

Bumble had a small collection of personal beliefs that made his flying memorable. One belief was that up is not down and so circuit entry should be left to the last possible moment and the circuit should be flown as slowly as practicable for this garners another minute to enter in the logbook. Also, through endless repetition, his instructors had managed to fix in his mind that a circuit must be square and the landing should be carried out on the designated spot. Warnings about modifying this to meet particular circumstances had whistled through his ears unheard.

One fine, cumulus-dappled day Bumble dangled and swung at the end of a tow rope to two thousand and then happily released. He flew around gently with his nose off to one side as was his habit, while the *Dragging Devils* yelled, "Straighten up and fly right", into the slipstream. Only when he circled under climbing gliders as he slowly lost height did Bumble feel at all disturbed. But persistence pays, he knew, so he continued his merry circles while the trees grew larger and the airfield rose on his canopy. He looked out at last and firmly started his circuit — only five hundred feet too late.

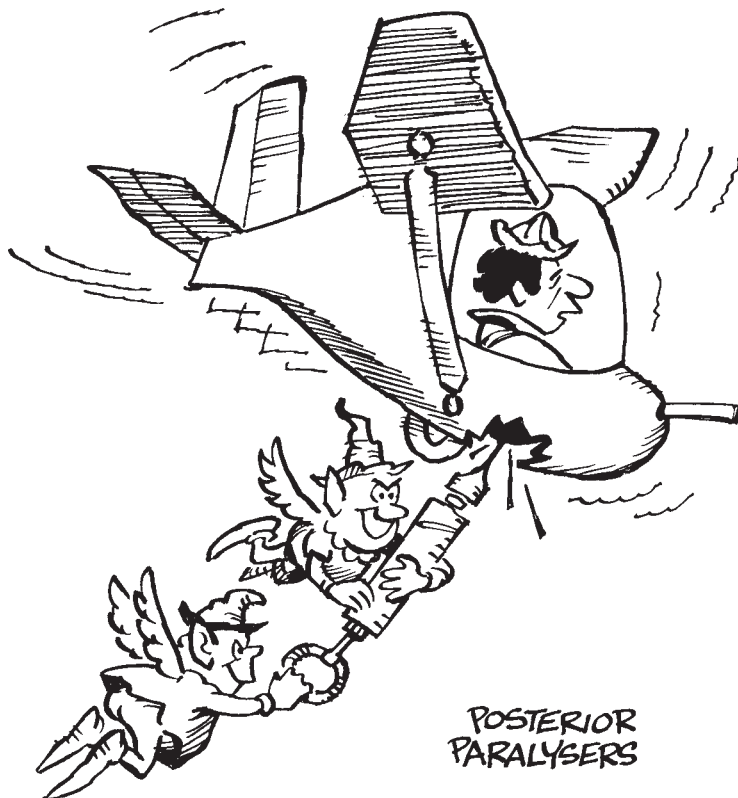
Now his thorough training took over a good square circuit and land in the proper place. He crabbed across the field slowly to conserve height and get extra logbook time, and as he did so he identified his invariable turning point and when he arrived there

kicked the glider downwind. He sighted the lone tree that marked his next turning point and flew steadily on. On base leg he saw that his course was good and he was at his usual distance from the field. The watchers had difficulty in keeping him in view against the background of trees and mutters of "Turn in!" and snatches of prayer could be heard.

Almost in line with his intended 'proper' landing place Bumble began to turn, as ever with lots of rudder and very little bank. Indeed, bank was almost out of the question for he had hardly enough height to put the wing down without scraping the wing tip on the ground. Being low, Bumble raised the nose and as speed fell off the drag got draggier, the lift got lousier and levitation lessened. The gremlins moved in with a concerted attack.

Bumble had no eyes for the ball of his turn and bank indicator, but the seat of his pants might have told him of the degree of his skid had not the *Posterior Paralyzers* moved in and, while leaving the pants normally sensitive, rendered the contents of the pants unfeeling. The *Dragging Devils* enthusiastically dragged at his keel surfaces and played havoc with his Lowering Devils ratio. As his speed decayed and his drag increased the *Tail Judders* buffeted his tail surfaces and the *Runway Winders* in a cunning flank attack suddenly raised the runway.

Bumble landed in a dusty heap of sound and fury — right on the 'proper' landing spot. □





# POINTERS ON FLYING YOUR GLIDER

"Now that you have built your glider you will want to fly it. With the shock cord launch method, you may fly it with no more danger than riding a bicycle."

Extracted from "Flying and Glider Manual",  
a "Modern Mechanics" publication, 1931.

Motorless gliding may be taken up either as a means of obtaining flying training or as a sport in itself. As the controls are the same in both a glider and power plane, many hours of valuable training may be obtained in a glider at small expense and will justify itself after the first flight, for there is a real thrill and challenge in soaring over hills and valleys, watching the ground and cloud formations, and striving to take advantage of every air current in order that the flight may last a few minutes longer.

Gliding with the shock cord method of launching is no more dangerous than riding a bicycle, providing your glider is properly constructed. Of course, crashes are inevitable with the beginner, but with the light weight and sturdy construction of the modern glider, it is rarely that the pilot will emerge from the crash with even a bruise. Landings have even been made in trees and against the sides of buildings without damage to the pilot.

The only real danger to be encountered is the stall. The pilot must remember that he has no power plant to pull him up, and he must depend upon rising air currents to obtain altitude. To tilt the nose of the glider sharply upward will bring about a stall and crash every time unless one is flying high enough to enable him to dive to regain flying speed, and it is seldom one will have this altitude.

The glider should be launched into the wind the first few times from level ground, and when one has got the feel of the controls he can make longer flights from a hillside.

There are several methods of getting a glider into the air for a flight; a number of pointers are given in the pages which follow which will help the beginner to get a conception of what the business of glider flying is all about. There are only two methods of launching, however, which have a wide acceptance. These are the shock cord or catapult method, and the auto towing method.

To launch by the shock cord method, the only method we can recommend to beginners, the pilot takes his place on the seat and adjusts his safety belt. Then while two or three "anchor" men hold back on the stern rope, the launching crew grasps both ends of the shock cord and runs forward into the wind as the stretched cord forms a narrow "V". At the command of the pilot the anchor men release their hold and the glider is snapped into the air in much the same manner as a stone is propelled from a slingshot.

Once launched, the glider soars because of its light weight, and because the very high lift section of the wing gives it a very flat glide with a stalling speed of between eight and ten miles an hour. Against a ten mile wind the glider should attain an altitude of about fifty feet when launched. It is then up to the pilot to regulate his glide to take advantage of every wind current. If launched into the wind from the side of a hill, rising air currents will carry the glider aloft and permit it to gain altitude. By watching the topography of the ground and the cloud formations overhead, the pilot may pick the spots where the currents will be to his advantage and may dive from one rising current to another.

Favourable currents will be found on the windward side of a hill or where the air is heated, as over a dried field, sand, road, or town. On a warm, sunny day the currents will be stronger than in cloudy weather. Rising air currents will also be found directly under high cumulus clouds. Cliffs and hills that lie at right angles to the prevailing wind provide the best gliding sites. Descending air currents will always be found past the crest on the lee side of a hill, over green fields and bodies of water and over forests. Rising air currents will be scarce if the sky is darkened by black clouds.

The second method, that of being towed by an automobile, is particularly useful in teaching students to become accustomed to handling the controls. This is naturally done at such low speeds that he is never in danger. Usually the beginner is towed across the field at 10 or 15 miles an hour, steering the glider with the rudder until its action becomes more or less automatic. During this time he pays no attention to the control stick, but after awhile the speed of the towing car is increased and the glider pilot is able to raise the tail of his craft off the ground. He can vary the angle of the wings, and, in fact, accustom himself to almost every maneuver except banking without leaving the ground, and travelling at a speed no greater than 20 miles an hour. Usually 3 or 4 hours is all the time required for this preliminary training.

Next the student is towed at a speed which will enable him to fly a short distance above the ground, say about six feet. The speed of the car regulates this height; usually the speed required is not over 30 miles an hour. In case of emergency, the glider can be landed by slowing down the tow car or tripping the tow rope, in which event the craft settles to earth of its own accord and no damage is done because of its light construction. Only after the student has thoroughly accustom himself to the "air feel" should he ascend higher. Ascents of 300 feet via the tow rope method have been successfully made. □

**THIS WINTER  
DO SOMETHING  
AEROBATIC!**

Arizona Soaring

ad

# A HAWAIIAN AND AUSSIE SOARING SAGA

## Joe Somfay

Overseas Correspondent, York Soaring

Hi folks, here is the brief report on my gliding in Honolulu and Sydney (Australia) last year.

It was a hard decision, but it had to be made. Deb and I discussed it briefly and it was clear that I indeed had been totally infected by "virus-soarus". I looked for cu while she looked for beaches, I asked "tourist information" for soaring sites while she asked for "basking" locations. So far this was the making of a somewhat tense and potentially disastrous holiday. So we had a summit meeting and concluded to be reasonable and do both. Soar and bask. After all, both depend on the sun and good weather, and both have water (vapour) in common. Be it enough said that we both had a wonderful holiday.

We visited Dillingham airfield at the northern tip of Oahu (allow 3 hours for driving and sightseeing and a dip in the Pacific). After a cryptic phone call to a person 20 miles from the field who knew the prices of rides (\$29 for single or \$39 for two squished into the back seat of a 2-32) but did not know the gliding conditions that day — "What you see is what you get" greeted me as I looked over the beachfront. From previous experience I knew that the island has climates ranging from tropical rainforest to semi-desert within five miles of each other, so his information was not useful. I should have called the weather office at the airport before setting out since the ride at Dillingham only works when the NE trade winds come off the ocean and then, I'm told, you can stay up all day and night if darkness permitted. Alas, no trade winds this time of the year. Good gliding in the Hawaiian spring and summer (March, April, May but check it out before you go there) and little else. The thermals at Dillingham are usually only over the asphalt runway. Given that the downwind and base legs are over the ocean and the ridge on the far side of the circuit, this restricts thermal-ling drastically.

Captain Michael Newton of Mid Pacific Airlines was washing his 12 year old Phoebus (the one that earned the only Diamond in

Hawaii) when we arrived. The "trades" were not active, the ridge was still but the rides were available. After a near day-long excursion, I must have been silly to refuse a 3000 ft tow to glide downhill all the way with no ridge lift, but all sounded ominous when I was told that they had to put the real control stick back into the 2-32 before I could go; I would not be allowed to fly and a checkride was only available if I made an appointment two weeks in advance, and I would have to pay for the instructor's time too. Well, I was almost cured of my "virus-soarus" and declined the 15 minute downhill ride driven entirely by someone else for a mere US \$39. It is a commercial operation there — not a club. My faith and respect for clubs jumped 100%. There is an Oahu Gliding Club, but it flies sporadically and no doubt only when opportune. I was not fortunate enough to be able to contact them.

Various 2-33s, one 1-26, two 2-32s, and a couple of Super Cubs adorn the perimeter fence and control tower area. Oh yes, the airfield is also used by the US Coast Guard, Air Force and private practising/ learning. It sounds busy but it really is mostly glider country. Most of the planes are outside, tied down and show signs of salt/air degradation. The concrete hangars built by the government last year stand empty because they charged \$250/month to park under them. One plane deep and no doors offer little protection from the trade winds driven salt. Even now at the new reduced price of \$85 no one jumps at the wonderful opportunity. Perhaps the hangars were really meant for Harriers. Well, this trip would not be the occasion of my sitting over Waikiki beach at 20,000 feet, and next time I will phone from Canada first and be sure to take a foldable Monerai or some other hand-luggage sized little sailplane.

My Honolulu disappointment (I paint an overly cloudy picture) was to be overcome by pure glee and joy when my diplomatic discussions with Deb lead us to Narromine some 450 km inland from Sydney, Australia. I suggested that she really must see the sheep, the wheat, the kangaroos and the koalas in their natural habitat and such an inland trip must be educational. That little trick out of the way, we proceeded to drive all day under cumulus covered skies. Three pilots completed 750 km tasks that day. Dave Hennigar's article in 6/83 explains much of the scene but the prices are interesting, these are the rental rates:

Standard class	Aus \$82 per day
Racing class	Aus \$98 per day
Open class	Aus \$112 per day
Tows to 2000 ft	\$11 + \$2.50/1000 ft
Retrieves	\$65/h [\$0.35/km by road]

Barographs, camera, film, developing and officiating are provided at no extra charge. Even the local motels acknowledge soaring as an industry. Kevin and Jeanette Nimmo run the Stockman Motor Inn, and Jeanette's cooking is fantastic. They even have a suite for six people for \$65/day with its own kitchen. The accommodation is as good if not better than the Hilton and at \$32 per couple per day, is hard to pass up.

The briefing at 0900 the next day by John Rowe indicated an oncoming front and brisk winds, scattered lift and thunderstorms were predicted. The German, Dutch and Japanese pilots (and some Aussies) stayed on the ground nursing their plastic charges. I was familiarized and briefed by the instructor and we were towed to 3000 feet in two checkout flights in a Blanik (their lowest performer and training craft). New habits to learn here: spoilers out to notify tug of rope slack on ground — spoilers in as rope tightens, low tow position preferred (fun time behind the Pawnee with its prop wash rinsing over you); a tail waggle by the tug is EMERGENCY — "cast off" and they won't wave you off at the desired altitude. Always a left hand circuit by the glider pilot and the occasional power traffic. You have the choice of tarmac or grass to land on and plenty of helping hands to pull you up if short (luckily I wasn't). After my checkouts I was kicked loose to try my hand solo in the Blanik. There was fickle thermal activity but I managed a reasonable flight before quitting for the day. No one else flew that day. We all hoped for the "tomorrow thermals", after the rain and thunderstorms arrived as predicted.

The next day's briefing brought little better hope and takeoff conditions commenced at 1300 hours with 25 mph winds. I had three nerve-wracking flights trying to hang on to thermals, getting the rust out and supposedly going for 50 km. This day was not to be mine. More practice, familiarity, and finesse is to be learned. The radio transmissions were indeed interesting with the talkative German participants and the almost totally silent Japanese (no one forgot their car keys). Unfortunately, I had to move on the next day to the promised beach. We both have great feelings about Narromine, it was an emotional good-bye at the flight office with exchange of a York Soaring badge. □

# FALL DIRECTORS MEETING SASKATOON

*nadian Diamond and record history contained in the directory is asked to contact Ursula Wiese, who will pass on the data she collected for the booklet. It's not a huge job — but a satisfying and rewarding one. Editor]*

**Dick Vine**  
Maritime Zone Director

The Directors meetings are held in gliding centres across the country to put the directors in touch with members as much as possible. A portion of the funds for directors travel, for delegates travel to the SAC Annual General Meeting, and for instructors meetings come from federal funding, results in the direct exchange of ideas and input of information which would not otherwise take place.

**INSURANCE** Arising from the minutes, it appears that new members of this committee have not met with Al Schreiter so far as was laid out at the March Directors meeting. Bill Mather and Bryce Stout have agreed to stand, and since Al is due to resign, it is imperative they be aware of the committee's work to effect a smooth transfer. Claims this year have been at about the 1983 level at this time and are better than average, so we may expect an improvement in our rates and deductible in '85 if all goes well for the rest of the season. SAC bills for insurance and membership will go out much earlier next year; each club will receive a list of insured aircraft by March 30, and any not on this list are not covered until directly informed by the National Office in writing. Our insurer is also offering liability coverage of \$1M per occasion (\$2500 deductible) for the protection of directors and officials of clubs and councils for \$50 per year.

**FINANCE** SAC's financial position is close to budget. We have received administration and travel grants from Fitness and Amateur Sport of \$15,700 to date (we asked for \$21,000) compared to total government grants of \$3400 last year. Next year it is proposed to prepare budgets using both low and no government grants. As the incumbent Treasurer, Don Dunn is resigning due to a move, the National Office is looking for a replacement, preferably from the Ottawa area.

**NOTICES OF MOTION** As a result of a letter from George Couser of MSC, the directors voted to require that notices of motion for the AGM concerning major issues and policy be received by the National Office bearing a postmark no later than 15 December. Clubs will be informed of these in writing by 15 January.

**PILOT DISCIPLINE** The Flight Training and Safety committee will deal with any problems of pilot discipline that fall

outside the jurisdiction of club CFIs. There will be a review subcommittee set up as an appeal body.

**TECHNICAL COMMITTEE** The areas of interest of this body will be greatly enlarged beyond the current business of type approvals. Many other technical subjects will be grouped so as to find members who will take on the job of collecting information of value to clubs and members such as launching methods, field requirements, radios/instrumentation, glider data, etc. This information will be stored in the Sport and Recreation central library (in Ottawa), to be retrieved on your request to the National Office.

**MEMBERSHIP** Membership is down again this year by a small number. Clubs appear to have trouble hanging on to their people. The campaigns to attract new members are effective. It is up to all of us to take a friend along to the club, give a good flight in smooth conditions and help them to become at home in your club. Use the personal touch. It was noted that many clubs are hard to contact, and members are lost simply because the existence of the club is unknown. An entry in the Yellow Pages under Aviation or Clubs/Associations will help to solve this. Half-year SAC membership dues and insurance is available to new members from 1 September.

**CANADIAN SOARING DIRECTORY** The amendment pages to this directory, first printed last year, will be sent in bulk to clubs. Clubs are requested to distribute these amendments to their members who own a directory. *[Anyone who is interested in maintaining the club information and Ca-*

**AIR CADETS** Efforts will continue to offer the services of the Association and its member clubs to Air Cadets who would like to continue their gliding experience beyond that available to them within the cadet organization. The civilian side of the Air Cadets will be approached to develop a common ground to enable cadets to fly with SAC clubs at an affordable price.

**COMPETITION** The 1984 National competition at Virden was a great flying success, although the organization lost about \$500 on the event. There are some very attractive decals remaining which are for sale at the National Office at \$5. The 1985 competition, a combined class contest, will take place at St. Raymond, Quebec, 12-25 July.

**INSTRUCTORS COURSE** A French language course, the first prepared by SAC, will be offered in 1986 (probably at Hawkesbury) in addition to the usual Eastern course scheduled for Gatineau.

**SAC CAPS AND PINS** Clubs can order these from the National Office in bulk at a reduced rate (the pins are a new item, and quite attractive).

**SAC 40th ANNIVERSARY** Next year we are 40 years old. Present members are asked to pass on to **free flight** any interesting documents, photos, or news of founding members for inclusion in a possible special anniversary issue. □

## THE EXECUTIVE DIRECTOR'S DESK

**Jean Matheson**

By the time this is being read I will have been with SAC almost one year. It has been a year of change, of learning, of some successes and, yes, of some problems. Change is necessary for growth; learning is perpetual.

Success has been met in obtaining tax deductibility for the contribution portion of the membership fee. At present the possibility of obtaining excise tax relief on aviation gasoline is being addressed. Problems are being met head-on, with investigation of cause and development of systems to eliminate them. Further investigation is being conducted

into possible methods of providing assistance to clubs in attracting new members, and into increasing services to club.

It is anticipated that an announcement of development along these lines will be forthcoming in an early issue of **free flight**. Meanwhile, as many clubs prepare to store their wings for the winter months, the National Office will be endeavouring to seek ways to better meet the needs of the membership.

*Jean is beginning an almost regular space to illustrate how the National Office is filling its time to provide services to you.*



# TOW ROPES & SPLICES

## A DISCOURSE ON THE NATURE OF POLYPROPYLENE

Albert Seaman  
from York "Soar Tales"

PRESUMABLY A PILOT'S INTEREST IN TOW ropes depends to a large extent upon whether he or she is usually at the pulling or pushing end. To the tug driver, once the burden has been cast off, the tow rope is a nuisance for catching in trees, power wires, fences, undercarriages and then, just before the next launch, the legs of the ground crew. To the glider pilot, it represents a means to an end. Whatever that end may be is usually in doubt from the moment the towplane waggles its wings in 500 feet per minute sink over the middle of the lake. But prior to that, when the rope is hooked up to the sailplane, it becomes a point of concern. And rightly so.

From the moment the rope goes tight and bangs the glider's tail on the ground, through the jagged array of crosswind overcorrections, to the point of actual liftoff and climb to 300 feet, the behaviour of that tenuous link to the towplane up ahead remains high in the thoughts of the glider pilot. A multitude of minor points will come to mind. Should the business end of the rope have been examined more carefully prior to giving the nod to the hookup fellow? Were there pieces of grass or loose strands through the ring? Are five knots in the line really too many? Did that grimace on the face of the hooker-up indicate that he had found a crack in the ring or were his shorts too tight as he crouched down to get at the tow hook? And so on.

Most faults or potential faults in tow ropes are readily apparent and easily fixed. One however, may not be obvious and it is that which really precipitated these comments. But before getting to that, consider briefly the manner in which contemporary tow ropes are manufactured.

Ropes encountered in aerotowing today will usually be made from highly oriented polypropylene fibres. Nylon, also oriented, has been used and may still be encountered, but it behaves too elastically for properly controlled tows.

There was a time when such elastic properties were taken advantage of, as in the pick up of a military glider by a low-flying Dakota (DC3) trailing a long hook. As the Dak flew low and slow across the field, the hook was intended to catch the tow rope strung between two widely spaced posts.

Presumably the glider being snatched airborne was intended to pass over or between the posts and maybe it did. The point however, is that the rope was intended to stretch to absorb the shock. But there must have been problems as the technique did not seem to catch on. Our regular club methods of launching appear to offer far less strain upon tow ropes, aircraft and pilots.

The technology that enables us to use polypropylene the way we do has all been developed in the last 30 years. The basic resin is usually copolymerized with ethylene to give it, amongst other things, less brittle characteristics at low temperatures.

In its "natural" state, polypropylene has a somewhat complicated molecular structure and unimpressive tensile strength properties. However, it was discovered that if it is stretched at the right temperature, the molecules rearrange themselves — become oriented — in the direction of pull, with a correspondingly high increase in tensile strength. It is this feature that is taken advantage of in the manufacture of ropes.

There are many different methods of producing the fibres from which tow ropes are made. Suffice it to say that filaments extruded from a die are first cooled and then reheated to the "orienting" temperature at which point they are stretched anywhere between 4 to 8 times their original length, giving perhaps 4 or 5 times the original strength when cooled again. If they are subsequently reheated to the orienting temperature or above, the molecular structure will immediately revert to its **original form and properties**.

As most tow rope fixers will have discovered, you don't just cut polypropylene rope, unless you want a mess of disorganized, unravelled fibres in your hand. The only successful way of parting the stuff is by use of heat. In the comfort of a storeroom or workshop, a spade-ended tip on an electric soldering gun does a very neat job of melting through the strands and fusing together the fibres. However, in the more rustic surroundings of the average airfield, a cigarette lighter or a box of matches is about the best that can be hoped for.

The melting point of polypropylene is well below the flame temperature of your average match. As the strands of the rope are introduced to the flame, the true nature of the resin will become apparent. Those nicely oriented little molecules simply can't wait to get back into their original disoriented arrangement. Freed from the constraints of orientation by a rise in temperature, the hot parts of the fibres will rupture, shorten and become globular on the ends. Many of them will become fiercely independent to the degree that far from being a neat and tidy amalgamation, the end of your rope will more closely resemble a bouquet of disgustingly wilted garden weeds. Once the initial contracting spasm is over, further judicious application of the

flame may persuade the mess to coagulate into a globule. At that point there will be the greatest temptation for the fixer to squeeze the softened, wriggling plastic deftly between thumb and forefinger to mold it neatly into the required configuration. For those practised in the art, a quick lick of spittle on the fingers and an even quicker squeeze of the hot ends may very well produce the required result. But for those innocents with soft, dry, delicate pinkies; "Oh what fun!" when hot, polypropylene behaves very much like its close relative, melted candle wax. It sticks quite well to unprotected skin, usually causing paroxysms of sheer agony and frequently rain-dance-like gyrations of unprecedented artistry. Be careful!

In the days of olde when ropes were made from sisal, hemp and other traditional materials, it was necessary to "whip" the cut strands in order to prevent them from untwisting. The fused ends of polypropylene rope strands obviously need no such treatment. But no matter how neatly the fusing may have been done, when the rope has been dragged around the airfield for a few hours things start to get frayed.

There was one occasion when the protrusion of unsightly tufts from the sides of a dragged-around tow rope obviously upset the finely-tuned sense of tidiness of a glider pilot. The gentleman produced his lighter to singe off the offending protuberances whereupon your author, right there in front of all those fine people dressed in their Sunday best gliding costumes, shouted **S T O P** in capital letters... or words to that effect. It was pointed out that

the flame against the rope could de-orient the fibres, causing a loss of up to 3/4 of their strength, which may be alright for some who don't care about rope breaks, but could be quite traumatic for others who do.

This incident highlighted the fact that there are probably very few laymen who would need to know that a standard tool of the tow rope splicing business (the cigarette lighter) could possibly cause any harm to the end product. So be careful not to cook the wrong parts when doing tow rope chores.

The ropes commonly used for towing gliders are the 3-strand variety. They are very simple and quick to splice. The simplest type of eye splice is normally used to hold the terminating ring, with a double loop through the ring itself to help distribute the load over a greater number of fibres at the sharp bend. Eyelets between the eye splice and the ring were tried at York, and probably other places too, but even the small amount of stretch possible in a polypropylene rope under load was sufficient to allow the eyelet to pop out of the eye, leaving only a single thickness of rope working against the ring.

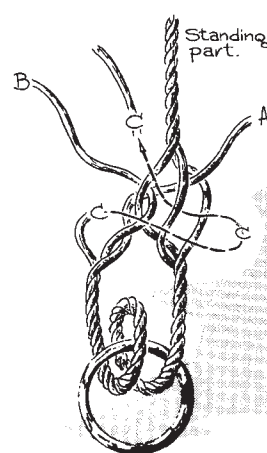
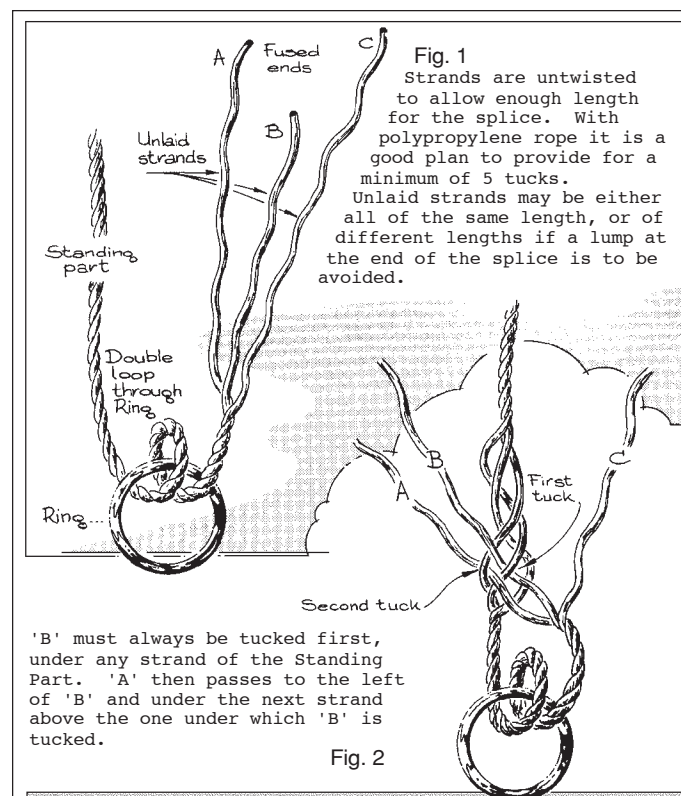
An excellent book by Eric C. Fry entitled "*The Book of Knots and Ropework*" gives very detailed instructions for producing Eye Splices, Short Splices and Long Splices in ropes. Those three should cover just about any need normally encountered at the gliderport. Like most reference works on the subject, the number of splicing tucks suggested by Mr. Fry is based upon naval traditions, which in turn are based upon the

use of traditional fibres. It may be well to point out here that natural fibres have rough or textured surfaces that are not necessarily reproduced on the man-made equivalents. This means that the tendency for natural fibres laying side by side to interlock when pulled will not always occur to the same degree in the smoother synthetic variety. Consequently, for polypropylene ropes it is probably wise to consider five tucks to be a minimum rather than three.

The procedure for making an eye splice is illustrated in these sketches. The initial tucks must be made in the order shown and then the same sequence followed until all tucks are made if the strands are to interlock correctly. If the finished splice does not look right it most probably isn't.

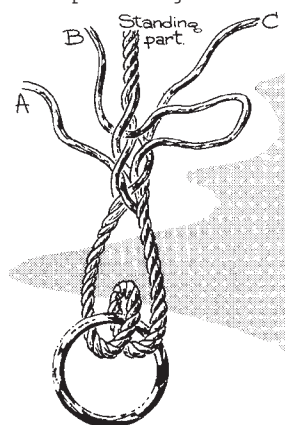
The lump caused by bunching of the strand ends at termination of the splice can be minimized by making the strands of unequal length, the second and third strands being one and two tucks longer respectively than the first. In practice, the unravelled strands invariably end up longer than necessary for the five or seven tucks. In that case it is usually easier to carry on splicing until the surplus has been used up rather than trying to shorten the strands and lose those nice little blobs on the ends.

If you haven't tried splicing before, follow the pictures and then admire the results. Having completed the splice to everyone's satisfaction, don't forget to tie the "weak link" knot a little way down from the end (Remember that a knot will about halve the breaking strength of the rope). □



The newly started splice is then turned over as shown in Fig. 3 and 'C' is tucked under the only remaining strand of the Standing Part which does not have a tucked strand under it.

**Fig. 4**  
The unlaid strands are pulled tight when the first 3 tucks are complete. Strand 'B' is then laid over the strand of the Standing Part immediately in front of it and tucked under the next strand. Strand 'A', on the left of 'B', is tucked next in the same way and the sequence B-A-C continues, always moving to the left, until all of the unlaid strands are fully tucked and pulled tight.



A. Seaman, York Soaring Association 1984

## SPLICING THE RING ONTO A POLYPROPYLENE TOW ROPE

# HANGAR FLYING

Compiled by Tony Burton

## FRENCH SOARING GOALS

French soaring has two awe-inspiring goals to work towards, one near term and one for the future.

The first, which is expected to be accomplished within the next year or two, is a gliding flight south across the Mediterranean. Ten years ago, a pilot reached the island of Corsica from Viñon, France (and he could have gone further) using wave generated from the Alps. This is still the longest water crossing by a sailplane. Several experts hope to do better now:

Nice, France to Bizerte, Tunisia via Corsica and Sardinia, 810 km of thermal/wave flight, 370 of which is over water.

Even more adventuresome, but waiting for further sailplane development and even more funding, is the "Zeus Project". This is an ambitious plan to cross 3000 km of the southern Atlantic, making use of the trade winds and intertropical fronts near the Equator. Planned is a sailplane of 40m wingspan, soaring for about 100 hours at high altitude! Project costs are estimated to be at least \$1.5M, but sponsors are already being lined up; after all, the budget is only a fifth that of running a stable of Formula 1 cars.

Adapted from an article in LE POINT  
16 July, 1984.

## ON THE WORTH OF FLASHING

"Platypus"  
Sailplane & Gliding, Jun-Jul '84

Every schoolboy (well, every schoolboy with a Gold C) knows that the only thing that really matters in covering the ground quickly is the strength of the lift you use, and that speeds between thermals are irrelevant, or as near as dammit. Yet people spend fortunes on fancy instruments to enable themselves to chase needles in lunatic dolphin flying. It's great to watch if you're behind them — and not too close. One minute you see them in full plan view as they plummet down like a Stuka pilot's reunion party; the next minute, when you have begun to think they have forgotten the task and have decided to go off and strafe some dozy hamlet, they rocket back up, again in full plan view, offering a brief glimpse of the sweating pilots' faces turning alternately grey and puce with the 'g', then they ram the stick forward at cloud-base, so that all their maps and cameras and lollipops and pee-tubes and other sunk crash against the canopy, and down they hurtle to beat up the peasantry yet again.

Their arms develop colossal muscles as stick and flap are frantically pumped at the behest of the needle — or the burp-bleep of the airmass audio, which they can barely hear because all this Ju-87 stuff has popped their tiny eardrums inside out. They do this mostly in 15 Metre ships and especially on the Continent; it is very useful for the following pilots because, while someone sneaking along at a steady 70 a mile or so ahead is often invisible, the dolphineers constantly flash in the sun like a swarm of silver crosses and give themselves away — as well as marking the lift and the sink for you.

The chief reason I don't do it much is that I have hardly ever found a perfectly compensated total energy vario that I can trust 100%. I do like to know that lift really is lift, and not just a little bunch of tubes and transistors having a practical joke at my expense. A 500 foot zoom is liable to make any vario go bananas. Moreover, if you apply 3g to your backside, then you have got a thoroughly desensitized derriere, at the very moment when that delicate instrument ought to be sensing the bumps and burbles on the thermal's edge. Thirdly, dolphining makes me ill (if you're flying a two-seater, you can take turns making each other sick, since it is common knowledge that having no lever to pump immediately induces nausea — God knows why). Fourthly, my suspicion of total energy varios gives me an excuse to fly slowly between thermals, with the MacCready ring set to one knot when I'm feeling bold, and to zero the other 95% of the time. Fifthly, if you're obsessed with the speed you ought to be flying at every single moment, you're not paying attention to the most important thing — where's the next thermal?



What I need is a device that shouts "forget this one, you're wasting your time!" or "straighten up now, fathead!" or "three seconds more and you're in the core!" etc. Come on, you electronic wizards, you promised us something like this years ago and microchips are getting cheaper and cleverer by the day. Us old pilots are getting dumber, so we need all the help we can get.

## ASW-20 FLUTTER INCIDENT UPDATE

During the Nationals, one pilot experienced an aileron flutter incident with his ASW-20. On later examination, no damage was found except a cracked aileron horn cover. The wings were found to have fore-and-aft play which may have contributed to the problem. Shims have been added behind the take-up pins on the fuselage, and Schleicher sent a shock absorber which has been fitted as a damper in the aileron circuit.

The manufacturer claims that the loose wings and an unauthorized tape to seal the ailerons helped to set up the initial vibration.

Report from Bob Gairns

### CZECHLIST DES OBERLEUTNANT PFELZ - KOMMANDANT DER Ka6 -

1. Ist die Wingen solidisch ongetaped?
2. Auf both Sides?
3. Ist der Tail still in dem Trailer?
4. Goes die Floppydingenaufdenwingen up and down?
5. Und die other Floppies: Elevator, Ruder, ..?
6. Ist die Parachute nicely gestarched?
7. Perhaps it fliegen will!

Getaken by Lloyd von Bungey  
from der Hope segelflugplatzklubhaus

## REGULATIONS FOR AIRCRAFT OPERATION – JANUARY 1920

1. Don't take the machine into the air unless you are satisfied it will fly.
2. Never leave the ground with the motor leaking.
3. Don't turn sharply when taxiing. Instead of turning sharp, have someone lift the tail around.
4. In taking off, look at the ground and the air.
5. Never get out of a machine with the motor running until the pilot relieving you can reach the engine controls.
6. Pilots should carry hankies in a handy position to wipe off goggles.
7. Riding on the steps, wings or tail of a machine is prohibited.
8. In case the engine fails on take-off, land straight ahead regardless of obstacles.
9. No machine must taxi faster than a man can walk.
10. Never run the motor so that the blast will blow on other machines.



11. Learn to gauge altitude, especially on landing.
12. If you see another machine near you, get out of the way.
13. No two cadets should ever ride together in the same machine.
14. Do not trust altitude instruments.
15. Before you begin a landing glide, see no machines are under you.
16. Hedge-hopping will not be tolerated.
17. No spins on back or tail slides will be indulged in as they unnecessarily 'strain' the machines.
18. If flying against the wind and you wish to fly with the wind, don't make a sharp turn near the ground. You may crash.
19. Motors have been known to stop during a long glide. If pilot wishes to use motor for landing, he should open throttle.
20. Don't attempt to force machine onto ground with more than flying speed. The result is bouncing and ricocheting.
21. Pilots will not wear spurs while flying.
22. Do not use aeronautical gasoline in cars or motorcycles.
23. You must not take off or land closer than 50 feet to the hangar.
24. Never take a machine into the air until you are familiar with its controls and instruments.
25. If an emergency occurs while flying, land as soon as possible.

### BLANIK FLAPS

There seems to be some genuine confusion about what the Blanik flaps are for and when they should or should not be used. Blaniks are fitted with Fowler flaps which are designed to increase lift at low speeds. They have the effect of lowering the stall speed when extended, but this is at the expense of an increase in drag. Generally, there are two situations when one might want to use them: Firstly, when thermalling in a non-turbulent thermal, use of between 30% and 70% flap will permit a lower flying speed. Secondly, on a calm day, full flaps can be used to achieve a slower approach and touchdown speed.

The key to understanding their correct use is the fact that you are producing increased drag (undesirable) for increased lift (desirable at low speeds). At any normal flying speed the drag penalty outweighs the lift benefits, and this results in an increased sink rate and reduced glide angle. In any case, the speed should never exceed the 60 kt placard limit for flaps extended because there is a significant danger of damage to the aircraft.

It follows that flaps would not be needed on a reasonably windy (and therefore turbulent) day, either during the flight or when landing. The Blanik flaps will never help you on an into-wind glide back to the field.

One last point: Sudden retraction of the flaps at very low speeds can induce a stall/spin because it raises the stall speed of

the aircraft. While this might be an interesting exercise at sufficient altitude, it could be a killer close to the ground.

Chris Wilson, SOSA Assistant CFI

### 1000 KILOMETRES IN WAVE OVER THE ALPS

A 1000 km wave flight over the Italian Alps and southeastern France was completed on 24 June '84 by Jean-Marie Clement, flying a ballasted Nimbus 2B from Varese, northwest of Milan, over a 'skinny' quadrilateral course. Winds across the Alps were 330-350°, 40 kts at 10,000 to 65 kts at 20,000 feet. Total flight time was 12 hours, with flight time around the photographed points being 9:32 hours. Distance around the turnpoints was 1050 km, which was flown at an average speed of 105 km/h.

Clement had recently been proving his engineering degree thesis of 1967 on high speed flight in strong winds. Several large triangle flights of about 660 km were flown in the previous year using Mont Blanc as a turnpoint, and flown at speeds of 100 to 150 km/h, giving the opportunity to become familiar with the area using conventional thermal flight.

On 23 and 24 June, the north wind blew across the Alpine arc at all levels. Ready on the threshold at 0700 on the 23rd, he had to be content with a 500 km O&R wave flight in a two-seater, flown below 18,000 without oxygen.

On Sunday 24 June, he declared a 1000 O&R to Bedarieux, France (west of Nîmes). Taking off at 0812 with no wave in the immediate vicinity of Varese, he ridge-soared 60 km, always close to landing out. After two hours he finally contacted wave at Monte Rosa (on the divide east of the Matterhorn). He climbed to 20,000 feet in 7 kt lift, breaking off to economize on oxygen use. The flight then proceeded south-westerly on course, until 8/8 cloud cover forced him to abandon the declared flight at a point east of the Rhone River valley. Clement decided to return to the Alps and attempt a long flight to wherever the conditions took him.

Soon after backtracking at about 1300, he photographed his first location point,

Malaucène (northeast of Nîmes), but progress was not good. He was soon flying over 8/8 cloud cover, where some ground features were identifiable by the form of the cloud surface under him. Arriving at Bure Peak at 7200 feet, he was caught in severe rotor for 15 minutes without gaining a foot, before contacting 8 kt wave to 13,000 feet and abandoning 3 kt lift at 16,500 to progress directly towards the Pelvoux Massif on the way to Aosta, Italy. Again, the cloud cover was 8/8 crossing into Italy near Bardonecchia (which was invisible); nevertheless, the rock faces gave usable lift for continuing.

Arriving over Aosta (just southeast of the French/Swiss/Italian border conjunction) on instruments, he photographed the town and climbed there before progressing to Zermatt, near the Matterhorn, to climb again from 15,000 up to 20,000 feet.

By 1800 hours, Clement had crossed Lake Como (north of Varese) and a decision had to be made whether to continue as far as possible towards the east (700 km already having been covered in 7 hours) with a return before a 2130 sunset. The conditions in the Valtellina valley were good, so his flight continued between altitudes of 11,500 and 18,000 under cloud, which completely closed in the Aprica Pass. Finding a hole at Tirano, Clement climbed at 2 kts to 19,000 and moved north-northeast to Bormio (east of the Bernina Pass), and photographed it down through another hole.

It would have been possible to jump eastward over the mountains towards Bolzano for a "super-1000", but there was a risk now after 11 hours of flying (18 hours of wave flight in two days after twice rising at 5 am) — after all, the flight was not valid for an FAI award anyway. Prudently about-turning for home, Clement had a few moments of panic as the flight unwound down to cloudbase, but a climb of 2000 feet at Tirano was always possible for a secure final glide.

He returned to Varese at 2000 hours after descending 13,000 feet with spoilers! Clement believed it would have been possible to have continued southwest to Viñon, France before sunset for a total distance of 1300 km.

Adapted from AVIASPORT, Aug '84

### SIGNIFICANT FLIGHT CERTIFICATE — APPLY NOW

The Significant Flight Certificate was created last year so that SAC would have something to properly recognize the fine flights accomplished during a season which may not necessarily qualify for an FAI badge or record. There is no hard definition for "significant", the flight can be great for any reason — not just distance or speed — type of glider, type of terrain, weather, experience level of pilot, etc. can all be factors.

So — CFIs, OOs — send George Dunbar, SAC Trophies chairman, the information you have on one of your pilot's "wow" flights. Give your pilot the national recognition his great flight richly deserves. George will select the awardees for ratification at the January directors' meeting. Awardees will have their Certificates presented at the SAC AGM (only if they will be present), or else the Certificate will be sent to the pilot's club for local presentation — it's no fun getting an award in absentia!

Take the time now to give one of your pilots recognition for a great effort.

## TAMING THE DOG

A last word on making a poor trailer handle better

Lloyd Bungey

from BC Soaring News

One of the most important things to realize is that practically every glider trailer has a bit of rogue in it. Even though the previous owner/driver swears that it is a real pussycat, all he is really saying is that he always stayed within its limitations. Now that you will be towing it, it is up to you to determine how it will handle behind your vehicle and how to correct any dangerous characteristics.

The first stage of the process is to examine the rig. Where is the axle located? What is the tongue load? (both in the loaded and unloaded state).

A good rule of thumb is that the axle should be mounted about halfway back along the body of the trailer. Also, the surface area should be about equal fore and aft of the axle, otherwise the trailer may push the towing vehicle around in gusty crosswinds. A tongue load of 40-80 kg (100-200 lbs) usually works out quite well. A lighter tongue load may indicate the centre of gravity is too far aft and the trailer could handle poorly at high speed. On the other hand, a heavier tongue load is an indication of a trailer that had handling problems and has had them dealt with by loading up the tongue. Without equalizer bars, such a trailer may so load up the rear of your car that the steering is affected.

Another item to examine is the location of the heavy items. I do not like to see the wing roots at the rear of the trailer, especially if they are heavy. Even though the centre of gravity of the trailer may be in the right place, the heavy mass located at the rear may have a "dumbbell" effect and lead to uncontrollable oscillations. One trailer I saw loaded this way was totally uncontrollable above 50 km/h even though the axle was aft of centre and the tongue load was 60 kg. It took a rearward shift of the axle of 45 cm, which increased the tongue load to 180 kg, to give any degree of comfort, and even then the limit for safe towing was 90 km/h.

ONLY SOME OF US LEARN  
BY OTHER PEOPLES MISTAKES  
THE REST HAVE TO BE  
THE OTHER PEOPLE

When examining the trailer, don't forget to check the nuts and bolts holding the various pieces together. A hitch assembly that is loose can lead to thumps and bumps which ultimately tears things loose, breaks welds, and does all sorts of damage.

Once content that all looks okay, the next step is the road test. In many cases, this will be an actual trip. If you wish to play it safe, however, make a test run with someone following you to view the situation from the rear. If your tow car is a light vehicle, you will be able to feel any tendency toward oscillation, but the heavier your vehicle is, the less you will feel. In this case, the person "riding shotgun" will be able to give you a lot of useful information.

Assuming the rig is not an out-and-out dog, you will probably find it handles okay at speeds up to about 80 km/h on the flat. However, that will tell you little about the dangerous situation — downhill towing.

To get some idea of what the trailer is likely to do downhill, find a nice straight piece of highway. Make sure you have several miles of level road, preferably followed by an uphill section just in case things get a little out of hand. Get the trailer up to speed, then back off a **little**. If there is any tendency to oscillate, it should show up now.

Try to determine the speed at which the slightest oscillation can be observed. This is the speed you must not exceed for safe towing.

If your car/trailer combination is good, significant oscillations should not be apparent at any speed you are likely to attain. If however, such is not the case you have only two options: either tow at a slower speed, or do something to improve the situation.

Trailers usually accumulate junk. One easy fix then is to throw away all the surplus weight to lighten the trailer. Sometimes this may do the trick but often it won't. Next, redistribute the load. If the spare tire is set to the rear of the trailer, move it forward, or even move it to the trunk of the car. Similarly, bring any movable weight up to the tongue and see if it helps. The less weight to the rear of the trailer, the less likelihood of a dumbbell effect occurring.

If the trip is going to be a one-shot deal, then rather than making major modifications to the car or trailer, extra weight may be placed over the tongue by putting containers of water in the nose of the trailer.

If none of these tricks work, then you will either have to do something more drastic like fitting trailer brakes (if not already fitted), moving the axle, or just drive more slowly.

Also, don't forget that it could be the mechanical condition of your car that is at fault. Check the shocks and springs to see if they are in need of replacement. If your car is fitted with coil springs at the rear then it is quite likely that your car is not stable enough laterally and you may have to limit your tow speeds.

One of the greatest fixes I know of to cure the wagging trailer is the anti-sway bar, obtainable from RV supply houses. This is a simple device consisting basically of a bar which slides through a friction brake. One end mounts on an attachment to the hitch on the car, while the brake section mounts on the tongue of the trailer. It is set up in such a way that any sideways movement of the trailer results in the bar moving through the brake pads. This results in a damping force which quickly eliminates oscillations. Such a device costs around \$100 and I highly recommend fitting one even when you don't really need it.

Proof of the effectiveness of the sway bar was proven to me when I towed an SHK trailer some years ago. I had previously towed this trailer at speeds of up to 120 km/h and found it perfectly stable. Then I got a new (old) car which was not fitted to take the sway bar. I suddenly found that the trailer was in reality an absolute dog. At 70, the trailer was vigorously pushing the car from side to side. Needless to say the rest of the trip was done more sedately.

A word of warning about sway bars, however: always release them before making really sharp turns or backing up at sharp angles. For normal driving they are fine, but there is a limit to the angle through which they can be bent.

A final word of warning on handling rogue trailers: if you feel a trailer starting to get away from you (that is the tail starts to wag the dog), **don't hit the brakes**. About your only hope is to get things straight with a small amount of acceleration, then slow down carefully. Going downhill, this can be really hairy. One acquaintance once told me of an experience he had going down a hill, with the trailer forcing him into a pattern of accelerate, brake a little, accelerate again ... slowly getting faster and faster as he barely retained control. At the bottom of the hill he was doing 135 km/h until the uphill section soon got things back under control. Not all cases of wagging trailers need such treatment. If by holding the steering wheel firmly to dampen sympathetic oscillations, the situation doesn't deteriorate, then just hold everything steady and hope for an uphill stretch of road. That always slows things down. □

# DISTRACTION

Pat O'Donnell  
SOSA

If you are flying gliders at a Canadian glider club and are allowed to carry passengers, then you are probably a good pilot and a fairly experienced one at that.

Picture a good-looking girl arriving at the field on a summer's day looking for a glider flight. She had no difficulty getting a pilot to take her flying; in fact, if she wanted several flights, she could go with a different pilot each time.

The stage is set for any pilot, who has not standardized his flight preparation and performance, to succumb to distraction.

The list of potential problems could include: ground handling equipment not removed, ballast not in or out as the weight of the passenger and pilot dictate, high-heeled shoes loose on the floor of the cockpit, and much more.

There is no way you can be sure that you will remember everything, but it is possible to improve your chances by taking a thoughtful approach to such flights.

Get your passenger strapped into the glider, and then do a walk-around on your own. This gets you away from the cockpit area where other members of the club have probably gathered to "help" with the flight preparations, and lets you concentrate on the weather, wind direction, and other considerations.

Besides warning the passenger to stay away from the controls you can say that you will describe what is happening in the early part of the flight. This is easier than coping with questions when you are busy. When you are at a safe height, you can open conversation by asking how the flight is going to that point.

The period spent at altitude is normally the "safest" part of the flight but you must not forget that flying with a passenger is not like flying with an instructor, a student, or another pilot. You cannot demand the same vigilance from a passenger.

When it is time to enter the circuit tell the passenger that you can continue the conversation on the ground and will describe what you are doing and looking for while flying the circuit.

If you remember to tell any friends of the passenger where to meet after the flight you will not have to shout and wave your arms to clear the runway for incoming gliders.

Distraction of this kind is not confined to flights with good-looking girls. The problem can come up just as often with a family member, the boss, or your buddy.

# Campbell

Printer ad,  
Ottawa

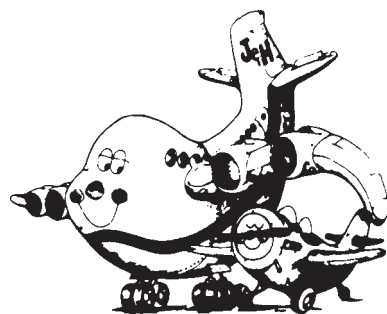
## AD NOTE ON PUCHACZ

A modification is required to the front seat mounting to prevent possible jamming of aileron control cables. AD number MSB BK-10/50-3/83 refers.

## NAMEAO 8/66, TOW HOOKS

The second oldest Notice to Aircraft Maintenance Engineers and Aircraft Owners which is still current is 8/66 — Gliders, Installation of Tow Hooks and Release Mechanisms. It behooves anyone contemplating such work to get a copy of this NAMEAO.

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# PROVINCIAL ASSN NEWS



Tony Burton

## COWLEY WAVE CAMP

A little for everyone

**Tony Burton**

The nominal time for the Cowley Wave Camp was stretched out by the Edmonton club as usual, as many of their members began arriving on the Wednesday before the Thanksgiving weekend to sneak up on the sometimes elusive big wave (lately, the best time has seemed to be the one or two weekends after the camp). The Edmontonians had good luck, as lenticulars decorated the western sky every day — even the temperature was 5-10 degrees above normal which greatly advanced flightline survivability.

Saturday provided all participants wave to 27,000 in the morning before a cloud deck developed at 17,500 in the valley. One radio dialogue heard was, "What's your average rate of climb?" ... "Pegged!" Later in the afternoon the area between the Livingstone Range and the continental divide opened up and allowed slow climbs to 23,000 over the Rockies to those who ventured west out of the valley.

At sunset, the camp cookhouse was filled with pilots and friends, as plates of munchies were served up along with two cauldrons of hot spiced wine courtesy of the Alberta Soaring Council. Especially welcomed at this time were two representatives of the Alberta Parks, Recreation and Wildlife Foundation, who presented Mike Apps (ASC President) with a grant check for \$15,000 which largely paid for the recent purchase of a Scout C-GPCK (Piece of Cake), the new ASC-operated towplane which will be used to support ASC events, club operations as required, and generally help further the sport in the province.

Also welcomed were coast-to-coast visitors: Dick Vine (oldtimer) and Joanne and Nick (new members) of the Bluenose Soaring Club, all of whom got more flying than they dreamed of; and Lloyd Bungey and Harald Tilgner of Vancouver Soaring Association, who had come to Claresholm to pick up the repaired club Jantar (the one that was damaged in its trailer).

Sunday morning greeted us with sunrise lennies, and early launches got strong lift in the lower levels which topped out at 21,000. The wave quit for the rest of the afternoon; it appeared as if the wavelength of the system generated from the continental divide was such that the Livingstone Range cancelled the wave lift in the valley (an unusual condition) — pilots getting noon launches reported only strong mechanical turbulence everywhere, so the others on the flightline wisely decided to save their tow tickets.

Monday, the airflow was about 45 degrees off the range, and only patchy wave lift was present, indicated by little 30-second rotor clouds. Most flights didn't get much beyond 17,000 feet, but it was workable.

All in all, there weren't classic Cowley conditions, but everyone got a good taste of wave, two got their Diamonds, and the companionship and weather were most agreeable — so why be greedy? See you next time. □

# FAI BADGES

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

The following badges and badge legs were recorded in the Canadian Soaring Register during the period August 1, 1984 and September 26, 1984.

## DIAMOND BADGE

54 Walter F. Weir COSA World Number pending

## GOLD BADGE

207 Volkmar Helmenstein Air Sailing  
208 George Betton SOSA  
209 Peter O'Donnell SOSA  
210 Steve Mason SOSA  
211 Larry Springford SOSA

## SILVER BADGE

693 Harold Knox SOSA  
694 Peter Foster York  
695 John Kilar Bluenose  
696 Dorothy Funk Bonnechere  
697 Ian Grant SOSA  
698 David Cole Toronto  
699 Kelvin Cole Toronto  
700 Gordon Waugh Bluenose  
701 Janez Volcic SOSA

## DIAMOND ALTITUDE

Peter Zatko ? 7100 m Pegasus Minden, NV

## DIAMOND DISTANCE

Walter Weir COSA 501.8 km Libelle Chemong, ON  
Walter Herten SOSA 500.8 km Jantar Std. Rockton, ON

## DIAMOND GOAL

Dominique Bonnière	Gatineau	328.7 km	Pik-20B	Virden, MB
Volkmar Helmenstein	Air Sailing	300.8 km	Ka6E	Belwood, ON
Kurt Meyer	Air Sailing	321.4 km	Std. Astir	Belwood, ON
Jenö Luxemburger	Kawartha	318.7 km	Cobra 15	Omemee, ON
George Betton	SOSA	317.4 km	Std. Libelle	Rockton, ON
Peter O'Donnell	SOSA	305.3 km	RS-15	Rockton, ON
Sid Wood	SOSA	305.3 km	Hornet	Rockton, ON
Cedric Greenhill	SOSA	317.4 km	Club Libelle	Rockton, ON
Steve Mason	SOSA	305.3 km	Ka6CR	Rockton, ON
Larry Springford	SOSA	305.3 km	Std. Libelle	Rockton, ON

## GOLD ALTITUDE

Brian Hollington Vancouver 3406 m Lark IS29D2 Hope, BC

## GOLD DISTANCE

Dominique Bonnière	Gatineau	328.7 km	Pik-20B	Virden, MB
Volkmar Helmenstein	Air Sailing	300.8 km	Ka6E	Belwood, ON
Kurt Meyer	Air Sailing	321.4 km	Std. Astir	Belwood, ON
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Steve Mason	SOSA	305.3 km	Ka6CR	Rockton, ON
Larry Springford	SOSA	305.3 km	Std. Libelle	Rockton, ON

## SILVER ALTITUDE

David Teal	SOSA	1564 m	1-36	Estrella, AZ
Peter Foster	York	1158 m	1-23	Arthur, ON
Mayer Berger	Toronto	1372 m	Bergfalke II	Conn, ON
John Kilar	Bluenose	1189 m	K8	Stanley, NS
Paul Anderson	COSA	1320 m	Jantar Std.	Chemong, ON
Gordon Waugh	Bluenose	1463 m	K8	Stanley, NS
Janez Volcic	SOSA	1067 m	Grob 102	Rockton, ON
Terrence St. George	Cu Nim	2042 m	Pilatus B4	Black Diamond, AB

## SILVER DISTANCE

Peter Foster	York	64.0 km	1-23	Arthur, ON
John Kilar	Bluenose	65.0 km	K8	Stanley, NS
Dorothy Funk	Bonnechere	76.0 km	Skylark 4	Deep River, ON
Ian Grant	SOSA	62.0 km	1-26	Rockton, ON
David Cole	Toronto	79.0 km	Ka6CR	Conn, ON
Kelvin Cole	Toronto	87.5 km	Ka6CR	Conn, ON
Gordon Waugh	Bluenose	64.5 km	K8	Stanley, NS

## SILVER DURATION

Mayer Berger	Toronto	5:30	Bergfalke II	Conn, ON
John Kilar	Bluenose	5:57	K8	Stanley, NS
Shirley Dashper	SOSA	5:33	1-23	Rockton, ON
Kelvin Cole	Toronto	5:53	Bergfalke II	Conn, ON
Gerhard Vandrei	Rideau	5:16	1-26	Gananoque, ON
Paul Anderson	COSA	5:10	Jantar Std.	Chemong, ON
Gordon Waugh	Bluenose	5:10	K8	Stanley, NS
Herb Ferguson	COSA	5:12	Pilatus B4	Chemong, ON
Terrence St. George	Cu Nim	5:06	Pilatus B4	Black Diamond, AB

## C BADGES

Stephen Foster	Toronto	1:20	2-33	Conn, ON
Fred Duncan	York	1:05	2-33	Arthur, ON
Michel Bohemier	Air Cadet	1:10	2-33	Borden, ON
Paul Payette	York	1:11	1-26	Arthur, ON
Peter Foster	York	—	—	Arthur, ON
John Kilar	Bluenose	5:57	K8	Stanley, NS
Ron Feyerabend	COSA	1:28	2-22	Chemong, ON
Ian Grant	SOSA	(in United Kingdom)		
Leo Maynard	Cu Nim	1:20	1-26	Black Diamond, AB
Timothy Paul	York	1:07	1-26	Arthur, ON
David Donaldson	York	1:05	2-33	Arthur, ON
Robert Shepherd	COSA	1:22	Blanik	Chemong, ON
Russell Copeland	Air Cadet	1:05	2-33	Borden, ON
Robert Raina	Cu Nim	1:20	1-26	Black Diamond, AB
Paul Anderson	COSA	2:03	Jantar Std.	Chemong, ON
Alexander Kasacous	York	1:12	1-26	Arthur, ON
Gordon Waugh	Bluenose	5:10	K8	Stanley, NS
Herb Ferguson	COSA	5:12	Pilatus B4	Chemong, ON
David Brown	Montreal	1:41	1-26	Hawkesbury, ON
Dave Woodcock	Blue Thermal	1:02	2-22	Cowley, AB
Bernard Arvisais	Bonnechere	1:10	2-22	Deep River, ON
Jack Chi-Yuen	York	1:08	2-33	Arthur, ON

## CFIs, SOOs, AND OOs

The new FAI Badge Application Form (revision 5, 1984) is now available from the National Office or Boris. Get a stack now for your club's pilots for next season.

Remember to throw away all the outdated forms when the new ones are in your hand. Old forms often contribute to application errors which waste everyone's time.

# FAI RECORDS

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

The 400 km triangle speed record claim, flown by John Firth on 17 May, has been regretfully rejected. Unfortunately, John's first selected turnpoint, "Rawdon racecourse", had been supplanted by a golf course. Rather than photograph the golf course or at least the "point on the surface" where the racecourse had existed, he chose to photograph a reservoir about 3 km from the declared turnpoint (which had a road around it which looked roughly racecourse shaped), but which was well out of the allowed sector for the original turnpoint.

Occasionally, record claims have been made *[and badge claims. ed]* in which the turnpoint feature (usually a grain elevator) has disappeared. However, provided that the "point on the surface" is still recognizable and can be correlated with the map showing the position of the original feature, then the turnpoint pictures should be taken in the usual way as if the feature still existed.

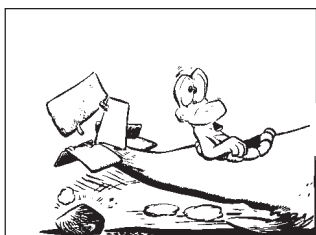
Obviously, whenever possible it pays to use a permanent feature or one whose existence can be confirmed, either from recent evidence or at least from an up-to-date map.

• • •

The Straight Distance Multiplace and Distance to Goal Multiplace records claimed by Hugh McColman and Chester Zwarych which were published in the previous issue, have been approved.



Walter Mueller



**Gotcha! – says the crocodile.** The photograph commemorates the airborne mating of a Cu Nim 1-26 and a Grande Prairie Blanik at Cowley, two summers ago. This consummation was the end result of a non-standard circuit by the 1-26, bringing each glider onto final at the same time from opposite base legs, each in the other's blind spot. They were both 'hangar' flights to the tie-down area, so no one was on the line to warn of the conflict, and to most spectators well off to one side at the campground, the gliders appeared to be landing parallel to one another.

The gliders converged at a very shallow angle and very little relative speed as both aimed for the same touchdown point. First contact occurred (fortunately!) only a handful of feet above ground just as the 1-26 was flaring, its skid rubbing along the Blanik's right wing. The 1-26 pilot's first impression was that he had stalled onto the ground, then his tail tipped up and he was staring into the shocked face of the Blanik's front seat passenger. The Blanik occupant's first inkling of danger was a huge shape suddenly appearing right on top of them just as they were about to land.

Note that the occupants of the Blanik are still trapped in the cockpit by the 1-26 wing pressing down on the canopy, which is deformed but unbroken — a tube of toothpaste soon removed the scratches in the plexiglass. The 1-26 was carefully lifted away without further damage to either glider, and the Blanik internees freed. Amazingly, little damage was done — the 1-26 was untouched, and the Blanik was airworthy albeit with scratches and slight dings to the upper wing skins.

People watching the landing, me included, were rooted to the spot as the realization struck that these gliders on final were **close**; the seemingly silent contact and resultant '*pas-de-deux*' as they slewed to an entwined stop seemed to be in slow motion. In retrospect, some have thought that if either pilot had shifted his concentration from the touchdown spot and seen the other, any avoidance maneuver may have resulted in more serious contact at a less forgiving height. Everyone had an angel working overtime ... but don't **you** count on divine support.

Tony Burton

**BLANIK**, C-GARR, Kawartha, 24 June. Hit fence on an outlanding. Wing leading edges and fuselage fittings damaged. Est. \$15,000.

**VENTUS**, C-GVRS, Cu Nim. Canopy broken during de-rigging at Virden, 9 July. Est. \$3,200.

**L-SPATZ**, C-GALG, Bonnechere, 29 July. Hit tree on an outlanding. Est. \$3,500.

**BLANIK**, C-GXDU and CESSNA 150 C-GQOA, Saskatoon, 5-6 August. Hail damage.

**2-22**, C-FWTY, Champlain, 22 July. Hit hydro wires on landing approach. Unknown liability claim.

**Ka6E**, C-FVMX, Hope, 19 August. Landed in trees short of airfield. Probable write-off. Est. \$8,500.

**BERGFALKE**, C-GXIV, Namao, 29 August. Windstorm damage while tied down. Probable write-off. Est. \$4,500.

**SCOUT**, C-GNJK, Cu Nim, 1 September. Landed with wheelbrakes engaged, damaged tail wheel and adjoining structure. No claim.

Total premiums paid \$268,922  
Claims (paid & est.) to date \$ 65,793



## OPINIONS

continued from page 3

### ONCE MORE ON PRIORITIES

Thank you for running my letter and Bob's reply together in the last **free flight**. It makes for a better discussion of the issue. However I would point out an area of doubt concerning the lack of additional risk from competition to our underwriters. Is this the result of the superior skill of the pilots involved or of the very low percentage of glider pilots who actually compete? If the former, what happens when we encourage a number of less-skilled people to take part and so lower the overall standard of flying? If the latter, how many more competitors can we afford before the higher risk factor of this type of flying becomes statistically significant?

Bob points out that I picked on one of his suggestions. True, but that was the one I disagreed with. I too would like to see more pilots chasing badges or upgrading their skills to more demanding aircraft.

It is precisely because the barbecue pit and the pool are a common feature in our backyards that the gliding club needs them too. How often have you heard an ex-member remark, "Well I loved it, but there was nothing for my wife to do and the kids got fractious." One more for our 30% turnover. If satellite TV, daycare, and a limo service are what it takes — go for it. Let the club 1-26 get along on just two varrios for a while. It will make it a lot easier to find retrieve crews, you know (how is that for a little temptation?). One of the reasons that Ephrata, Washington is so popular for contests is that the ground crews are comfortable. There is a radio-equipped, air conditioned clubhouse there: no more frying in the car.

Is competition the purpose of the sport? I doubt it. A recurring theme in the correspondence columns of SOARING is the complaint that too much space is devoted to race reports which are of interest only to a very few members. "Platypus" seems to run into the same problem in Britain.

On a different topic. Who drew the great cartoon on page 5 of the last issue. I should like to have it tattooed on my chest above the words, "INSTRUCTOR — THIS SIDE UP!"

Brian Hollington, VSA

*Gil Parcell, a professional illustrator, and Canada's best and most prolific gliding cartoonist, is the person who has brought Eric Newsome's gremlins to life. Tony.*

### HOW DO THEY DO IT?

I read with great interest SAC'S latest annual report. Much was said about declining membership levels, and a number of useful suggestions were made. It is easy to see why SAC is so interested in this topic.

## COMING EVENTS

Jan 12-13, 1985 **SAC Board of Directors meeting**, Ottawa. Contact National Office for details (613) 232-1243.

Jan 16, 1985 and the next ten consecutive Wednesdays, **Toronto Ground School**, 7 - 10 pm at Bathurst Heights Secondary School, North York. Cost approx. \$25. Call (416) 789-0551 for registration.

Mar 23-24, 1985, **SAC AGM** in Toronto. More details later.

### NOTE TO CLUB EXECUTIVES

Coming events is getting thin, folks. It's time to give me notice of club events which are of possible interest to other people in your area. Tony.

### COMING UP IN 1/85 ...

The recent International Coaches Meeting held in Holland, and attended by Ian Oldaker. Are the national coaches going to get tough with the manufacturers?

IFR Procedures. No, it's not what you think! How a chocolate bar caused disaster.

The world of winch launching; written by Eric Durance from the viewpoint of the pilot, the operator, and the builder. A study of the economical "get-it-up" system which most clubs aren't familiar with these days, but may become so as aerotowing costs soar higher than the aerotowee.

As you may know, I am the treasurer of a small club in southern Ontario. Any club treasurer will tell you that a topic of great importance at the club level is how to get the members to fly more. I found no suggestion on this topic. But it is clear from the charts on pages 30 through 33 that some clubs have found the secret.

Just look at those statistics from York Soaring. With only fifty-four members (page 30) they flew over five thousand flights (page 32). Why, that's an average of over ninety flights per member. If we could get those folks to share their secret with us we could all be rich.

Dixon More  
SOSA

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