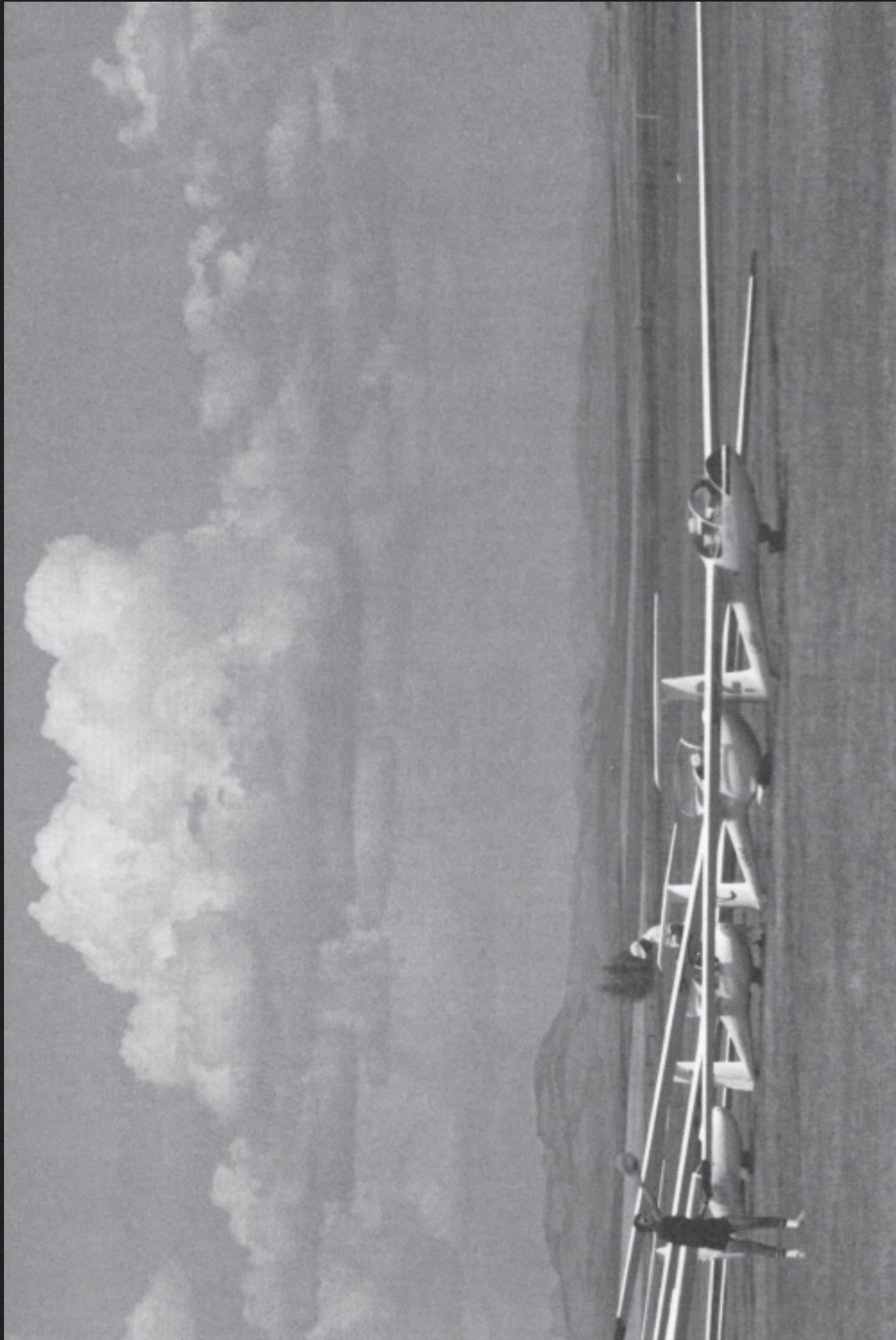


free flight • vol libre

5/85
Sep-Oct



Musings

L'hospitalité parlée ici!

And so it was — without pause, from arrival to departure. The Club Vol à Voile de Québec put their hearts and backs into running a contest and accommodating 27 pilots, aircraft, crew and families at our 1985 Nationals at St-Raymond, Quebec. That all went well is testimony to their efforts as well as donations from Labatts Breweries and the food producer, Culinar. From all who flew — Salut, mes amis. To all who were there — Merci du fond du cœur. It was also good to see club towplanes present from MSC, Outardes, Gatineau, and SOSA. Great cooperation. It was a disappointment that Fitness and Amateur Sport did not help — again.

Last year the suggestion that soaring competition was boring appeared [5/84, page 2]. I was puzzled, but because I had limited experience, I was prepared to change my view if ennui appeared after further exposure. Well, in addition to my *hors de concours* experience at Virden, I've been in three competitions (two provincial and one national) and I can say that to me, and I expect all at St-Raymond, the competition was definitely not boring. Testing, humbling, and perhaps humiliating, but not boring. The weather was so fickle and challenging, and the country so intimidating, that one's judgement, weather sense, and flying skills were always being tested. I'm so far down on the learning curve that every contest is a huge learning experience for me, in the air and on the ground (five retrieves in seven days — do I have muscles!). I learned too that the pilots who finish well do so because of their experience, ability, and a finely-honed sense of how far one can go and still have an out. And finally I learned — again — that I learn by listening, watching, and talking to those who do better (or occasionally worse) than I. Then I learn some more I hope, by flying and trying to do better. Help and advice is there for the asking — the key is participation.

As you may have read in the newspapers, the federal government has reaffirmed its policy on third-country competition having South African presence in any part of the competition. Hence we are not represented at Rieti. Thanks to the persistence of Wilfried Krueger, who has the Hon. Otto Jelinek as his M.P., we have responded to an invitation to provide budgets for potential assistance from Fitness and Amateur Sport for "Austraglide '86" and the '87 World Gliding Championship in Benalla, Australia. We expect an answer in September.

Work has kept me very busy since the AGM so I'm behind in SAC chores. I'll catch up in August if all goes well. I have two points of concern:

- The postal increase is hurting. Two cents isn't much on one letter, on 1300 it is \$26, and on each issue of **free flight** it is \$50-\$75. It adds up.
- The unbudgeted cost of a copy of the Annual report for everyone, as you directed at the AGM, instead of only to those who ask, will be in excess of \$5000 by the time the publishing bill and the postage is paid. It will be worth every penny if each copy is read cover to cover.

Our accident picture is not great so far. The Nationals was free of accident and incident save for gear doors and scratches. Unfortunately, our training and regular flying is not. Look critically, please, at your own flying and the practices of your club. The loss of pride or face because of needed change is a far less price to pay than that of a broken aircraft or body.

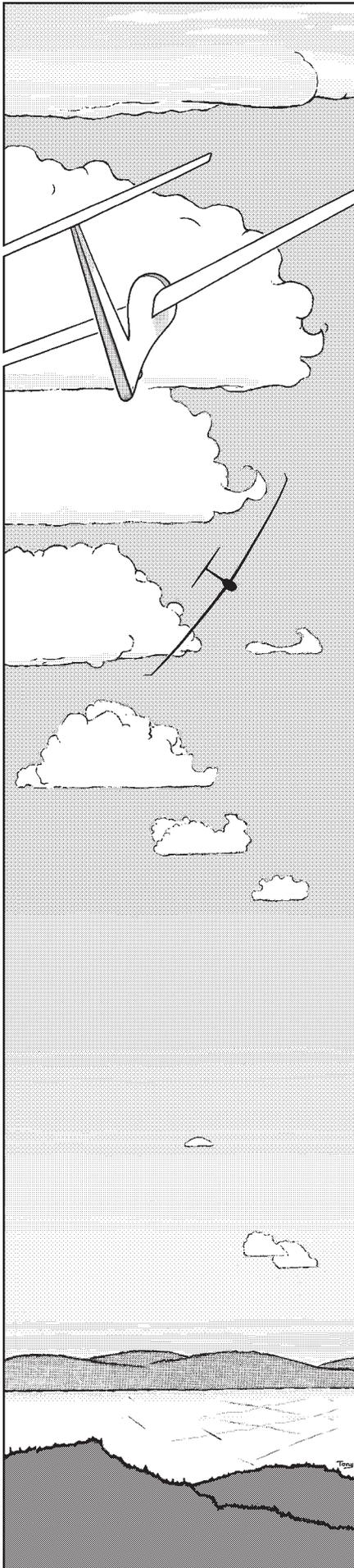
Fly often, fly well, and please fly safely. Starve the crocodiles.



P.S. Almost half of the '86 soaring calendars have been bought. Have you sent in your order and cheque? Once they are gone, there won't be an opportunity to get more.

"We have seen others swallowed by crocodiles and we have learned from their mistakes."

....the late King Sobhuza II of Swaziland



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Trademark pending Marque de commerce en instance

5/85 Sep-Oct

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

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cover

Action at Cowley Summer camp. The weather cooperated, giving soaring all 10 days (the best stretch of gliding Alberta has had all summer). In attendance were 32 private ships, 13 club gliders, 7 towplanes, 105 pilots, and over 100 other friends and visitor. Photo by Hans König.

LET'S GET SERIOUS!

Al Schreiter
SOSA

Recent issues have carried articles and comments to the effect that the sport of soaring is getting too expensive, and that in order to attract new members, clubs and the SAC must find means to lower the costs of membership. No one has made any specific, workable suggestions how this is to be accomplished, or even defined "too expensive". This is akin to saying that in order to avoid death one has to live longer... someone else can work out the details.

Let's get serious. Most of the real costs of soaring are beyond our control. We have little influence over the price of either new or used equipment. The operating costs of towplanes are determined by outside forces. Taxes are beyond influence. If we want to soar, we have to pay for it — I can't believe money has anything to do with membership. Let's not spend too much time worrying about the few potential members who are deterred by cost. Instead, let's concentrate on attracting just a few hundred of the tens of thousands who can afford our sport.

First, let's stop talking about how badly we need new members and then wait for someone else to produce them. How many clubs have a written three-year plan to raise their membership to a specific number by the end of a specific time period? Does your club executive know how many new members the club wants, or can absorb? Does everyone in your club know? Do they care? A surprising number of clubs do not have a real commitment to growth. They like being a small group of around 20 — they just don't like the attendant costs of being small.

Unless your club has a well-defined, reasoned-out specific membership goal, approved by the majority of the present members, how does it expect to get this majority to cooperate in a realistic effort to achieve this goal? Do you know what a potential member should look like, and where he/she can be found? If you don't know that, how do you expect to recognize one?

Have you examined the process by which new members are absorbed into your club? Is there a proper introduction of new members or information for them? Do new members know what they are expected to do, or what the club "no-nos" are?

Have you examined your equipment lately? How exciting is it for a new member to look forward to hanging around over the field in an 18 year old, more than slightly battered glider for the rest of his "soaring" career? Better equipment costs money, but it also helps attract and keep members. Are your present members committed enough to soaring to go out on a limb and finance better equipment?

Once you have decided that you want new members and defined the number you are looking for, not just this year but for at least the next three years, what do you do about it? You must make a continuous effort on several fronts.

First, get to know the sports and recreation editors of your local papers. Invite them to the field and offer them an introductory flight (don't charge for it). Give them some written informational material about soaring and about your club. If you don't have any, make some — they like pre-chewed material. Keep in touch with them. Everytime something exciting happens at your club, such as badge flights, record attempts, new equipment, feed the information to them **in writing**.

Second, use every available chance to display your equipment, especially during the winter when it's not being used anyway. Shopping malls, sports shows, and conventions are always looking for additional show pieces. But when you display it, make sure it's in presentable shape.

Thirdly, get into the local high schools and service clubs, bring some of your best slides and put on a half-hour presentation about soaring and your club. Service clubs are usually desperate for guest speakers, and most of their members are well-heeled enough to be able to afford soaring.

And so on, and so on. Use your own imagination. The object is to make as many people as possible aware of the fact (not just once a year, but continuously) that a soaring opportunity is available in your neighbourhood. Until you reach your defined membership goal, the effort must be perpetual. And lastly, don't apologize for the cost. Compared to many other sports it's still very reasonable. Lots of people are quite willing to pay for something that is as much fun, as rewarding, and as thrilling as soaring. Let them know how they, too, can participate. Your club and soaring in Canada will be the healthier for it. □



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.

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L'ASSOCIATION CANADIENNE DE VOL A VOILE

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

L'ASSOCIATION est membre de "L'Association Royale Canadienne des Aéro Clubs" (RCFCA – Aéro Club National Canadien), représentant le Canada au sein de la Fédération Aéronautique Internationale (FAI, administration formée des aéro clubs nationaux responsables des sports aériens à l'échelle mondiale). Selon les normes de la FAI, 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 grâce et à l'individualité 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.

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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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5

OPINIONS

CHANGE THE QUADRILATERAL

Are the most recent changes to the Sporting Code an improvement?

For decades, the only permissible distance flights were straight, zig-zag, out-and-return, and triangular. Now that 40:1 glide ratios, water ballast, and air data computers are commonplace, it is also deemed necessary by the FAI to add new options to the traditional four. Why?

Under the new rules, a Gold distance can be flown using a close pair of turnpoints 50 km from the airfield and a third turnpoint 50 km on the opposite side. On a day with 6000 foot cloudbases, a pilot in a 40:1 glider could fly a Gold distance without ever leaving gliding range of the take-off point. Similarly, Diamond distance can be flown within gliding range of home as long as a height of 7800 feet can be maintained near the turnpoints [in this case, 83.3 km away]. This is certainly a possibility in the west. I find it difficult to accept such flights as achievements demonstrating pre-eminence in the soaring fraternity.

Furthermore, the rules as now established are arbitrary. For example, only incomplete triangles can qualify for distance. Why not other incomplete courses?

I've got two diamonds now, and have been looking forward someday to making the exhilarating 500 km leap. Perhaps by that time the new rules will have been repealed. I hope so.

Jack Dodds
Erin

Changes to the Sporting Code are not made without a significant amount of discussion over a period of time by international members to the FAI group (CIVV) charged with soaring standards. It was largely your assumption of perfectly placed turnpoints, which in practice cannot be met in many places around the world, that prompted the recent changes. Many countries have problems of severely restricted airspace, unflyable terrain (mountainous, or intensive agricultural areas), or unsoarable air (near oceans). Japan would be a good example of a nation having all three hindrances to long flights. Some countries can't even fit a 500 km triangle within their borders. The result is that many sailplane pilots have had to travel to other countries to do their advanced badge flying, and this was judged not to be in the best long-term interests of the sport. Even in Canada, many areas suffer some of the restrictions listed above, and a pilot whose club is in those areas can travel distances equivalent to crossing several European borders to reach some soaring Valhalla like Saskatoon.

Your example courses are correct and possible: given the assumed cloudbases, your 40:1 glider flown at max L/D at all times, a dead calm day, perfectly placed turnpoints, thermals situated directly over each turnpoint and the airfield exactly when the pilot arrives, and no sink anywhere on course. I don't think that you should be concerned that the Gold and Diamond distance flights are being too seriously watered down. The improbability of all your conditions being met, and of the pilot being ready to go on such a day, would demonstrate the ultimate pre-eminence in good fortune! Also, regardless of the pilot's position relative to the airfield, he would have to make a precise soaring flight of about seven hours for the 500, and that's no mean feat.

Lastly, paragraph 5.3 of the Sporting Code does allow distance to be claimed from incomplete triangles, but not other incomplete tasks, and this does seem arbitrary to me. Perhaps the Sporting Committee can follow up on this. Tony

DAGLING TAIL FEATHERS

Lloyd Bungey of the BC soaring fraternity writes in part of the difficulty experienced by Canadian Museum of Flight and Transportation in rebuilding the tail feathers of the Dagling primary because of lack of plans.

Towards the end of the European phase of WWII, a number of Dagling primaries were built in Montreal by, if memory serves me correctly, G. H. Randall Co. Ltd., a wood-working firm. The thing climbed well on auto-tow and winch tow. In free flight, it descended mostly — no one ever got it up high enough to work a thermal. We might have been fortunate there as the ailerons had no differential built into the system. If the company remains in existence, a call to Montreal directory assistance would produce a telephone number for further inquiry. If that fails, the Montreal Soaring Council acquired two Daglins and I believe some parts of a third from Randall. They were Randall's only customer. Randall ceased production of our secret weapon about then. Someone with the Montreal group may remember what happened to the remains, Oscar Estebany for instance.

Ken McGurk
Pincher Creek, Alberta

On going through my old free flight issues, I discovered that Ken McGurk was mentioned as being the SAC Treasurer in Vol. 1 No. 1 (Apr. '49) (called The Bulletin then). The cost of mailing it was 1¢, by the way.

SETTING RECORDS WITH A NIMBUS 3

An April soaring holiday in the Appalachians earns four Canadian citizen records...

Peter Masak

Peter is currently working out of Houston, Texas on off-shore oil rigs for Schlumberger, a company which helps to find oil for other people. His work schedule frequently conflicts with soaring opportunities, and is a major factor in Peter's recent emphasis on record attempts as an outlet for his skills.

Peter began soaring at York in 1974, and in '76 earned the CP Air award for best power pilot trained by the Air Cadets. He graduated from the University of Waterloo in mechanical engineering in '81. He has owned a Mü13, an HP-18, and an ASW-20 before getting a half share in a Nimbus III.

Peter is actively pursuing some long cross-country flights, such as the world triangle distance record, and is in competition with Brian Milner, Tom Knauff, and Karl Striedieck for a planned 1382.5 km triangle using the ridges over which his recent Canadian records were set. A long term goal is to earn a spot on the world contest team.

500 km out and return — April 19

Ridge Soaring, Penn. to Seneca Rock, Va. and return.

Originally, Tom Knauff of Ridge Soaring and I had intended to team fly a large triangle. The weather was rather peculiar, since a warm front had moved through and stationed itself to the northeast, leaving prevailing westerly winds in the area. An almost stationary cold front, which had the "real" weather behind it that we were looking for, remained a frustrating distance away to the west with no prospect of movement.

We were ready to go by nine that morning, but since a large area of overcast moved in, the weather looked rather dismal. We sat and waited and brooded long enough to realize that all hope for a long triangle had evaporated. Tom opted out, saying that he wanted to see some improvement in the weather before committing. Despite this, Flight Service was still forecasting good conditions to the south. This seemed rather unbelievable, since the entire sky looked like it might rain at any minute. The predicted wind direction was a bit too far off the ideal for the ridge to be working well locally, and everyone at the field resigned themselves to the fact that there was no prospect of long cross-country.

I optimistically predicted that the ridge was probably working south of the kink at Tyrone only 20 miles south, and finally resolved to go for an easy 500 km out and return to Seneca Rock, Virginia. The route to the turnpoint and back is easy to navigate, but requires crossing four major gaps, including the dreaded Keyser Knobblies. I had already flown the route several days before at 122 km/h, but wished to improve my speed and really put a lid on the record.

Two days before, with encouragement from Karl Striedieck but against Tom Knauff's advice, I had made a 6 am start on a world record triangle distance attempt in marginal conditions, and ended up having to abandon the flight and sheepishly return to the field. After this incident, most of the glider pilots around who had lost sleep helping me on this attempt were starting to brand me as the "eternal optimist" and place my weather forecasts back in the ranks of the bush-leagueurs.

As a result, at noon I was the only sailplane pilot to take off. Bob Tawse was already in the air with his PIK-20E motorglider, and was reporting workable ridge lift. After release, I immediately proceeded southbound into terrible looking overcast skies and dove for the ridge. A couple of hundred feet above it, I felt more turbulence and was relieved to see the vario move back to up.

By Tyrone, I passed under Bob and pressed onward at 120 knots. A few turns in a con-

venient thermal at Altoona allowed for a quick trip across the first gap. Back on the ridge again, I pressed forward into a clearing sky and could see several lenticulars near the plateau 15 miles upwind. Moving out upwind off the ridge, I luckily connected with a secondary or tertiary, and elected to briefly stop at the location where the wave lift was obviously strong. A fast climb to 6000 feet was enough to get across the next gap, so I departed the very localized wave area and pressed the stick forward for a quick transition across the gap. From there, the ridge to Cumberland was an easy trip again at 110-120 knots. At Cumberland, I caught a thermal and speculated on the best means of crossing the very rough terrain ahead. I could almost imagine my partner reminding me not to land out in the Nimbus, so I continued my thermal climb to the cloudbase at about 5500 msl. This was enough altitude to glide clear across the Knobblies to Scherr, where there are no landing fields, but normally good ridge lift. I descended on a southbound course and arrived at the ridge where it comes to a point, with two low ridges running back behind me to the north, and a single large mountain ridge ahead to the south. Here were a few heart-throbbing moments while the sailplane continued to descend below the ridgetop. As I rounded the bend, the vario ever so slowly worked its way over zero and we started to climb up the face of the mountain. It wasn't pleasant to be floating along at a seemingly standstill 60 kts while I nurtured the heavily laden 1650 lb Nimbus back up into friendlier air. I resolved to climb up off the mountain as soon as the first thermal came along, and we did just that at the strikingly beautiful Hopewell Gap near Petersburg, West Virginia. A very fast climb to cloudbase was enough to reach the turnpoint 20 miles ahead.

My elapsed time to this point was about two hours, which was not bad, so three turnpoint shots of my turnpoint near Seneca Rock seemed like a good idea. Northbound again, I decided that there appeared to be enough crosswind for the ridge to work, and again dropped down near the crest to try to improve my speed. Nice cumulus were popping everywhere, and the Nimbus and I just bombed along running a combination of rotor lift, ridge, and occasional thermals.

As Altoona loomed in the distance, it was apparent that a large storm was moving into the locale near the northern end of the ridge. I called ahead on the radio to try and get a weather report on the conditions. It seemed conceivable that my record was evaporat-

500 km triangle — April 20

Ridge Soaring to Clearview, Maryland and Cumberland, Maryland.

Alan Sands, Tom Knauff, and I decided to team fly this record. We thermalled together before the start and attempted to start together as well, but we had some trouble getting close to one another. We tried to go through the gate with a racehorse type start, but Alan misread his altimeter and went through a 1000 feet too low. As a result, he was behind from the start and never caught up to Tom and I.

On the first leg, thermals were excellent and the team flying helped us on to the turnpoint 120 miles away in only an hour. Unfortunately the last twenty miles leading into the turn at Clearview airport, Maryland were completely blue and decidedly murky. Prospects for a continued fast flight were dismal, and we shifted gears downward to avoid putting ourselves on the ground. I rounded the turn slightly ahead of Tom and slowed to 70 knots, anticipating a long glide back to the hilly country to the west. It was reassuring to chat with several friends flying from nearby Woodbine and the Mid-Atlantic Soaring Association, who confirmed that there was still some lift in the murk. A few minutes of flailing in spotty lift allowed Tom to catch up and pass me. We alternated in finding narrow uncertain lift and just continued on into the wind about 3000 ft over the ground. Finally, 10 miles downwind of the eastern flank of the hill country, we picked up more organized lift and climbed back up.

Meanwhile, Alan Sands was about 20 miles behind in his Nimbus III, and was reporting trouble finding the turnpoint as we had, and speculated that he might have passed it. Fortunately it appeared in the murk and Alan continued on to a thermal marked by a scratching Club Astir. Alan took great delight in climbing up past the Astir, and in his own words, "just left him for dead", in spite of carrying his super heavy water ballast load of 800 lbs! We need these kind of experiences occasionally to help justify to ourselves why we paid so much money for a thing that doesn't even have an engine.

Meanwhile Tom and I were forging ahead into the wind, but it seemed every thermal we tried was disorganized and chopped. Perhaps moderate wave action was interfering with the thermals. Tom got ahead of me and we became separated from this point on in the flight. We took slightly different courses to the second turnpoint at Cumberland, and as luck would have it, I arrived there first. Our average speed had slowed considerably however on the upwind leg, and it seemed that all prospects for the US record at least had evaporated. Considering the wind velocity at altitude, it seemed a sure thing that the ridge ought to be working, and I pushed the stick forward to bring me down faster.

I planned on intersecting the ridge just north of the Bedford gap, and as I sunk down, a Libelle pilot to the north reported,

"You're crazy to try the ridge - I'm down on the trees right now and can barely stay up!" I responded instantly by reefing on the stick and zoomed back up. A convenient thermal offered itself, and I climbed. With enough height to barely cross the Altoona gap to the north, I steered the Nimbus across it and around into the bowl area where a rapidly developing wisp was beckoning. From a couple of hundred feet off the ridge top, the thermal sucked us up at a steady 7 knots, my best climb for the day. I topped out at 7000 feet, enough for an easy final glide back to Ridge Soaring and a new Canadian record at 122 km/h. Tom arrived shortly thereafter, having made up a lot of time by running the back ridge up from Bedford. Alan came in within minutes of Tom, having aborted the tough second leg and wisely chosen to avoid an off-field landing. We were all excited at our speeds, and thought that, with a little better luck on the second leg, we had a real shot at the US record.

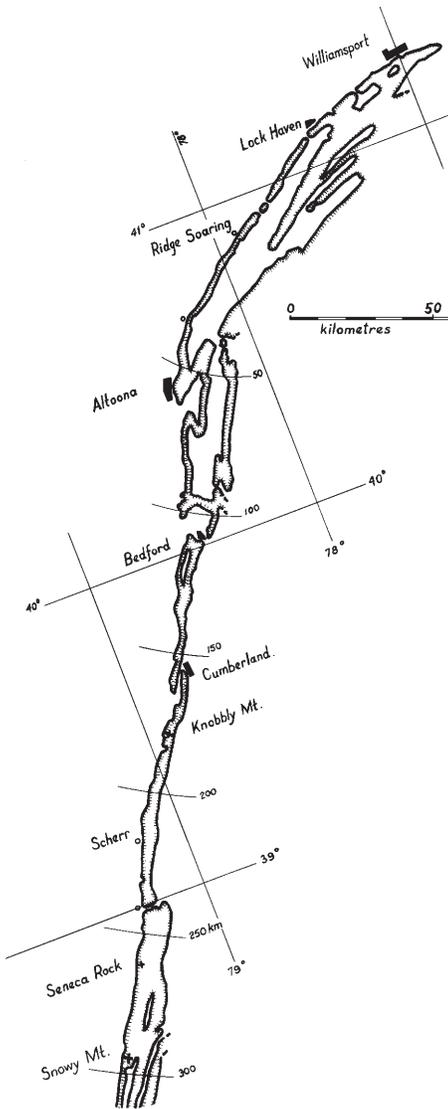
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300 km Triangle — April 22

Kettle Dam to Ickesburg to Nisbet, all in Penn. (Ridge soaring along one leg)

After an unsuccessful try the previous day to redo the 500 km triangle at a higher speed, Alan Sands and I looked for a less stressful task on what appeared to be another great soaring day. Light westerly winds, and a cumulus base estimated to be almost 11,000 feet, promised fantastic local conditions. While Tom was off on another 500 km triangle attempt, Alan and I prepared for a 300 km triangle. The triangle we had chosen took advantage of the ridge on one leg with thermalling required for the other two. Unfortunately, with the rather light 10 knot westerly winds, the prospect of running the ridge looked dismal.

We took off at 1 o'clock and started racehorse style by 1:30. I dashed forward at 120 knots, hoping to make it to the first turnpoint 30 miles away in a straight glide from start gate altitude. I was counting on reaching the ridge at the Altoona bowl, where getting a thermal is always a sure thing. Alan was a little more conservative, and held back somewhat, not willing to commit to having to run the ridge in the light winds. I reached ridge top level at Tyrone and rounded the bend in the ridge while gradually dropping my speed to sustain in the very marginal lift. Just past the large high tension wires at the Altoona bowl, I picked up a light thermal and gradually worked up from the tree tops in weak 2 or 3 knot lift. Meanwhile, Alan arrived and wheeled into the lift about a hundred feet below. I was disappointed in the lift, and with about 1000 feet off the ridgetop, set off for the Kettle Reservoir turnpoint about 3 miles away. I snapped my turnpoint shot and dashed off downwind to what appeared to be a young boiling cumulus only a few miles away. Sure enough, I eased into a 6 knot climb, and immediately called Alan, recommending that he join me. By the time he arrived, I was 1500 feet above him



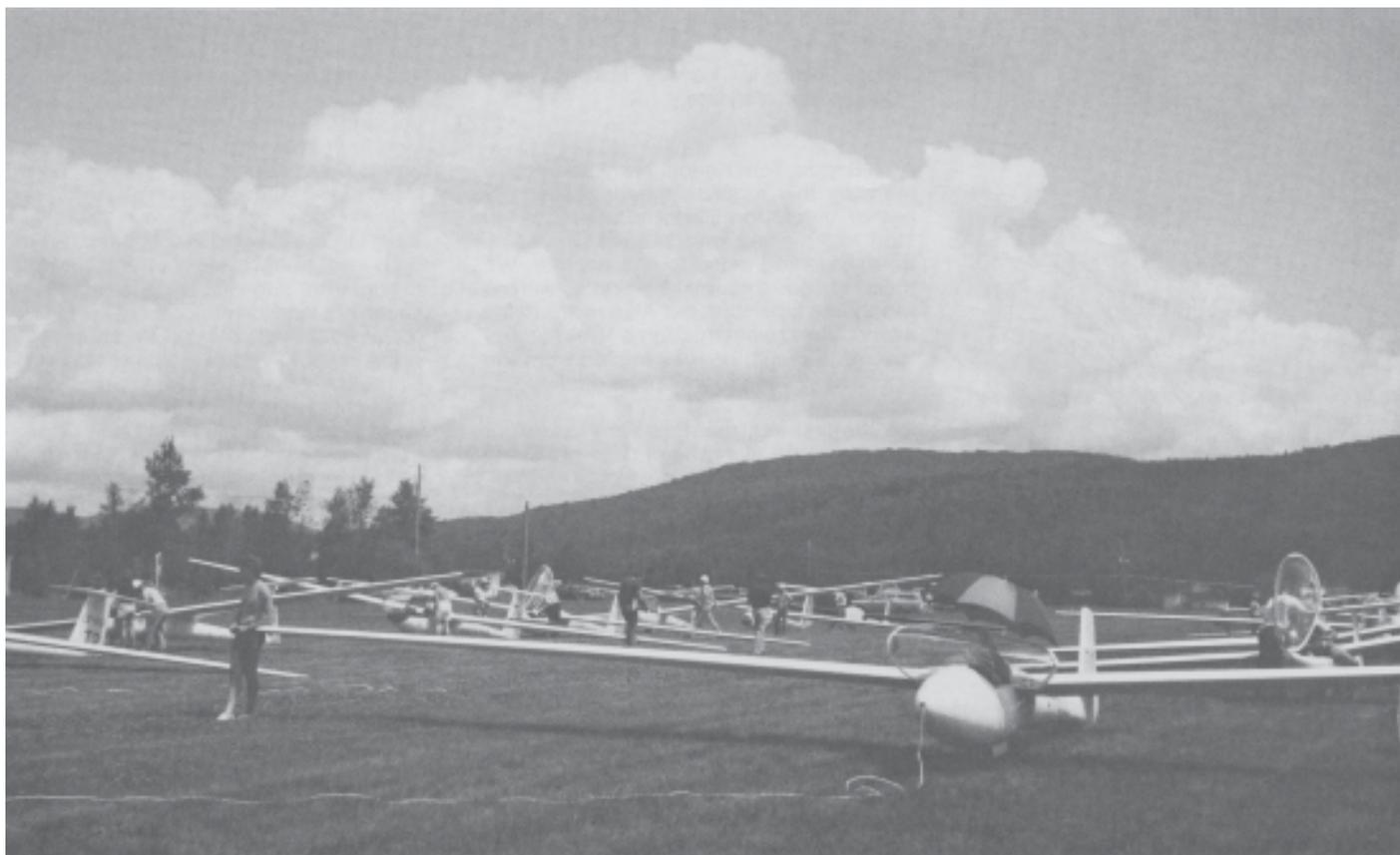
The soaring super-highway — a very well polished Appalachian mountain ridge along which world records are still available.

ing as the storm moved in between me and Ridge Soaring about 30 miles away.

An RHJ-9 pilot reported that he could maintain altitude in the rain, so I pressed on at maneuvering speed into the ominous conditions. Rain pelted the canopy (which sounded like someone was throwing gravel at me), but I was reassured by the sight of a Twin Astir also pressing north into the rain. I slipped well underneath him and onwards towards home, and as I passed Eagle Field, radioed in to Ridge Soaring to expect me in a few minutes. At the field Doris answered, and valiantly waited out in the rain until I appeared to get my finish time. After landing, we calculated my speed, and I was thrilled to discover that I had beaten both the US and Canadian national records (speed 144.3 km/h)! A nice beginning to a soaring vacation.

• • • •

continued on page 15



Alex Krieger

ST-RAYMOND 1985

Denis Gauvin
CVVQ

Le Club de Vol-à-Voile de Québec était l'hôte cette année du Championnat Canadien. L'organisation s'était mise en branle il y a déjà plus d'un an, et il restait quelques travaux de dernière minute lorsque les premiers compétiteurs sont arrivés. Vingt-quatre pilotes ont su trouver leur chemin jusqu'à St-Raymond, auxquels se sont ajoutés trois membres de notre club. Nous retrouvions donc 17 planeurs en classe 15 m, et neuf en classe Standard.

Chemin faisant, les pilotes de l'extérieur ont connu des craintes en ce qui a trait à la possibilité d'atterrissage en campagne. Cependant, ceux qui ont pu voler le samedi 13 juillet sont revenus rassurés qu'il existait vraiment des champs "atterrissables".

Comme toute compétition qui se respecte, il a plu durant les deux jours de pratique officiels, et tout le monde s'est retrouvé à la réunion du mardi matin, 16 juillet, au hangar des avions aménagé pour la circonstance.

JOUR 1 L'épreuve était assez courte, étant donné que plusieurs pilotes en étaient à leur premier vol dans la région, et que la météo n'était pas extraordinaire. Malgré toute l'effervescence due à une première journée, les remorquages se sont bien passés, et bientôt tous les pilotes étaient sur le parcours.

Tous sauf un, puisque Walter Herten décidait de se retirer de la course pour des raisons de santé. Il devait par la suite faire montré d'un grand esprit sportif, en demeurant jusqu'à la fin des compéti-

The Quebec Soaring Club hosted the contest this year. The organizing committee starting in autumn 1984 with planning and preparatory work, but still members were busy when the competitors began arriving on the site. Twenty-four pilots arrived from places between Montreal and Edmonton and three pilots from the host club participated. In all 17 sailplanes competed in the 15m class, three of them handicapped Open class ships (Tinbus and two Kestrel 19s), and nine sailplanes flew in the Standard class.

Most of the arriving pilots had not previously flown at St-Raymond and after having travelled through the region between the St-Lawrence River and the Laurentide mountains expressed doubt concerning availability of outlanding fields. However those who could fly on Saturday July 13 got a look from above and seemed reassured. This turned out to be a certain advantage since the scheduled official practice days were rained out.

So the beginning did not appear promising and everybody had his doubts about the first contest day. However, Tuesday, July 15, Day 1 of the contest brought ideal weather, and pilots, crews, and officials met Tuesday morning for the official pilots' meeting in excellent spirits in the towplane hangar transformed for the occasion into briefing room.

DAY 1 The Task Committee set a short task since for several pilots this would be their first flight in the region, and the forecast did not promise anything outstanding. The organizers were slightly nervous, but all gliders were launched within 40 minutes by the six towplanes, and soon all competitors were off and away. All competitors, but one: Walter Herten had to withdraw

tions, et en se rendant très utile, à la barrière de départ, et pour aller récupérer des planeurs "aux vaches". Un gros merci donc à Walter et sa famille.

Les conditions rencontrées durant cette journée étaient assez près des prévisions, à l'exception d'orages qui se sont avancés plus tôt que prévu et qui sont venus obscurcir et arroser les points de virage. Les premiers rendus au point de virage ont pu terminer le parcours, les autres se faisant rabattre au sol par la pluie.

John Firth en 15m et Dave Webb en Standard se sont moqués de l'épreuve, la complétant en environ une heure 15 minutes. Malheureusement, en raison du nombre de vaches, la journée fut sérieusement dévaluée, ne rapportant que 306 et 495 points.

La journée s'est terminée par un party de hamburgers, et les conversations enflammées démontraient que le championnat était en cours.

JOUR 2 Journée magnifique, plafond prévu de 5000 pieds, le trajet sera plus sérieux qu'hier. Le parcours amène les compétiteurs au-dessus des Laurentides, et les ramène près du fleuve au retour. À part quelques moments délicats la majorité des pilotes complèteront l'épreuve, et les arrivées en petits groupes feront la joie des spectateurs. Les deux Kestrels traversent la ligne d'arrivée nez-à-nez, mais Firth est le plus rapide, à 97.5 km/h. Mike Apps a si bien calculé sa finale que son planeur traverse la ligne d'arrivée en roulant et s'immobilise quelques pieds plus loin. John Firth consolide sa première place, pendant qu'en classe Standard, Jörg Stieber remporte l'épreuve, qui sera dévaluée encore aujourd'hui.

JOUR 3 Les conditions sont excellentes, et les distances s'allongent. Le polygone permet de garder les planeurs à des distances raisonnables du terrain, et bientôt la course est engagée. Un peu de stratégie durant les décollages, et pour passer la barrière de départ. Le parcours est assez long, et nous devrons encore survoler les Laurentides, surtout à l'ouest de Shawinigan, où l'effet du lac St-Pierre se fait sentir sérieusement. Cet effet ira en s'agrandissant plus tard en journée, et les retardataires s'y feront prendre. En 15m, Mike Apps répète sa maintenant célèbre finale en roulant, et s'empare de la première place, 0.1 km/h plus rapide qu'Ulli Werneburg qui recevra 999 points pour la journée. En Standard, Jörg Stieber remporte la journée, ce qui lui permet de prendre la première position au classement général.

JOUR 4 Après la pluie d'hier, les conditions ne sont pas très fortes, et les épreuves petites. Le ciel est passablement couvert les ascendances pas forts, mais John Firth se permet quand même de rouler le circuit à 82.5 km/h, presque 10 km/h de plus que John Seymour, notre visiteur des USA. Avec ses 1000 points pour la journée, John se reprend un peu pour la mauvaise fortune du Jour 3, un atterrissage en campagne coûteux. Ulli Werneburg, grâce à une quatrième place, se glisse au premier rang du classement général. En Standard, André Pépin gagne la journée et une deuxième place pour Dave Webb lui permet de reprendre la première position devant Jörg qui est allé vaches aujourd'hui.

Après quatre jours de compétitions, sur un total possible de cinq la course est réellement engagée. Les concurrents en tête sont assez rapprochés, et les conditions atmosphériques sont telles que les vitesses ne dépassent pas beaucoup les 60 km/h. Il faut donc être patient, et ne pas risquer trop.

La soirée se termine avec une fesse de bœuf B-B-Q, arrosée d'un bon petit vin, et tout le monde est heureux.

JOUR 5 Les prévisions météorologiques annonçaient un ennuagement vers 17 heures venant de l'ouest, d'où l'utilisation d'un polygone prenant la forme de deux aller-retour, avec l'idée que les spectateurs présents à l'aéroport pourraient apercevoir les planeurs qui viendront prendre leur photo. Malheureusement, le ciel nous est tombé sur la tête vers 1430, avec pour résultat 25 vaches. Les routes du comté de Portneuf fourmillaient de roulottes, dont huit se retrouvèrent à l'aéroport du Lac-à-la Tortue, qui fut des lors rebaptisé le Lac-à-la-Torture.

LES EPREUVES • THE TASKS

Day/Jour 1 Juillet 15 July
15m — Lac-à-la-Tortue (143.2 km)
Std — St-Tite (123.8 km)

Day/Jour 2 Juillet 17 July
15m △ Lac Maskinongé, Trois Rivières (282.4 km)
Std △ St-Paulin, Trois Rivières (225.0 km)

Day/Jour 3 Juillet 18 July
15m □ Lac Maskinongé, Ste-Thècle, St-Boniface de Shawinigan (355.4 km)
Std □ St-Paulin, St-Ubald, St-Boniface de Shawinigan (317.6 km)

Day/Jour 4 Juillet 20 July
15m — St-Tite (123.8 km)
Std △ St-Adelphe, St-Casimir (115.3 km)

Day/Jour 5 Juillet 21 July
15m □ St. Paulin, St-Raymond, Ste-Thècle (327.2 km)
Std □ St. Boniface de Shawinigan, St-Raymond St-Ubald (261.6 km)

Day/Jour 6 Juillet 23 July
15m △ Ste-Thècle, Trois Rivières (198.1 km)
Std △ Ste-Thècle, La Pérade (139.2 km)

Day/Jour 7 Juillet 24 July
15m △ St-Tite, Ste-Thècle (127.7 km)
Std △ St-Tite, Ste-Thècle (127.7 km)

from the competition since he did not feel well enough. However he demonstrated sportsmanship at its best staying to the end of the competition and rendering important assistance at the start gate and to several retrieve crews. Our best thanks to Walter and family.

The weather forecast for this day proved to be quite correct, except for thunderstorms which developed earlier than expected and created problems with visibility and rain at the turnpoints. The first pilots to reach turnpoints managed to complete the course, the others being forced down by rain.

John Firth in the 15m class and Dave Webb in Standard had no problems with the task, coming back after about 1:15 hours. However, due to many pilots landing out, the day was devalued considerably, down to 306 and 495 points respectively.

A hamburger party, held in the same towplane hangar, ended the day. The passionate discussions of flying tactics and strategy, planned and accomplished, were proof of the contest having started in earnest.

DAY 2 A brilliant day with cloudbase forecast at 5000 feet justifies a more challenging task. The race will be taking the pilots over the Laurentides on the outgoing leg and near the St-Lawrence on the return leg. As usual there are moments of suspense, but the majority of pilots completed the course in both classes. The arrival of the sailplanes is a delight for the spectators. The Kestrels crossed the line within seconds of each other, KQ just a bit higher than JF, however John Firth is the faster with 97.5 km/h. Mike Apps has the best final glide calculation — he crosses the finish line while rolling under his own momentum and comes to a stop within 100 feet.

John Firth's grasp of first place overall tightens, while Jörg Stieber, winner of the day in the Standard class, finds himself within 49 points of the leader, Dave Webb, notwithstanding devaluation of the day to 711 points.

DAY 3 Conditions are super. The distances grow longer. Polygonal tasks keep the sailplanes within reasonable distance of the field. The start is preceded by some tactics before take-off and while crossing the start gate. It is a long task — the Laurentides

Ed Hollestelle, qui avait perdu sept places hier, à cause d'une malencontreuse vache, se reprend en rapportant la journée, qui sera dévaluée. Ulli Werneburg ajoute quelques points à son avance. Dave Webb verra ses efforts récompensés pour remporter cette journée, et consolider son avance en classe Standard.

JOUR 6 La météorologie disait qu'il n'y aurait pas d'orages, aujourd'hui. Pour plusieurs pilotes, une bonne partie du parcours s'est effectué dans, ou près de la pluie. Certains ont parlé du vol le plus mouillé de leur vie.

La journée d'hier avait vu partir deux compétiteurs pour des raisons d'urgence, et tous les pilotes auraient bien aimé que Jock Proudfoot et Jörg Stieber soient des nôtres jusqu'à la fin. Jörg faisait une belle lutte à Dave Webb depuis le début.

La stratégie des pilotes commence à faire des victimes. Prendre un remorquage tôt, ou tard, partir tôt, partir tard? La guerre psychologique s'amplifie. Lors des décollages, un orage surprend ceux qui avaient rejoint l'arrière de la grille de départ. Wilf Krueger est furieux contre un officiel, Stan Janicek est complètement découragé: il a du revenir atterrir, ses bouchons de ballast ayant été aspirés et faisant office de "petits aérofrees." "Il y avait du 8 nœuds, c'est mort, c'est fini". Après un autre bref orage, les derniers seront remorqués, et Stan et Wilf arriveront premier et deuxième en 15m. Cette journée ayant encore été dévaluée, Ulli conserve la tête du peloton.

En Standard, Jim Oke devance Dave Webb par moins de 1 km/h, durant ce qui se révélera être la seule journée de 1000 points pour la classe Standard. Dave conserve son premier rang cumulatif, et Jim prend la deuxième position.

Party de hot-dog en soirée. Déjà six jours de compétition officiels, et encore une possibilité de deux. Les pilotes sont satisfaits et en ont long à raconter.

JOUR 7 Conditions très difficiles, vent fort du S-O; malgré une courte épreuve, personne ne pourra compléter le parcours, seul John Seymour parvenant à photographier le premier point de virage. Il sera gagnant en 15m, Ulli sera troisième et conservera le premier rang.

Quelques pilotes auront le plaisir de voler dans l'"onde thermique", mais Yvon Saucier, sur Pilatus, utilisera cette onde à son maximum, et remportera la journée en classe Standard, avec 56 km, dont une vingtaine dans l'onde.

Cette septième journée devait se révéler la dernière du championnat. Le jeudi 25 était une répétition du mercredi 24, avec des vents très forts, et un plafond assez bas.

Les compétiteurs ont donc pu préparer leur équipement pour le voyage de retour du lendemain, et se faire une toilette pour le banquet de fermeture.

Une centaine de personnes étaient présentes au banquet, durant lequel furent remis les trophées. Nos plus sincères félicitations aux gagnants, et à tous les compétiteurs, à leur équipe au sol, aux officiels et à tous ceux qui ont participé de près ou de loin à l'organisation du championnat. La "mère nature" a été de notre bord, car avec sept jours de compétition sur une possibilité de dix, le Championnat '85 a connu une météo exceptionnelle.

Je suis mal placé pour faire des commentaires concernant l'organisation, mais à en juger par les sourires lors du banquet de fermeture, je crois que le Club de Vol-à-Voile de Québec a su offrir à ses visiteurs des facilités et une organisation qui ont rendu leur séjour agréable.

Je termine en remerciant particulièrement Gerry et Evelyn Nye, qui ont opéré la barrière de départ et d'arrivée durant toute la compétition, ainsi que le Club des Outardes, le Club de Montréal, SOSA ainsi que le Club Gatineau, qui nous ont fourni chacun un avion remorqueur et un pilote.

Le CVV Québec remercie tous ceux qui ont travaillé à la préparation des Championnats '85 et vous dit à tous: à la prochaine. □

have to be crossed west of Shawinigan where the lake effect of Lac St-Pierre has to be avoided. This lake effect intensifies through the afternoon and latecomers bear the consequences. Mike Apps in the 15m class repeats his rolling final and places first for the day and overall. His speed was 0.1 km/h better than Ulli Werneburg's, good for a one point advantage, 1000 to 999!

The day in Standard class is won by Jörg Stieber, who also becomes first in overall standing, eight points in front of Dave Webb.

DAY 4 After Friday's rain the conditions are not strong and the tasks are modest. The sky is mostly overcast, the lift only acceptable. Nevertheless, John Firth flies the task at 82.5 km/h, nearly 10 km/h faster than second place John Seymour, our visitor from the USA. The 1000 points for the day compensate John for his misfortune on Day 3, when he had to land out, losing precious points. Ulli's fourth place enables him to remain first overall, with a precarious 53 point lead over second place Mike Apps.

Standard class is won by André Pépin, Dave Webb is second and retakes the overall lead, since Jörg Stieber was unlucky and had to land out.

Four contest days out of five possible is a real encouragement for the organizers, especially since the championship is now official. The race is really on: in the 15m class first and third place are separated by 171 points, but in the Standard Dave Webb has built a lead of 427. The weather is good but not outstanding and speeds do not often exceed 60 km/h. The pilots have to remain patient and not take too many chances. The day is finished off with a beef BBQ, and the food and wine keep everyone happy.

DAY 5 The forecast said clouding over by 1700 hours from the west, and the tasks chosen were polygons in form of two goal and returns. Since it was Sunday, many spectators were expected at the field and they would be able to observe the gliders overflying the aerodrome and taking their turnpoint photos. Unfortunately, clouds and rain came just a bit too early and made every contestant land out. Soon the Portneuf County roads were jammed by 25 trailers of which eight made a rendezvous at the Lac-à-la Tortue (Turtle Lake) airport, forthwith renamed Lac-à-la-Torture (Torture Lake).

Ed Hollestelle, being thrown back seven places on the previous day due to an ill-starred outlanding, wins the day, though it is devalued to 306 points. Ulli Werneburg, second for the day, remains first overall. Dave Webb wins the day in the Standard class and improves his overall lead.

DAY 6 The forecast claimed there would be no thunderstorms. At the end of the day everybody was searching for those involved in forecasting. There were plenty of thunderstorms, there was plenty of rain; pilots were in it or next to it, and some claimed this was the wettest flight of their life.

The day before, two competitors had to withdraw and leave due to unforeseen circumstances. All pilots would have wished to see Jock Proudfoot and Jörg Stieber compete to the end. Jörg gave Dave Webb a real fight and we all hope to see them both in the next contest.

Pilot's tactics and strategy begin to take their toll. Take off sooner or later, do the start sooner or later? The psychological warfare brain centre works overtime. During take-off a thunderstorm with a vicious squall overtakes those pilots who moved to the back of the line. Everybody is tense. Wilf Krueger is upset because of a questionable line boss call. Stan Janicek has to land back after having had 8 knot lift. He is completely discouraged, "The air is dead, the day is finished." After another small thunderstorm both take off, and Stan and Wilf get first and second places in the 15m class. The day is devalued to 725 points, and Ulli remains first overall, even though he has yet to win a day.

Standard class is won by Jim Oke, who is 0.9 km/h faster than Dave Webb. This win is good for 1000 points, the only time for the Standard ships in this contest. Dave remains first overall, while Jim takes over second place.

A well attended hot-dog party shows everybody, pilots and organizers, in excellent spirits. Six contest days are official and two more possible. Everybody seems completely satisfied and have much to tell everybody else.

DAY 7

Conditions are difficult, the wind blows strongly from the south-west. After waiting for high cloud to dissipate, the 15m task is revised to be identical to the Standard class. After the sniffer reports 4-5 kts lift the decision to take off is taken. However the wind increases during the afternoon and the short distance notwithstanding, no pilot completes the task. Only John Seymour reaches and photographs the first turnpoint, and wins the 15m class for the day. Ulli Werneburg is third and conserves the overall lead.

Several pilots, including John Seymour and Bob Carlson, enjoy "thermal wave" soaring; but only Yvon Saucier, flying the Pilatus, makes maximum use of the wave and wins the Standard class with 56 km, 20 km of which was due to wave lift.

This seventh day becomes the last day of the competition. Thursday, July 25, is a repetition of the conditions of the previous day, with even stronger winds and low ceiling. For safety reasons, the task committee cancels the day and the competitors start preparing for the return trip, loading the equipment and freshening up for the closing banquet.

A good hundred persons were in attendance at the banquet which saw medals and trophies presented to the winners and the second and third runner-up. Our sincere congratulations go to the winners, to competitors and their crews, to the officials and all who have participated in organizing and running this contest. For once Mother Nature was on our side, and with seven contest days out of ten possible, the '85 Championship has been a true test for the participants and was blessed with an enviable lack of damage.

I am in no position to comment on the quality of organization; but if we are to judge by the smiles of all contestants at the banquet it would seem to indicate that the Quebec Soaring Club has succeeded in presenting to its visitors contest facilities and an organization which made their stay as pleasant as possible.

I would like to conclude with a particular word of thanks to Gerry and Evelyn Nye, who operated both the starting and finish gate during all the competition, to George Dunbar who came from Calgary to score, and also the clubs from Outardes, Montreal, SOSA and Gatineau who provided us with towplanes and towpilots for the duration of the contest.

The Club de Vol-à-Voile de Québec extends its thanks and appreciation to all those who helped to prepare and run the '85 National Championships and says to everyone, "See you next time in St-Raymond."

English text by Alex Krieger

15 METRE CLASS	Day/Jour 1		Day/Jour 2		Day/Jour 3		Day/Jour 4		Day/Jour 5		Day/Jour 6		Day/Jour 7						
	kph	pts pos	kph	pts pos	kph	pts pos	kph	pts pos	kph	pts pos	kph	pts pos	kph	pts pos					
1 Ulli Werneburg ASW-20	(80.0)	137	8	90.7	978	2	77.7	999	2	(115.1)	211	2	56.9	578	5	(54.8)	174	3	
2 Wilf Krueger ASW-20B	(79.8)	137	8	87.6	p886	3	73.3	955	5	(71.0)	113	8	81.6	693	2	(52.5)	163	6	
3 Mike Apps ASW-20FP	107.4	302	2	81.3	852	6	77.8	1000	1	(71.0)	113	8	52.1	577	6	(39.5)	98	9	
4 Walter Pille Kestrel	73.3	246	5	84.5	836	7	(344.1)	634	10	(114.6)	197	4	79.6	664	3	(57.1)	171	5	
5 Stan Janicek Timbus	(80.0)	128	13	77.1	729	10	74.3	917	6	(107.8)	180	6	94.6	725	1	(43.7)	104	8	
6 Ed Hollestelle ASW-20	82.9	265	4	85.1	902	4	75.0	972	3	(157.6)	306	1	65.0	616	4	(47.1)	136	7	
7 John Firth Kestrel	116.3	306	1	97.5	1000	1	(265.3)	p389	16	(71.0)	105	15	(115.8)	320	10	(59.7)	183	2	
8 John Seymour ASW-20B	98.7	289	3	(12.6)	25	16	74.0	963	4	(114.6)	210	3	56.2	577	6	(63.7)	219	1	
9 Chris Wilson Mosquito	(115.1)	187	6	78.6	817	9	(327.3)	637	8	(71.0)	113	8	(170.0)	495	9	(6.9)	0	10	
10 Nick Bonnière Pik-20B	(77.9)	134	12	79.2	825	8	60.0	824	7	(78.0)	129	7	(107.7)	314	11	(0.0)	0	10	
11 Bob Gairns ASW-20	(71.6)	123	15	63.3	614	11	(245.0)	476	13	(108.2)	196	5	(16.8)	49	15	(0.0)	0	10	
12 Robert DiPietro ASW-20B	(80.0)	137	8	84.9	900	5	(293.5)	571	11	(0.0)	0	17	(107.7)	314	11	(54.8)	174	3	
13 Bryce Gormley Pik-20B	(37.5)	64	17	(216.7)	422	12	(327.3)	637	8	(71.0)	113	8	(2.6)	8	16	(0.0)	0	10	
14 Colin Bantin RS-15	(80.0)	137	8	(29.3)	57	13	(255.8)	497	12	(71.0)	113	8	(107.7)	314	11	(0.0)	0	10	
15 Denis Gauvin Lark-29	(74.8)	128	13	(11.3)	22	17	(212.6)	413	15	(71.0)	113	8	(173.1)	504	8	(0.0)	0	10	
16 Bob Carlson Pik-20D	(71.6)	123	15	(27.7)	52	14	(71.6)	139	17	(61.6)	92	16	(91.7)	267	14	(0.0)	0	10	
17 Jock Proudfoot ASW-20	(82.0)	141	7	(26.0)	51	15	(245.0)	476	13	(71.0)	113	8	DNC	0	17	DNC	0	10	
STANDARD CLASS	()	values in brackets are distances in kilometres																	
1 Dave Webb DG-300	103.4	495	1	78.6	632	2	68.6	876	3	(143.3)	267	1	64.4	985	2	(54.8)	194	2	
2 Jim Oke Std. Cirrus	54.3	289	6	(12.2)	22	7	70.5	891	2	(99.1)	171	2	65.3	1000	1	(48.1)	157	3	
3 Jörg Stieber LS-4	77.6	367	2	87.9	711	1	76.1	933	1	(91.4)	154	3	DNC	0	9	DNC	0	9	
4 Larry Springford Libelle	60.6	289	6	71.1	570	3	(246.0)	542	4	(63.8)	95	4	(107.9)	412	7	(0.0)	0	6	
5 André Pepin Jantar Std	(47.0)	110	9	71.0	568	4	(226.9)	500	5	(63.8)	85	4	(19.0)	73	8	(39.5)	109	5	
6 Brian Milner Jantar Std	71.0	334	3	66.7	532	5	(114.3)	318	7	(58.9)	84	6	54.3	803	3	(40.7)	115	4	
7 Paul Thompson Std Cirrus	67.0	314	5	(100.8)	186	6	(207.2)	457	6	(58.9)	84	6	51.4	750	4	(11.1)	0	6	
8 Yvon Saucier Pilatus	70.5	331	4	(11.3)	21	8	(135.8)	299	8	(0.0)	0	9	34.8	531	6	(55.9)	200	1	
9 Robert Binette Libelle	(105.3)	246	8	(0.0)	0	9	(71.0)	156	9	(37.6)	38	8	45.4	644	5	(0.0)	0	6	

Bumble and the Gremlins

Eric Newsome

Part 8 The Case of the Knave in Wave

Bumble had always wanted to fly the wave. His fantasies were of soaring higher than the eagles and surveying, lord-like, vast rolls of mountain ranges flattened from the perspective of his towering height. Besides, it was easy. Nothing to do but find the great, smooth currents riding in the lee of the mountains as the deflected air seeks its equilibrium, nose into wind and hover over one spot while the altimeter winds its message of gain. No doubt he had forgotten the gremlins, or perhaps had rashly assumed that they only inhabit the flatlands.

Take-off was fine, but once in the air the towplane seemed to be climbing strangely. As they circled, the peak of a small mountain flashed by the wing. Another circle and again the mountain flashed by, but it seemed to have grown. Round again and the mountain seemed higher still. The towplane was pointed up but going down! Vague memories of a previous experience trickled into his consciousness and he recalled a gremlin that had made his up go down. Gradually height was gained and the towplane left the airfield area and headed out towards a patch of wispy cloud.

That was when the *Rotor Rollers* made ready. Unbelieving, Bumble saw the wisp of cloud beginning to roll over and over. There was a terrific 'whump' and the towplane disappeared completely under his nose, seconds later he was craning upward trying to find it somewhere over his head. Bumble found his left wing dropping and then, before he could take any corrective action, he was tossed onto his other wing tip. Bumble started to sweat.

His control movements now resembled the actions of the famous horseman who galloped off in all directions at the same time. Whatever he did seemed to be of no avail, and for a panicky moment he wonders if the *Control-Crossers* had modified his control linkages. Through all this the *Bumble Beaters* had been rapping his head on



the canopy, floating his maps over his eyes and slapping his face with the oxygen mask which had started out draped negligently on his lap. He would have cheerfully released had he not peered over the side and discovered to his horror that all the landing fields had been replaced with vertical real estate and densely wooded valleys. Having no alternative, he hung on grimly.

Suddenly Bumble got the greatest shock of all — the motions ceased and there was nothing but a deadly silence. The towplane wings waggled and now he had no choice but to release and go. And still the eerie silence. Bumble looked at the variometer and it was pointing commandingly up. The Wave! He had found it! Sure it was easy.

The lift increased almost alarmingly as Bumble hurtled upward towards the clouds. The clouds! Now what? But no, there was a hole in which the sky gleamed blue. Caution forgotten, Bumble fixed his eyes on a spot on the ground over which he was hovering and climbed on between the cloudy walls.

He was still climbing when the gremlins darted in and made adjustments to the wave. All Bumble knew was that the light had suddenly gone out and round him was nothing but a blank wall of grey mist. Instruments! The turn and bank, was it switched on? The needle started to show a left turn. Good, it was working. But it didn't feel like a left turn but more like a steep turn to the right. The airspeed was winding up rapidly and Bumble hauled back on the stick. The airspeed fell off and kept falling. Bumble shuddered and heaved and Bumble, ignorant of what was happening and knowing only that he didn't like it very much, started his long spin to the hidden earth below...

With his glider spinning down in the cloud of a suddenly closed wave 'window', Bumble cowered back in his seat waiting for the crunch which must inevitably come. Where were the mountains? Which part of the cloud had the *Cloud Stuffers* turned into cumulo-granitus?

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LOW LOSS INSTRUCTING

PART 3 STALLS AND SPINS

Tony Hayes
Adapted from
Australian Gliding

tive which may be a major distraction but not visibly obvious as such. The pupil will also have had little, if any, experience of the glider rapidly gaining or losing speed, the controls will no longer appear to be responding the way the pupil expects them to. These factors combine, diverting attention away from the exercise at hand and therefore reduce the effectiveness of what is being taught. Inherent pressures on the pupil may also be compounded by the activity of the instructor. Unable to avoid environment pressures which force encapsulation of exercises, faced with the problem of picking up from previous instructors on exercises which have to spread over several flights, the instructor must adopt methods where pupil performance may be readily quantified.

Remorsefully, stalling and spinning solidify into primarily manipulative exercises which in simplistic terms translate as — 'if this pupil inadvertently enters a stall/spin, is he able to recover in an acceptable manner?' But is this the main objective of training in this area? Our initial objectives are to instill prevention, to ensure that the future pilot will instinctively retain control. On this prime safety base we may then build exposure to developed situations and recovery from them. Initially, stall and spin exercises should be entry, rather than recovery, exercises and be approached in that manner. Only by servicing the former adequately will we ever obtain a valid appraisal of the latter.

This series now moves into the practical applications of Low Loss Instructing. Four exercises have been selected as vehicles by which the underlying objectives of instructing may be seen at work. These are stalling (and by implication spinning), launch failures, running out of height in the circuit, and off-field landings.

Whilst they may appear to be quite different subjects, they have two features in common: they are the main contributing factors in the majority of glider accidents, and none of these exercises is normally experienced by the pupil in routine flying unless the instructor so chooses.

INSTRUCTING AND FLIGHT SAFETY

Flight safety is a state of mind which a pilot dons with the same ease and comfort as a pair of well-worn slippers and yet provides the protection of 2-inch armour plate. It is a direct product of what the pilot has learned from what he has been taught, how he has been taught, and what he has observed while being taught.

With most of the training syllabus the pupil will see constant repetitions of exercises under differing conditions because they are an integral part of every flight — launch, circuit, landing etc. — but with stalling and spinning, as with the other exercises in the remainder of this series, the pupil will only see what the instructor deliberately prepares for him. Vital components of flight safety knowledge in areas which are known killers will depend entirely on what a pupil will observe, interpret and remember from only a handful of flights.

If the pupil only has experience of the glider being stalled from 20-30 degree climbs, then in his mind that is what a stall is, that is how it happens. Should we then wonder at the same person later losing a single-seater on a cable break recovery? For although the attitude has been corrected and looks nothing like the 'stall', as soon as the pilot banks, the increased wing loading and low speed will take control of the glider from him.

If the pupil only has experience of the glider spinning with the instructor doing the entry 'because this glider does not spin very well and we really must be spinning,' then certainly the pupil will retain a clear impression of the importance of spinning but also

that spins only happen with difficulty. Should we then wonder at that pilot failing to hear and feel the 'alarm bells' as later he is distracted attempting to save a circuit past saving, slowing down to stretch the glide, and finding the wind gradient waiting like some invisible monster from a fairy tale?

Doom and gloom stories are easy to write and people have a morbid fascination in reading them, so what is the point of the above? Well, try some basic instructional theory. When we become involved with practical flight instruction, as opposed to talking about exercises on the ground, we find that the pupil learns 65% by doing the exercise, 25% by seeing what is going on and only 10% by hearing about it. Clearly, it follows that in deliberately contrived exercises the instructor may verbally emphasize what should be happening or what the real intention is, but the pupil will take in little of this as 90% of his attention is soaking up what is actually happening. Therefore in such exercises we should present them in as valid a manner as possible while also appreciating that if what we are doing also entails impressive and unusual views of the ground, then we must also do something active about reducing the pupil's fervent wish that he was anywhere else but where he is.

BASICS

There is something faintly absurd about taking half a ton of refined aeronautical engineering plus two souls who are only there to enjoy themselves, place the whole combination half a mile above the surface of the planet and then deliberately stop it from flying.

It would be futile to pretend that a large number of people do not approach stalling or spinning without some sense of wrongness, consequent unease, and a real possibility that their mental attitudes might harden into something which will continue to give them future anxiety. The viewpoint is not unreasonable after all; for example, while stalling is quite a simple exercise, it is introduced early in the pupil's training — just about the time he is beginning to feel confident that the glider will not do anything peculiar all by itself. We then show him, sometimes too enthusiastically, that it may. A couple of other contributing factors are also valid at this stage of the pupil's progress. The pupil is probably still 'G' sensi-

INTERLOCK

Stalling may be introduced as the ultimate expression of slow flying which the pupil is already familiar with and so becomes the 'known' base upon which stalling will be built. A sound pre-flight briefing, in conjunction with at least a superficial knowledge of how a wing works, supplies the required support on which the pupil's skill, confidence and later, responsibility, will be founded.

The instructor, at this stage, has two tasks — first, the pupil's confidence must be maintained so that he remains actively learning and does not begin mentally rejecting what he is being made to do. Secondly, working on the "first-habits-learned" principle, clear warning triggers must be established in the pupil's mind to identify that the glider is moving towards a stalled condition. Nearly all these requirements may be met by utilizing exercises the pupil has already learned. The main confidence control is stability — the first exercise the pupil ever learned. The pupil has developed confidence in the glider's ability to fly by itself and not abruptly do anything strange. This concept is easily extended to cover the second or two the glider is out of normal control, for its behaviour will still be constrained by its stability and therefore is entirely predictable. Equally, the pilot's recovery response is entirely predictable and quite standard.

The symptoms of the approaching stall may be demonstrated very adequately: nose slightly higher than normal, reducing airspeed and changing noise level. These are all applicable to attitude control. Nose

continued on next page

attempting to go down, stick coming steadily back to prevent this have been experienced in slow flying. The increasing ineffectiveness of the controls has also been experienced.

A symptom the pupil will not have met before is pre-stall buffet but we may remind him about airflow break-away, discussed in briefing. Another is the high sink rate in a flat attitude, which is not readily noticeable at height but requires emphasis because the most natural thing in the world is to raise the nose to reduce sinking speed.

Seen in this manner, a pupil's introduction to stalling is more of a rather boring review exercise than some form of desperate activity. The instructor therefore has the pupil's confidence completely under control and is maintaining an effective teaching platform.

LOW LOSS STALLS

We can talk about loss of control (the wing no longer lifting etc.) when we discuss stalls, but should also see the interpretation the pupil may place on these and use effective counters from the outset. When a glider stalls it does not fall out of the sky all the way to the ground, unless it happens to be extremely low. The stall is not an ongoing situation, indeed if the glider stalls and drops its nose it would recover by itself. No, what we are primarily interested in is the consequences of the stall, that the glider has to stall before it is able to spin which is an ongoing situation, or how the loss of height a stall produces may place us in a situation we had not planned for and may have difficulty extracting ourselves from.

Our path thus becomes clear — we wish to identify that the glider might stall and cored itself. We may wish to override its inbuilt behaviour and recover with minimum height loss if we have allowed it to stall. We might therefore productively take advantage of the time the pupil is at his most impressionable, and firmly implant all the cues that the glider is likely to stall, concentrating on prevention rather than cure while giving the pupil time to come to terms with the exercise.

Typically, one might select an attitude which will give about one knot per second speed reduction and thus have the various symptoms of the approaching stall tick by at a rate at which they can be individually noted and examined. The glider remains in a flat attitude and ends with the stick against the back stop and the nose gently pitching up and down. This exercise may be achieved in any club trainer.

A direct consequence of this is that while you may stay at the 'stall' virtually as long as you wish, there is only one obvious way that you can extract yourself from it. The pupil will therefore, from the first attempt, produce a fully controlled recovery entirely by himself on a "return to normal speed" command rather than over-controlling on a "stick forward to recover" command. There is nothing artificial about this, it is exactly what the pupil is likely to be doing later when thermalling near the stall in turbulent air. With a workable basis established, we may

now move to mildly accelerated situations, again they should be valid and realistic. Pilots do not normally proceed across the sky in a series of 25-30° zooms from which they may accidentally stall without noticing.

Therefore, while a slightly higher nose attitude is employed this time, which will promote a nose drop, it should still be within the bounds of what might happen in normal flight. In this manner the sequence of approach stall symptoms is retained, although at a slightly higher rate, while enabling progression to begin exploring why the stick must move forward even though the nose is dropping.

About this stage the exercise becomes quite enjoyable for the pupil, for although he is experiencing different sensations,



Cameron Platts

attitudes and control responses, he is doing so in a situation where he feels well in control. With the level of attention we thus obtain from pupils it is possible to become more meaningful about stall evaluation and the degree of recovery required.

If this sounds a bit technical — in simple terms we do not want the stick bounced off the front stop because the glider nearly entered a gentle stall, but we do want the angle of attack down quite promptly if the situation is going to produce a rapid nose-down pitch. If the pupil's confidence levels have been controlled, this will be achieved almost without trying.

Once the basic stall is understood, a few loose ends may be tidied up such as some review on further effects of rudder to control wing drop at the stall. Also, stalling in a turn, where the pupil will begin to see that stalling speed is dependent on wing loading — important exercises in themselves but serving the dual purpose of supplying attitudes, actions, and situations that will become an important part of the base upon which spinning will be built later.

THE SPIN

Once stalling prevention and recovery have been established in the pupil's repertoire of skills, the pupil may then progress to

spins when a suitable time presents itself. The significant difference between stalling and spinning must now be underlined. Unlike conventional stalls, the spin is an ongoing situation and it must be assumed that once autorotation has begun it will continue until the ground or a recovery intervenes.

Possibly for the above reason, combined with the quite rapid attitude change a spin entry displays, many people find spinning a frightening and sometimes terrifying experience. Even a semi-technical description of autorotation is a little daunting — an ongoing process of a glider yawing and rolling in the same direction while pitching nose up. There is nothing quite like spinning, no other activity the glider will produce, short of falling to pieces, which will produce so much activity with such a high

descent rate. We should accept this, take it into account and actively counter the mental discomfort it may initially cause.

The gung-ho style of instructing — "I have control. This is a full bottle spin. What are you doing there on your knees, lad?" — will achieve little except confirm the pupil's worst fears. Fear is so often merely a product of the unknown, lack of knowledge, lack of understanding. If the pupil has even a simple grounding in the principles of flight, then spinning may be made more understandable immediately.

The little description of autorotation given above may be easily worked out — use opposite rudder to stop the yaw, ease the stick forward to stop the nose pitching up and unstall the wings. Now we have flying speed again, the bank may be reduced as we climb back to achieve normal speed/attitude. There is nothing mysterious or frightening about that. When the pupil is brought to the point where he is shown that the humble trainer he has come to trust and love is capable of changing itself into a whirling dervish, then the tools we bring with us are Knowledge and Confidence. Without them, we are unlikely to produce an adequately protected future pilot, for the nature of the spin is very distracting and will actively compete against the instructional task.

OBJECTIVES IN SPIN TRAINING

The glider will not spin unless it stalls first, so we have an obvious application of exercise interlock — stalling is going to become the 'known' basis on which spinning is built. — "Let's see what happens when just one wing stalls etc." This becomes our prime Confidence control. Regarding Knowledge, most of the groundwork will have been established if stalling has been adequately treated and once more we fall back on the vital first exercise — Stability, and thus convince the pupil that although the entry and established phases of the spin look a little different, the glider is still constrained by its design and stability. What it will do is entirely predictable and therefore may be countered in a completely predictable and standard manner. This single factor alone is possibly the biggest danger in spin training where Confidence is not being controlled, for the spin recovery always works.

The pupil soon realizes that if you do A plus B you get C, grits his teeth and performs recoveries which are acceptable, the instructor will then allow him to move on to a more comfortable exercise. Inside however, he may have been hiding acute distress which has totally clouded his appreciation of the symptoms and 'feel' of the situation as the glider fell off into the spin. In the situation above, spin training has failed, even though the pupil is able to pass a check flight on spin recoveries. Somewhere along the line, objectives have changed towards seeing the exercise as primarily about recovery.

OK, so let us consider some obvious facts. We hear very little about inadvertent spinning at height as it very seldom results in an accident. The spin training is adequate, the pilot has height and therefore time to recover. What we do hear about, and it usually makes the paper, is inadvertent spinning at low height because the glider often hits the ground. We may take little comfort from our altimeter in spin exercises at height, while it may show that we have lost only 30 feet at the end of an incipient spin, we are less conscious or even aware that we have probably used maybe 250-300 feet in the exit recovery dive. So it is worth stating quite clearly once the glider begins autorotating, its attitude will change rapidly to a point where, no matter how good or how fast you are, a large amount of height will be required for the recovery. If you lose the glider in the latter part of the circuit there is only one thing that does matter or has any significance at all — the glider is going to hit the ground, and 600-odd pounds of airframe strapped to your backside is going to drive you personally into the deck like a tent peg.

The prime objectives of spin training are to prevent this from happening, to chop through whatever is distracting the pilot into not maintaining safe speed near the ground and/or make skidding turns — to wake up the pilot to what is going to happen before the extreme attitude change takes place and it is too late.

LOW LOSS SPINS

The gory bits have been included in this article quite deliberately. They are an integral part of the spinning scene and receive plenty of exposure among flying people. Talk about how hairy spins are often serves to harden a pupil's attitude and produce an in-built rejection to the exercise long before he has to meet it. Instructors realise this and it is not uncommon to see them over-reacting, deliberately ignoring any unease the pupil might have in an attempt to instill confidence and breezing into the exercise as if it were just a launch.

On the other hand, I have found it more productive to approach the exercise assuming there will be unease present, encouraging the pupil to give his subjective views and prove that they are unfounded from the outset. Spin training may be conducted in exactly the same way as stalling. In the very first spins, the pupil will be at his most attentive, so these become a series of about six incipients which are stopped as soon as the nose has begun to yaw down through the horizon. The recovery response becomes established while the pupil is soaking up the cues the glider produces to indicate that it is going to spin.

With the skill already becoming established in terms of both identification and recovery, the exercise may now be extended, the glider being allowed to fall off a little further each time in keeping with the pupil's confident ability to actively control it. From the incipients we progress towards the quarter turn, on to the half turn and then the full turn. This requires a lot of spins which is good, for the pupil will have had repeated exposure to many entries and is therefore more likely to remember. Finally, we need to show to the pupil's satisfaction that once a certain point has been reached in spin development the glider will settle down and not be changing its behaviour. To do this we should perform at least one fully developed spin of about three turns, preferably more if the situation permits.

IT WON'T SPIN

It damn well will! But it may be frustrating attempting to make the club trainer spin in a consistently convincing manner. The only solution to this is practice, the more spin entries instructors perform the more accomplished they will become and so the more valid will become the exercises they teach. Pressures of the gliding environment really hit in this area, our flight times with individual pupils may be seriously limited and at winch clubs height is always at a premium. The instructor may have a justifiable worry that if the pupil cannot be made to spin the glider himself and two flights have been wasted trying, then the pupil will be totally convinced that the glider just will not spin. We are less aware that the pupil's crude and ineffectual attempts to recover at height would look only too real if they were happening right after a 300 foot cable break. The temptation is real and understandable. The instructor takes control and begins doing the entries, the pupil the recoveries.

Over a period of time, even the most well-intentioned instructor may develop established habit patterns as a result of a series of compromises, something along the lines of, "I have trouble making this spin off a turn, the pupil has no hope, so to save time it had better be from straight and level. I had better focus the pupil's attention on the recovery which is the important bit". Is it really the important bit if that pupil inadvertently spins below 300 feet in a year's time?

FUTURE SPIN TRAINING

Our trainers are something of a compromise and therefore our training itself may become something of a compromise. Today there is an arguable need to make contrived exercises more valid, but what of the future? As we pursue our need for performance, so our trainers are steadily becoming larger, cleaner and heavier — they will require more height to recover from a stall/spin situation, therefore we must anticipate that they will be designed to be increasingly docile, for the glider clubs are unlikely to elevate their circuits by 300-400 feet as a further protective measure.

We may reasonably expect the spin training problem to become worse not better as time goes by. This problem may be stated quite simply because it is so enduring: instructors having trouble making spinning realistically convincing as a product of mishandling, and single seater pilots having no trouble at all, sums it up. We tend to view gliding on a day-to-day basis. What current advances are being made in flying? What are the current new aircraft available which are a direct reflection of what gliding is about today? But it is vital that club training is not automatically included in that restrictive view, because training is applied to a number of time frames simultaneously, which can stretch back years. Whilst training procedures must cater for new state of the art gliders, it must also cater for the previous generation gliders which continue in the movement for 30 years or more.

A pupil whom the movement will train in 1993 will still have access to gliders which were built in the 1960's and are already obsolete by our standards today. Such pilots, whether they fly in 1985 or 1993, will still require the protection of piloting skills which are founded on the enduring physics of flight and not the transient dictates created by design and demand. The bottom line question in spin training is not as simple as "will the club trainer spin?" It is and always has been, how convincingly the average club instructor is able to make the trainer spin within the framework of a meaningful exercise.

It appears inevitable that we will increasingly have to depend on instructional skills to bridge the reality gaps and keep pilots safe in the real world of solo flying. □

Part 4 of this series will discuss running out of height in the circuit and the implications of the exercise on control of judgement and habit patterns.

SAFETY

Cockpit checks

A couple of things which could have led to accidents came my way recently; they are both related to the cockpit check. There are at least three things which need special attention and thought in the pre-takeoff check, especially in gliders which are not familiar to you.

Freedom of controls Both rudder and elevator may be restricted by objects improperly located. A common one in a 2-33 is the rear seat cushion sliding forward and blocking the stick movement. Instructors can do this deliberately to test the student's recognition of the problem (30% of them do not!).

Canopy closure Until you are familiar with the action of the latches, the canopy must be checked by pushing up on it or the frame to see if the latches are engaged. A recent incident showed that this can be a potential danger in both 1-26 and 1-23.

Dive brakes Many of the European types have brakes which use an over-centre mechanism to lock the brakes. The brake handle has no detent and a bumpy ground roll or turbulence can unlock the brakes and the brakes may then suck open at a critical stage in the tow. Pilots flying such types must be aware of the hazard and fly the tow with the left hand close to the brake handle. The otherwise well-designed Grob Twin may show this problem. Instructors could check the P2's awareness by deliberately nudging the lever until the lock is broken.

As more modern trainers replace the older and familiar types with unimpressive dive brakes or spoilers, instructors must become particularly aware of this potential danger.

John Firth
for Flight Training and Safety Committee

Skill fatigue

The Australian Bureau of Air Safety Investigation's *Aviation Safety Digest* recently had a brief article on skill fatigue, which is defined as "the deterioration in performance caused by work that demands persistent concentration and a high degree of skill."

Skill fatigue, the dangers of which need to be understood by all pilots, may be combined with or accentuated by other fatigue factors such as sleep loss, and is associated with failure of memory, judgement, integrating ability and presence of mind. The phenomena were first described in 1948 following a classic series of experiments in the UK; subjects were tested for 2 hour spells in very high workload pilot-

ing tasks demanding sustained concentration and skilled performance throughout the test period, and it was found that skill-fatigued subjects accepted lower standards of performance and safety. With increasing fatigue, integrative ability failed and pilots would chase one instrument at a time, while memory was decreased as pilots forgot to monitor side instruments or reset instruments and controls. Performance tends to suffer a vicious circle of disruption, as increased time to observe and interpret instruments leads to greater errors requiring greater control actions which themselves may be poorly controlled and require additional correction.

While the incidence of skill fatigue will differ according to workload and the individual pilot, even the most experienced pilot can be faced with skill fatigue. The observable effects which are apparent to the pilot are one or more of the following characteristics:

- Loss of accuracy and smoothness of control column and rudder movements.
- Unawareness of the accumulation of rather large errors in azimuth, elevation and attitude.
- An increase in control movements involving greater fluctuation in order to produce the same effect.
- Under and over-control movements.
- Forgetting of side tasks.
- Errors of inattention, failure to scan sky, fixed vision.
- Preoccupation with one task component to the exclusion of others.
- Easy distraction by minor discomforts, aches, pains, noises, etc.
- Increasing unawareness of performance deficiencies and, in extremes, signs of physical breakdown such as fainting, cardiac arrhythmias, etc.
- The requirement for larger than normal stimuli for evocation of appropriate responses.
- Errors in timing.
- Overlooking of important elements in a task series.

The above effects could very well be experienced by soaring pilots, particularly by those on long cross-country flights or in competition during difficult weather conditions. Thanks to Gerry Nye at MSC for this article. Tony

from the Canadian Airline Pilots Association "Pilot"

WOODEN AIRCRAFT COMPONENTS DETERIORATION INSPECTION

Recently, a Notice to Aircraft Maintenance Engineers and Aircraft Owners (N-AMEAO 13/85, 9 May 85) was issued on the causes, detection, and repair of wood decay in aircraft structures. It would be wise for owners of wooden aircraft to obtain a copy of this publication from your local AME.

**THIS WINTER
DO SOMETHING
AEROBATIC!**

Arizona Soaring

ad

Bumble and the Gremlins

continued from page 10

Suddenly a blinding light shone and Bumble emerged from the cloud base, wildly spinning over a wooded valley. Disoriented, he worked on the controls, and the built-in qualities of the glider (with some help from the guardian angel who looks after flying fools) gradually sorted out the problem and Bumble found himself flying along serenely the right way up. He still had plenty of height and turned for the airport — enough was enough for one day.

And yet as he flew the *Confidence Boosters* took over and Bumble began to congratulate himself on the way he had handled a tricky situation. Then again there was silence, and the variometer moved firmly up the scale. He was in wave once more, and once more there was a hole in the cloud above him.

As Bumble looked up at the wave window the gremlins attacked, scattering a small amount of Diamond dust in his eyes. Immediately the cloud took on the hue of a gold badge in which the cloud opening shone like a solitary diamond luring him on. Bumble started up again, and clearing the cloud, saw a white carpet spread around him as far as the eye could see. It seemed that he had beaten the gremlins this time, but he should have known by now the persistence with which they pursue their prey. Just short of his Gold height gain, the variometer once more pointed decisively down. Bumble hunted around but found only greater sink. He turned for the hole in the clouds. There was no hole. The gremlins had carefully zipped it up and Bumble was trapped above the cloud deck. Sinking inexorably, Bumble flew one course after another but there was no clear way down. The cloud neared, and soon he would be in it. Was he headed for the valley or for a mountain peak? He couldn't tell. With sec-

onds to go, Bumble got a misty view of the ground far below and pulling his airbrakes to the full, he spiralled down in a tight turn — right over the airfield!

The gremlins had their final sport as the *Rotor Rollers* were still busy stirring things up at the lower levels. Bumble was tossed from one to the other around his travesty of a circuit, but eventually arrived on final approach. He set his glide path to give lots of height over the threshold but at a hundred feet the curl-over got him and Bumble found himself suddenly without airspeed. Ramming the stick forward he arrived on the ground with only the top of a small tree in his tailwheel as a memento of his escapade.

So ends the saga of Bumble; may he long survive. Remember, even though his soaring career has been less than meritorious, he has served as a horrible example — that's worth something.

Setting Records ...

continued from page 5

and rapidly climbing up to the 10,000 foot base.

The sky was a glider pilot's dream, with perfectly spaced cumulus and incredibly high bases for this part of the country. We were fortunate to be in Pennsylvania for the very special two or three weeks of the year when the trees still had no leaves, and the forests acted as giant solar radiators. In two weeks, these conditions would be gone for another year.

The Nimbus and I set off now for the second turnpoint and like playful dolphins, soared off downwind in alternate graceful dives and zooms. I reached the second turnpoint with a 100 mile/hour average speed and speculated as to the possibility of breaking the world record. With no real decent thermals in the vicinity of the turnpoint, I continued around it and now set off on the toughest leg into wind.

If the ridge was working at my third turnpoint, I would have enough altitude to make it there and just cruise home to Ridge Soaring, however Tom Knauff who was flying in the area recommended against it. He cautioned that the sky was completely overdeveloped and advised that he was having considerable trouble scraping up from a low save off the valley floor. Heeding this advice, I thermalled twice in 5 to 6 knot lift to cloudbase at 11,000 feet msl, and then set off for the turn with excess altitude. Reaching the turnpoint at Nisbet at 90 minutes into the flight, I realized that the US record was in the bag with a slight possibility of matching the world record. I continued on with 50 miles to go and completely overcast skies all around, which served to encourage keeping the stick back a little.

Jay Desmond in a Pegasus about fifteen miles ahead reported being able to sustain about 70 knots on the ridge, which

unfortunately was far too slow for what I needed. I held my speed at 110 knots, always knowing that I could cruise slowly on the ridge if need be. At Howard, I checked my time and realized that the hoped-for world record had evaporated and the US record was no longer a sure thing. At Milesburg, I cruised across the gap only 10 miles out and saw the Pegasus impossibly low below me still heading in for Ridge Soaring. I commented on the radio that he looked far too low to make the field and recommended that he dump his water considering that he appeared to be only halfway up the 800 foot ridge. Tom came on the radio and advised Jay to land immediately rather than try to make the field, while I slowed down to 80 knots and held steady at the crest of the ridge. I made the finish gate, still convinced that I had the US record in the bag, but learned to my chagrin that I had missed it by only 45 seconds. I was thrilled to find out that this was only 8 minutes off the world record pace, and speculated that under more ideal conditions (say a 15 knot wind instead of 10 knots) which would provide for decent ridge lift, the world record would have been a distinct possibility. My speed was 148.9 km/h. I landed the Nimbus III with only the inner water tanks dumped, and considered the possibility of trying for a quick 100 km triangle.

• • • •

100 km Triangle — April 22

Ridge Soaring to Spring Mills, Penn. to Mill Hall, Penn. and return.

...Doris Grove was really excited, and offered to help reload the Nimbus while I dashed off in my car to retrieve Jay who had wisely set his Pegasus down in a field three miles north. On returning, and with the help of several people, I pushed the Nimbus back on the runway with a 100 km triangle declaration in hand. Doris was just bubbling with enthusiasm and helped me launch on this attempt at 4:30. Thermals

were already starting to decay somewhat, but I managed to climb to a decent altitude while I waited for a cloudstreet to gradually drift out on course. The sun angle was low, with sunset only an hour and a half away, but I speculated that with a little luck and a cloudstreet to the turnpoint, I could still make the flight.

I set off on course at 4:50 with the sky rapidly decaying everywhere. The start was well executed, and I had 4000 feet to play with. I went directly downwind, about 40 degrees off course along a cloudstreet and managed to maintain altitude while holding about 80 knots. Halfway down the leg, I turned again 90 degrees to the left and flew up the valley in dead air. Five mile upwind of the turnpoint, I was feeling very uncertain and undecided as to whether I was setting myself up for a sure off-field landing, but I decided to commit and rounded the first turn with only 1500 feet above the ridge tops and 2500 feet above the valley floor.

The second turnpoint looked impossibly far away and the final glide calculator confirmed this. I continued on upwind regardless, hoping to make it over two sets of ridges to the gap in the ridge at Howard about 18 miles away. Penn's Cave airport passed by underneath and then another ridge fell behind. Only 300 feet above the ridge top and with the main ridge still about 6 miles away, I contacted an invisible and unmarked lift street which miraculously provided just enough sustenance to carry me all the way to the main ridge with no loss of height. I sped through the gap, and while saying my thanks to the heavens above, set off on the ridge at 80 knots. Rounding the turnpoint to the north and then turning 180 degrees for the last leg back to Ridge Soaring, I knew that the record was assured. I gleefully cruised back along the ridge, and arrived back home with a 44 minute elapsed time, reveling in the fact that I hadn't thermalled once over the entire course! My average speed was 87 miles/h or 142 km/h. A fitting end to an absolutely fantastic day. □

CLUB NEWS

VOL À VOILE BUCKINGHAM HONOURS ITS FOUNDER

Le 22 juin 1985, Mme. Matheson, Directrice Executive de l'Association du Vol à Voile au Canada fut invitée à présenter au Frère Hormisdas Gamelin une plaque commémorative en reconnaissance de ses valeureux services. Le Frère Hormisdas a marqué l'événement en effectuant sa 3419^{ème} envolée en planeur et sa première en appareil ultra léger ou comme le Frère les surnomme "Les petits planeurs".

Il nous fait plaisir de vous annoncer que le Frère Hormisdas Gamelin a été reçu "Membre de l'Ordre du Canada."

Nous effectuons présentement les démarches nécessaires au changement du nom de la corporation pour celui de "Centre de Formation Aéronautique Gamelin".

Le club a re-orienté ses activités vers l'ultra léger. Cependant, nous continuerons à promouvoir le vol libre. Nous espérons que l'avenir nous permettra de réintégrer le planeur à nos activités.

Nous profitons de l'occasion pour remercier l'Association du Vol à Voile du Canada pour l'appui qu'elle nous a toujours apporté, ainsi que le Gatineau Gliding Club et Micro Aviation de Limbour Québec de nous avoir assisté dans toutes nos entreprises.

Nous sommes à refaire l'historique de notre club, par conséquent, nous serions intéressés à recevoir des photos et/ou articles concernant le club Vol à Vol Buckingham. Vous pouvez nous rejoindre à l'adresse suivante.

• • •

On June 22, 1985 Mrs. Matheson, Executive Director of the Soaring Association of Canada, was invited to the airport to present to Brother Hormisdas Gamelin a plaque in recognition of his valuable services rendered since he founded the club in 1948. Brother Hormisdas marked the event with his 3419th flight in a glider and his first in an ultralight or, as he likes to call them, "little gliders".

The club has re-oriented its activities towards the ultralight movement. However, we will continue to promote soaring by whatever means possible. We hope that in the near future, we will be able to reinstitute this type of aviation into our regular activities.

To the many people who know Brother Hormisdas, all will be pleased to know that he has just recently received the Order of Canada for his many contributions, of which soaring has certainly played a major role.



Brother Hormisdas is strapped into a Gatineau Gliding Club 2-33 for his 3419th flight. He founded the Buckingham club in 1948, which was then operated from GGC's present site, Pendleton airfield. His club was first named the St-Michaels High School Glider Club.

We take this opportunity to thank the Soaring Association of Canada for their continued support and the Gatineau Gliding Club and Micro Aviation of Limbour, Quebec for their on-going assistance; it is always appreciated.

As we are now in the process of changing our name to honour our founder, we would appreciate receiving photographs and/or articles you may have on the Buckingham Gliding Club. The proposed new name for the club would be "Centre de Formation Aéronautique Gamelin."

Michel Bastien
Club Vol à Voile Buckingham
120 Place du Verger
Buckingham, Québec
J8L 3A3

WINNIPEG GLIDING CLUB

The signs in the local towns around our new airfield invited the local citizens to come and view our facilities and have a ride. So it was that on July 6 our gliderport was officially opened with over 150 "locals" attending and over 40 rides given to those interested. A brief intermission around two o'clock allowed for the ribbon-cutting ceremony with speeches by our president Dick Metcalfe and the local councillors for the municipality. An aerobatic display by

Russ Flint in his Cirrus awed the crowd including some of our glider pilots. A high speed "contest finish" ended the display with Russ landing directly in front of the crowd. After that it was back to more rides.

Our second season at "Starbuck International" has seen a great improvement in facilities. The runways have come along really well with about 75% of the area grassed in. Under the watchful eye of Dick Metcalfe (who is an Agriculture Canada employee) they have been given the best of care. The water supply and washing facilities have been upgraded over the last year. Electricity at the time of writing had not been hooked up but was about 80% completed. So in just over two years we have carved out a nice little area for our members to enjoy.

Flying stats are looking better than last year as well. To the end of July we had approximately 800 flights compared to 450 from the same period last year. Cross country flights have been down almost 100% owing to the fact that we had eight weekends either blown out or rained out in May and June. If all goes well, we should have a very good year.

The 1985 Manitoba Soaring Championships scheduled for two weekends in June had to be cancelled because of the rain and poor weather.

A winter works project saw one of our 2-33's being completely refurbished. A high visibility paint job was sprayed on. Also the entire interior was cleaned up, so as to impress people taking fam rides. It is now the pride of the fleet.

On a more personal note, 1985 saw the marriage of Jim Oke to Liz Scaife, one of our newly licensed pilots. Larry Morrow, who is our chief tow-pilot, took a job with the Air Cadets as one of their tow-pilots for the summer. John Bandorf's Duster was sold to a syndicate out of Regina; and a long-hidden Pioneer II, C-GOON, was flown for the first time in two years after some lengthy modifications to the canopy.

Mike Maskell

GROB CAN REPAIR YOUR FIBREGLASS SAILPLANE

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The Rideau Gliding Club near Gananoque, Ontario never makes headlines and rarely contributes to **free flight**. We cannot claim too many Silver C, let alone Golds or Diamonds. Our senior members only dream of wave; our junior members believe it is something you do as you say "Goodbye". We are not what you would call high-profile, yet make no mistake, we are a *great* club, principally because our sport is people versus the elements — and we do have some great people!

Our part of eastern Ontario is as flat as Twiggy, and being close to Lake Ontario (with prevailing SW winds), seems to offer few thermal guarantees. To counter what we don't have, we do have space in a wartime hangar (with a guaranteed fortune in guano for those wishing to harvest), and paved runways which mean consistently short retrieves — some of us can't thermal worth a damn, but our landings are a joy to behold. We share the airfield with a very active Gananoque Sports Parachute Club, which uses two Cessna 172s and a Beech 18 (sounding like a highly mobile glider-cleaver), which means we pay a lot of attention when flying — the way some of the parachutes are built, we pay a lot of attention on the ground too.

Our club owns a Cessna 150, a Schweizer 2-33, a 1-26, an LK-10, and has just bought a Pilatus. Two members own aircraft; Frank Thompson a Zugvogel IIIB, and Peter Skensved an SHK. The club has maintained an approximately 20 member roster since its inception as the Queen's University Gliding Club around 1948, originally flying out of Kingston's Norman Rogers airport, then later out of Gananoque airport. Rideau Gliding Club has *never* been mentioned in the "Crocodile Corner" principally, we believe, because of the emphasis placed on safety by the executives and membership over the years.

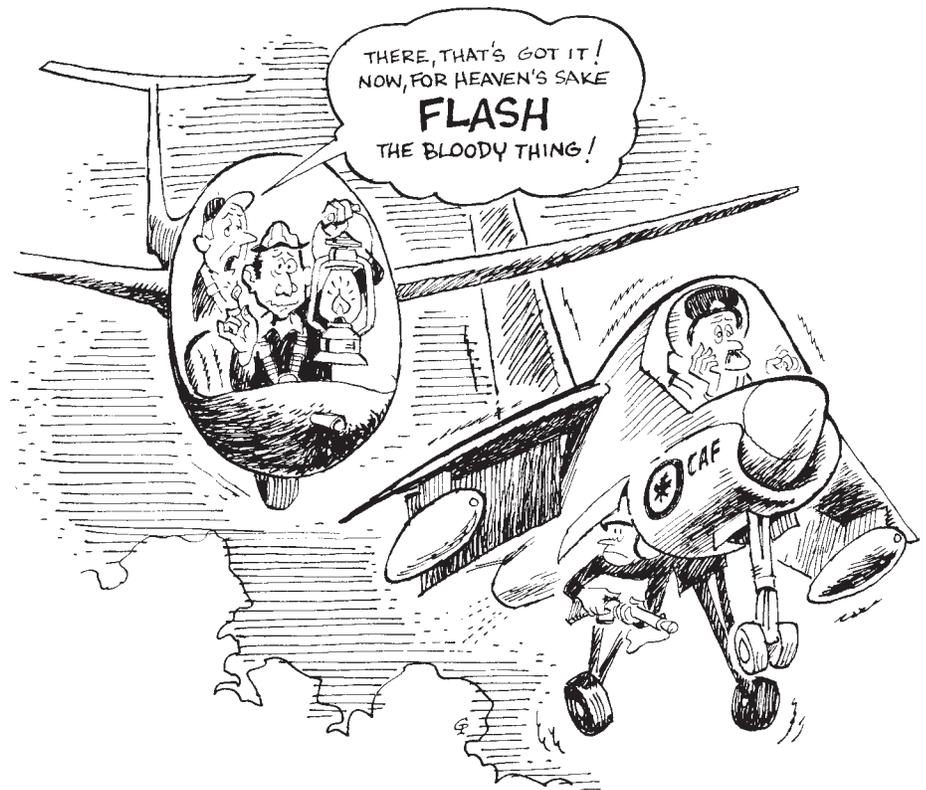
Once new members have become comfortable flying the 2-33 solo, they usually move to the 1-26; when comfortable with it, the opportunity exists to try the LK-10. Since this beast flies nothing at all like the New York brand, most low-time LK pilots hate it. The senior instructors love it: coincidence? — an acquired taste? — masochism? Flight experience will be required on the LK before any member progresses to the Pilatus, simply because it is different from the Schweizers. Rideau Gliding Club insists that every pilot, in every circuit, completes his prelanding SWAFTS check. Speaking personally, I found the habit a real eye-opener when landing a Blanik for the first time and suddenly found what "Wheels-Water" meant.

I was impressed enough that now I actually move an imaginary lever — even when flying the 2-33. Incidentally, each night I pray, "Please Lord, don't let *me* be the guy to land the Pilatus on its belly."

Gananoque was to have had an ultralight school move in, but it looks as if the project has fallen through — pity — we could have tested possible glider/ULA mutual training benefits.

Ray Lawton

WHEN YOU'RE LEGAL — AND WHEN YOU'RE NOT



Tony Burton

It's the end of a glorious soaring day, and you have just landed out 550 km away from home in a field near Smallville. You're still high from the glory of completing your Diamond, and while chatting with the farmer, the local constable drives up to see what's going on. During your explanations, he asks to see the glider log book and your licence — Thud — you're back on the cold, cold ground, and the unromantic bureaucracy has gotcha!

All pilots should be aware that a lot of paper has got to be on board a glider for both it and you to be legal.

- Certificate of Airworthiness
- Certificate of Registration
- Aircraft Journey Log (up-to-date)
- copy of the Interception Procedures
- your Pilot Licence
- Licence Validation Certificate (medical)
- Radio Station licence (if one is installed)
- Radio Operators Certificate (if installed)

Some clubs seem to have organizational problems which result in the books getting out of date. I know of towplanes which have been flown with accidentally lapsed C of A, and 2-33 flown all season with empty journey log books. Does your club have TC approval for block entries in the journey log of the trainers? If so, do you know that the daily flight sheets are then legal documents?

Not having all this documentation present and complete can get you into trouble out of all proportion to the "crime". One power pilot in Ontario was fined \$5000 for not having the Journey Log with him on his trip, even though he did keep a record of his flights on a separate piece of paper. Why the punishment was harsher than most embezzlers could expect is beyond my grasp. The fact that a Journey Log is awfully difficult to stuff into a Libelle safely cuts no ice, just be warned that your local RCMP are empowered to enforce Air Navigation Orders and Air Regulations, and are doing so.

Wotthehell are "Interception Procedures", you ask? You haven't been reading your A.I.P. — SAR 1-8, paragraph 4.7. Every aircraft is required to carry them on board in case the pilot is intercepted by our Canadian Armed Forces, so that the pilot will know what to do and how to signal that CF-18. The functionaries who drafted this procedure and put it into law forgot that gliders are aircraft also.

I asked Gil Parcell to illustrate the light side of this bureaucratic inanity for you, and he has put it in fine perspective. Well, enough of making merry on this subject — the sad fact is that you or your whole club could be shut down if all the i's aren't dotted, so check again those papers under the seat cushion. □

HANGAR FLYING

Compiled by Tony Burton

EVERYTHING YOU WANTED TO KNOW ABOUT LIGHTNING

- The first requirement for the lightning strike is an electrical charge build-up between the ground and the atmosphere of up to 300 million volts.
- There is then a "preliminary breakdown" stage (lasting about 10 thousandths of a second) when a low current discharge works its way to the ground in 50-100 metre steps taking about a microsecond per step with 50 microsecond pauses, creating a path of ionized air.
- The first return stroke then occurs from earth to sky, lasting a thousandth of the breakdown time. The stroke has up to 400,000 amperes of current in an ionized channel of air heated up to 30,000°C, giving 1,000,000 watts of light per metre. The explosively fast heating of the air creates a shock wave with pressures between 10 and 100 atmospheres. Only about 1% of this energy is converted into the crash of thunder.
- After the stroke, a new ionization trail (called a "dart leader") will form following a portion of the previous path. This causes the forking seen, and return strokes will occur several times with short 40 millisecond pauses between resulting in the flickering that the human eye can just detect. One flash has been recorded with 26 return strokes!
- Lightning hitting the ground produces a loud crack, a machine gun sound indicates several return strokes occurring. A ripping cloth sound is caused by a leader that did not reach the ground.

Thanks to Michael Steckner
London Soaring

ST-RAYMOND — A PILOT'S PERSPECTIVE

- Watch out for Jörg Stieber, a young pilot from SOSA who did very well the first time out, coming third in the Standard class even after missing the last two days.
- Most days the thermals were narrow and difficult to work — everyone complained of this. On the last day with a strong headwind those who made over 50 km were real heroes. Walter Pille said he never had such a difficult flight.
- The day devaluation formula in the contest scoring rules got a lot of comment from the pilots. On Day 1, Dave Webb complained that if he had flown more slowly he would have earned more points!
- Two pilots were noticeable by their absence in this contest: last year's Standard

class winner, Ian Spence, was writing a book, and 15m pilot John Brennan was trying to determine which Coke was more appealing to Canadian customers.

- John Bisscheroux flew in to St-Raymond from MSC in his DG-202 one day (a distance of about 280 km) and tried to make it back the following morning (Day 5) but was cut off by rain showers to the west near Trois Rivières as were the competitors on their tasks.
- On the last day, a couple of pilots found shear wave. Yvon Saucier was able to reach 6500 feet after starting (about 2500 feet above cloudbase). He was able to soar along the shearline for 15 miles, singing and generally enjoying himself while others struggled below in the very strong headwinds. It won him the day in Standard class.
- The atmosphere of the contest was relaxed and friendly at all times, and we competing pilots were especially grateful for this feeling.

Bob Gairns MSC

SAC GLIDING MEET — KINGSTON

From the Aug '49 free flight

The SAC Meet at Kingston (30 July–7 Aug) started with a bang and closed with a burst of applause as Bob Cuddy buzzed the crowd at high speed in his LK. For the record, seven sailplanes were on the field, two Queen's University LKs, Al Pow's LK, Gatineau Gliding Club's Grunau and Olympia, and Montreal Soaring Council's Pratt-Read. For towing, three Tiger Moths were gathered from Oshawa, Montreal and Kingston.

On the first day 31 flights were made, and both Chris Falconer and Wally Hinman of MSC earned their C Badge in the Pratt-Read. The following day saw phenomenal soaring weather, the sky thickly studded with cu and a light offshore breeze blowing. Thirty-five flights were made, totalling some 30 hours.

SAC President LeCheminant remained aloft 3:40 hours in the Olympia, Al Pow of London stayed up 3:07 hours and soared 40 miles to Brockville in his LK, Hank Janzen soared 3:50 hours in an LK. Stefan Brochocki of Montreal was up for 2 hours in the Olympia, and George Dunbar piloted the Pratt-Read 1:10 hours. A total of 31 names were in the draw in the morning for order of flying.

Monday, 1 Aug, 55 flights were made in stable air, including a spot landing contest in the Grunau from a tow of 300-500 feet. George Illaszewicz (Polish Silver C) came out in front, only 1'-6" from the line, Frank Brame came second with a 2'-4", and Shorty Boudreault third. It is understood the booby prize winner came 1000 feet short.

The remainder of the week was devoted chiefly to instruction, but with the ground chock-a-block with official observers, Al Pow was finally credited with his oft-flown Silver C [Cdn #7]. Now, in company with Shorty, we have all of ten feet of Canadian Silver C on the hoof. Later, Al cracked the Canadian duration record with a flight of 6:16 hours, and on the last day he disappeared to turn up some two hours later at Gananoque airport.

Additional C Certificates were earned by J. J. Asselin of MSC in the Pratt-Read and Guy Joyce of St-Michael's club, Buckingham, Quebec in an LK. Silver C height legs were earned by Don Holman and Ken McGurk of Toronto Gliding Club in the Grunau.

Housing and eating arrangements were first rate, due to the exertions of Bill Frayn, Dick Baiden, Gord Sage and others of the Queen's club. Blankets, mattresses, beds and pillows were supplied, and catering for three good meals a day was laid on the airport. No one had to leave the field unless they wanted to.

During the week, Mr. Charles Travers, DOT Supt. of Air Regs, and Mr. Desmond Murphy, DOT Chief Test Pilot, visited the field and the latter took a flip in the LK. Considering his enthusiastic reaction, it seems probable that the Gatineau club near Ottawa will see something of him in the future. Interesting lectures during the early evenings were given by Jack Ames on aerotowing, George Illaszewicz on winch launching, and Bill Frayn on airman'ship. Bill reported to the RCN Air Arm the day after the meet and expects to be posted eventually to Shearwater, near Dartmouth. While it's a great loss to the Queen's club and the Kingston Flying Club, he has hopes of lending a hand to George Dunbar in Nova Scotia and improve gliding facilities there. The meet owes much of its success to his planning and the many hours of towing he put in.

The aim of the meet — 100 hours of flying — was almost achieved, the latest count brings it close to 85 hours. The meet, national in scope, also had an international flavour with the German Grunau, British Olympia, US LK, Polish and British gliding aces, and US visitors from Rochester. SAC members from Victoriaville and Buckingham, Que; Toronto, Montreal, Quebec, Arnprior, Ottawa and Dartmouth, NS, all had a generous share of gliding time.

George and Grace Dunbar with a party of Gull Gliding Club members including Eldridge Lloy, Bob and Byron Reid and Ova Jesson arrived from Dartmouth the first day. Unfortunately, Fred Weber of North Battleford, Sask. did not turn up, though he was expected daily.

DG-300 APPROVED

MOT has approved the operation of the DG-300 in Canada as of 21 June 85, under type approval number G111. The aircraft is to be operated in accordance with the German-approved flight manual, Revision 1, 3 June 1985.

FAI BADGES

Boris Karpoff
14 Elmwood Avenue
Senneville, PQ H9X 1T4 (514) 457-9707

Please note my new address and telephone number above.

In the months of June and July which would usually be reported on this space, I received only eleven badge leg applications. This is an unusually small number for the middle of summer, but just as well this time since I still haven't got everything unpacked yet in the new house. Perhaps the soaring weather has been so good across Canada that everyone is holding on to their application forms until second or even third badge legs have been completed. I hope so for your sakes, if not for mine.

We will see how full this page is in the next issue.

GOOD FLIGHTS

520 km DDD (dirty downwind dash), 5 Aug, Russ Flint, Std Cirrus. Going home from Cowley Summer Camp, takeoff 1225, landed near Ernfold, Sask. (on TC Hwy) at 1950 MST, more than half hour later sun-time. Crew arrived two minutes later. Not bad, eh?

MORE DETAILS ON THE ALCOR

The photo below shows some of the details of the Alcor cockpit. Most obviously, its size is limited. Bob Lamson, the designer, made the cockpit small because it was originally intended to carry a large pressure differential of oxygen for high altitude flight. Now that only a small differential (about 1 psi) is to be maintained, the small cockpit size is only an impediment to getting the required instrumentation in.

The volume forward of the vertical plexiglass "dam" is unpresurized. Note the small balloon, which is the pressure indicator. It inflates slightly as cockpit pressure exceeds atmospheric when breathing oxygen is metered into the sealed cockpit at altitude. A mask is used "in reverse" to dump moist exhaled breath overboard, thereby eliminating canopy fogging. The flat black surface forward rapidly heats and re-radiates energy into the cockpit space. The removable canopy shown here is for summer use — the high altitude pressure canopy is double-walled and has no side vent.

Tony Burton



Campbell

Printer ad,
Ottawa

CROCODILE CORNER

- Libelle 201**, C-GNBE, SOSA, 29 June. Ground-loop on an outlanding, rear fuselage cracked. \$8,700.
- Super-Cub**, C-GRZO, Air Sailing, 1 July. Towplane contacted undergrowth on take-off and was flipped onto back. Pilot OK. \$8,400.
- 1-26**, CF-QDZ, SOSA, 12 June. Overshot runway and hit trees. Pilot OK, damage to fuselage and both wings, \$8,000. Probable write-off.
- Pilatus B-4**, C-GHES, Vancouver, 12 July. Hard landing causing damage to nose. \$3,500.
- Ka6**, C-GCJB, London, 17 July. Possible liability claim from crop damage on outlanding.
- LS-1**, C-FSLA, MSC, 28 July. Nose damage on outlanding. \$1,000.
- 2-33**, C-GQNI, COSA, 5 Aug. Fatal. Uncontrolled dive to ground, first solo, airborne medical problem suspected. \$14,000.
- 1-23**, CF-XKL, Edmonton, 1 Aug. Outlanding damage to rear fuselage skin and bulkhead. \$1,000.
- Blanik**, C-GXSZ, Grande Prairie, 5 August. Heavy sink on final aircraft landed short. Some surface damage to wings and tail from vegetation. \$2,000.

Est. claims to date \$77,000
1984 claims payout \$60,000



THE EXECUTIVE DIRECTOR'S DESK

Jean Matheson
Executive Director

The office has now settled well into its new surroundings — a little more space (much needed). We are finding working along side the RCFA most pleasant and hope they feel likewise about us. I must tell you about our move (of only a few feet — across a public hall). The evening before the move (scheduled for Saturday am.), I left the office with the understanding that Joanne and her family would meet with me and my family at 9:00 am. to move the furniture. When I arrived in the former office, it was bare — not a stick of furniture anywhere — with the exception of two black telephones staring quietly at me from the floor. Upon closer scrutiny, I found a note saying, "Hope you're surprised! Joanne." Indeed, I was surprised! Joanne and her family had come in Friday evening and moved everything! It had been my intention to take the moving crew to lunch on Saturday, but only Joanne and her husband together with my husband and me were here Saturday morning putting up shelves, organizing material from boxes on shelves, etc. After we had finished, we felt we might not be welcome in a restaurant in our sweaty, dusty state.

I have since given Joanne's sons and their friends each a SAC cap and sent flowers to Joanne. How else can one suitably say "thank you" to willing helpers not wanting recognition? Should you find yourself in the neighbourhood, feel free to drop in and see our new set-up any time between 8:30 and 4:30 (EDT, of course!).

Membership cards and club reports, as well as annual reports, are now in the hands of your club. If you have not received your copy of the Annual Report or your membership card, see your club representative. On reviewing the first quarter of financial activities, I am concerned that, at the end of June, we have received slightly less than half of the budgeted membership fees. If you have not yet paid your SAC membership, please hasten to do so as SAC depends on this revenue. Also, only paid-up members will receive free flight.

We now have on the computer member records, club statistics, mailing labels and the Instructor Course Manual. The Insurance Program is to go on the computer next. It has taken some time, but, we are aiming toward accuracy in the first instance.

As a result of publication of the Contest Letter register, I have heard from some members regarding changes. We are now programmed to put these letters with the membership records, so please let us know when your sailplane changes ownership.

The Board of Directors will be meeting at the Holiday Inn, London, Ontario, October 5th and 6th. It is customary to have a reception (cash bar) for local club members on the Saturday evening (Oct. 5th) 7:00 pm to 10:30 pm. Would you please let your club president know if you will be attending so the National Office, in turn, can be notified in order to make appropriate arrangements. Receipt of this notification should reach me by September 15. Thank you. □

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Al Schreiter
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Mississauga, ON L4Y 3G5
Mbr: Al Schreiter

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George Dunbar
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Calgary, AB T2V 2T7

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Dr. Wolf Leers
#201, 3271 Bloor St. W.
Etobicoke, ON M8X 1E2

WORLD CONTEST

Al Schreiter
3298 Lone Feather Cres.
Mississauga, ON L4Y 3G5

COMING EVENTS

Oct 12-14, **Cowley Wave Camp**. Host: Alberta Soaring Council. Facilities usually open a few days earlier. Contact Kevin Bennett, 92 Millbank Close SW, Calgary T2Y 1C8 (403) 253-0063.

Oct 22 and consecutive weeks, **Glider Ground School** taught by Bob Kurzwernhart at Mohawk College, Hamilton, Ontario. Cost \$65. Call (416) 575-2139 or 2036 for info.

Oct 5-6, **SAC Director's Meeting**, London Ontario. Holiday Inn, Saturday evening get-together for all local SAC members.

Mar 7-8, **1986 SAC Annual General Meeting**, Vancouver, BC.

the fine print

Pilots, OOs, it's time to start sending your flight data to George Dunbar for the SAC trophies and significant flight certificates.

NEW FACES



Joanne Hagar
National Office secretary

We introduce Joanne. She joined SAC in July after working as an assistant accountant in a retail business for the last 12 years. Her hobby has been raising six children, three of each. Welcome to the madhouse, Joanne, we hope you enjoy your time with us.