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free flight • vol libre

5/90
Oct-Nov



POTPOURRI

The Canadian soaring community is saddened by the death of Terry Tucker. As you'll read in this issue, Mrs. Tucker was the kingpin of SAC for over ten years, her contributions will always be remembered.



On the September first weekend there were two fatal glider accidents in Ontario causing three deaths. The causes of these accidents aren't known yet, but they should make us all think about safety and our attitude towards it. At this point in time (mid September) our insurer has paid out, or has in reserve, \$220,000 in claims this year! As we have received very few incident/accident reports, these two facts contradict each other. Let's all think about how safe we really are — an incident/accident report should be filled in even for minor incidents because what was an incident this time could turn into an accident next time. Besides letting others know about a potential problem, filling in the form makes those involved seriously reflect on the occurrence.

On to more pleasant things! This past summer I've visited a few clubs and found there is plenty of enthusiasm out there — if only the weather would cooperate. Southern Ontario has had the worst weekend weather that I can remember; it seems that the weather was in a seven day cycle with Wednesday having the good soaring conditions.

Sue and I flew in our first contest when we flew our Twin II in the provincial contest at SOSA in August. Due to the poor weather there was only one contest day. It was a day that looked better than it really was, which worked to our advantage because most of the hotshots (I won't name names) raced on and soon landed out. Those of us that wimped out and flew conservatively made it home after a three hour POST.

We are now making plans for our fall directors meeting which will be held in Quebec City on 12-13 October. The fall meeting last year was held as a conference call which saved money but we found it was far less effective and therefore not cost efficient. Sixteen hours of discussion around a table plus the after hours informal dialogue can not be replaced by a two hour phone call with only one person talking at a time, often you're not sure who's speaking. Some of the subjects we expect to discuss are: our financial situation this year — long range financial planning, Pioneer Trust Fund, GST implications, procedures manual amendments, a report from the Insurance committee plus other items which require the consultation of the directors.

Have a safe and enjoyable autumn.

Chris Eaves

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Trademark pending Marque de commerce en instance

5/90 Oct – Nov

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

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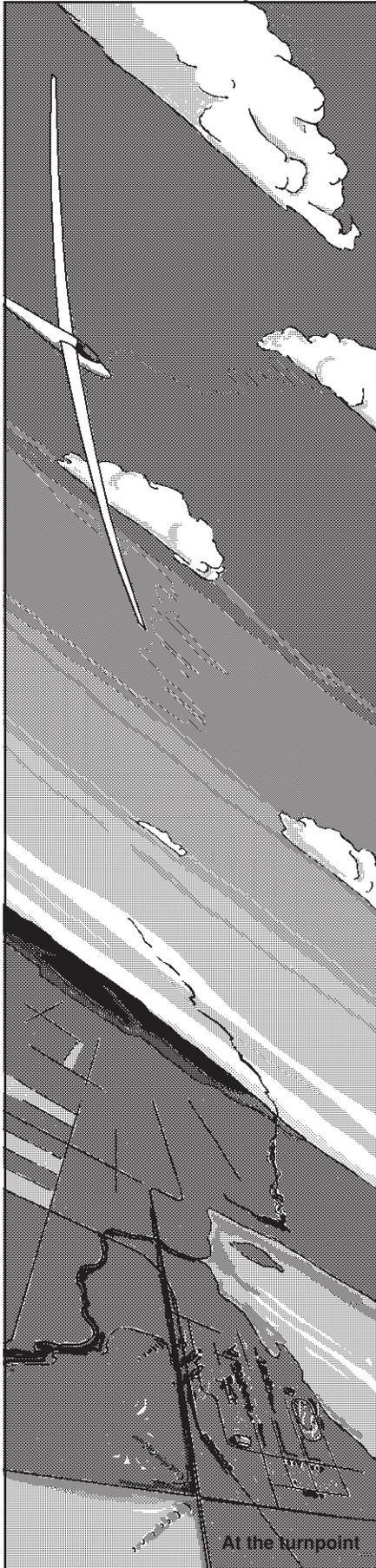
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"August Moon", flown by Stewart Tittle, flies past 8300 foot high Centre Peak of the Livingstone Range, as part of the group which climbed up to visit the gliding cairn at the Cowley Summer Camp look on.

photo: Tony Burton



WHERE'S SUMMER GONE??

A couple of weekends ago on 11 August I had only my second cross-country flight at the club this year. Admittedly, I've been all over the place, soaring at three competitions, Cowley and all that, but even then the weather hasn't been pulling me out to Cu Nim early on a Saturday morning. Conversations with eastern pilots indicate a so-so soaring season everywhere — it must be the greenhouse effect changing the position of the jetstream, or perhaps none of us has been saying our prayers enough. I hope the climate change isn't already here and we have to get used to more of the same next year.

The weather hasn't been totally unusable, of course, and many soaring events this year have been successful. Cross-country courses have gone well, east and west. The Nationals provided good soaring weather even though pilots had to go looking for it rather than waiting for it to come to them!

My personal soaring hit a peak this season with my long flight east on the way to the Nationals and when I won the Sports Class competition at the Region 8 contest in Ephrata in central Washington. It was a very tight competition, with only three points, then a single point separating me from the lead up to the last day. After a dozen years of competition flying with Echo Echo, it was a great feeling to go up and accept the winner's plaque, and doing it in the States sort of gave me the feeling of being the gunslinger riding in from out of town. Now that I have a 'rep' to maintain, perhaps that will concentrate my attention at the next contest.

The countryside was spectacular to fly over, with large fields amidst lava beds, mountains to the north and west, cliffs, rivers, and reservoirs circling the Columbia plateau — monster dust devils snaking off the ground in every direction — and JAL pilot trainees doing circuits and bumps in 747s just to the east (passing these aluminum overcasts on some final glides back to Ephrata was eye-opening).

I certainly plan to go to a US National Sports Class contest at the earliest opportunity. The Sports Class rules are fun and challenging to fly to. It is somewhat different than flying the longest possible pilot-selected closed course within a fixed time as in POST. In Sports, one is required to race a minimum distance pilot-selected course based on handicap. In POST, the contest director sets the race duration each day, in Sports it is the "scratch" distance each pilot applies his ship's handicap to, and in both types one's finishing speed is also handicapped. It works, a well-flown Blanik won on one day! Flying handicapped contests are an excellent way for new pilots to get their feet wet in competition flying, and I would encourage you to give it a try with whatever you fly.

This issue will see the start of a new "exchange" column by Stewart Midwinter on how the pilots in the lowest corner of the flight envelope can soar parachutes and hang gliders extraordinary distances. (This June a hang glider was flown 485 km out of Hobbs, NM!) I am doing the same for them on sailplanes. The idea is to generally trade gee-whiz stories, and describe technology and techniques used in each sub-branch of non-powered flight that is of general interest to the whole soaring community.

I have two good flying stories for you in this issue from a pair of Cold Lake pilots. That club was on the edge of dissolution two years ago but was saved by some inspired advertising and is now very active with a bunch of keen members. My request for missing old back issues of *free flight* to complete the editor's set brought swift replies and the gaps are filling in. Thanks. I still need more though, see the details in Hangar Flying. Keep the club news and flight stories coming in.

Tony Burton



The SOARING ASSOCIATION OF CANADA

is a non-profit organization of enthusiasts who seek to foster and promote all phases of gliding and soaring on a national and international basis. The association is a member of the Aero Club of Canada (ACC), the Canadian national aero club 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 official journal of SAC.

Material published in **free flight** is contributed by individuals or clubs for the enjoyment of Canadian soaring enthusiasts. The accuracy of the material is the responsibility of the contributor. No payment is offered for submitted material. All individuals and clubs are invited to contribute articles, reports, club activities, and photos of soaring interest. Prints (B&W) are preferred, colour prints 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 whose name and address is given in the magazine.

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

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Letters

L'ASSOCIATION CANADIENNE DE VOL À VOILE

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

L'association est membre de l'Aéro Club du Canada (ACC) 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.

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

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

L'exactitude des articles publiés est la responsabilité des auteurs et ne saurait en aucun cas engager celle de la revue **vol libre**, ni celle de l'ACVV ni refléter leurs idées. Toute correspondance faisant l'objet d'un sujet personnel devra être adressé au directeur régional de l'ACVV dont le nom apparaît dans la 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 (\$20 par an, EU\$22 dans les Etats Unis, et EU\$28 outre-mer) veuillez contacter le bureau national.

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novembre

APOLOGIES TO RVSS INSTRUCTORS

In the June/July *free flight*, Bruce McGlashan's article describing the concept of the club Chief Soaring Instructor in the "CASG News" on page 21, it stated that there was no one in Rideau Valley Soaring qualified to be a CSI. Sure there are. Bruce pointed out to me that his statement was cut short in *free flight*: "...who isn't already doing more than his/her share of work for the club." being chopped off at the end of the sentence.

Editor's apologies to Bruce — and RVSS instructors may get off his back.

DANES NEED OUR GLIDERS IN 91

... We are now in the middle of the Danish Championship and are also beginning to think seriously about the World Gliding Contest in Minden in 1991. We know that the Swedes have been in contact with the US

† TERRY TUCKER

It is with profound personal regret that I report the recent death of Teresa (Terry) Tucker, a member of the Gatineau Gliding Club since its earliest years, and for ten years the Soaring Association of Canada's office manager.

Terry was part of a soaring family. Her husband, the late Dr. Norman B. Tucker, was also one of the early members of the GGC. A World War II pilot, he was an aeronautical engineer at the National Research Council and sessional lecturer at Carleton University in Ottawa. Of Terry's four children, three became glider pilots. Her older son, Richard, has been CFI at GGC for several years. Her younger son, Gregory, and daughter, Leslie, both soloed at the Gatineau club.

Terry was a glider pilot and a power pilot and was a member of the Ninety-Nines, the association of women pilots. Poor health had restricted her active flying for several years, but she still visited Pendleton, the home of GGC, and participated in its social functions.

The relationship between SAC and Terry Tucker goes back some twenty

years when she became the first person on the SAC staff. For ten years she combined many roles, being responsible for memberships, insurance, orders for supplies, enquiries from members and clubs. She took an active role in organizing the annual general meetings and also attended the directors meetings across the country. She knew almost every soaring pilot in Canada and I think most of them considered her to be a personal friend. The Gatineau Gliding Club also benefited directly from Terry's dedication. For many years she acted as the billing secretary, studying the daily flying log sheets and sending out the monthly bill to all the members.

In addition to her unquestionable organizational skills, Terry possessed a friendly, cooperative and happy disposition which made any contact with the SAC office a pleasant experience.

Mogens Hansen, IGC delegate,
Danish Gliding Association

This is a portion of a letter sent to our Sporting Committee Chairman. If any sailplane owner has a proposal which could be of use, please contact Colin Bantin. editor

We all owe Terry a debt of gratitude for her many years of unstinting effort. She will be sorely missed by her many friends in the soaring movement across Canada.

Philip White

SPAM CAN'S CROSS - COUNTRY

Murphy takes a bite out of the Silver

Randy Blackwell

Cold Lake Soaring Club

Noon - 13 May 1990

MILITARY AIR TRAFFIC was still holding up operations for the Cold Lake Soaring Club. Somebody should tell these guys that Sundays are for glider pilots. Such a nice day too. Cumulus everywhere. Hmm ... maybe a little cross-country is in order. After many good years of gliding with the Air Cadets, I'm itching to do some soaring for a change. I think I'll throw a small cross-country kit together while we're waiting for these military guys to settle down.

1:30 pm

With all the jet noise winding down, the tower is finally going to let us fly again. Cross-country essentials in place, I climb into XQL, the club's trusty 1-26, "Spam Can", and wait for my turn to launch. My right foot is soaking wet after trying to drink water from an outside tap. I hope it's not too cold up there, I am forewarned by one of the club's CF-18 pilots, Bingo Larue, to "check your six" while flying. He has a nasty habit of sneaking up on other gliders in OAK, his wood Slingsby Dart painted in stealth colours.

1:57 pm

On tow behind our Scout, the tower reminds us to stay to the south of runway 04/22 while Gord Ireland does his Twin Huey test pilot imitation in the northern remainder of the world. Thermals are booming everywhere as I pop off tow at 2000 feet agl right into 500 fpm up. Minutes later, I've caught up with AML, the Grob 103 we have on loan from the Alberta Soaring Council. Breaking through 8000 feet I look to see which way to strike out on my first motorless cross-country. The wind is indifferent so I point XQL's nose southwest toward Bonnyville airport 32 km away. Half-way there and down to 5000 feet, I start to thermal and see Bingo behind me in his Dart. Not knowing how long he's been there, I remind myself that a fighter pilot's day is made if he can sneak up on someone. Strange

people these jet jocks, but it's nice to have his company. We gain a bit more altitude before we head out in loose formation toward Bonnyville. With steady sink for the next few miles, Bingo decides that discretion is the better part of a day's flying and heads back to the base. Aware of our AME's two airstrips nearby, I decide to press on.

3:00 pm

My heart sinks in harmony with my electric vario as I approach circuit height over Bonnyville airport. The end looms near. Scratch, scratch, scratch ... a little lift ... scratch, scratch ... a little more. For what seems like an eternity, I endure 1-200 fpm lift up to 6500 feet. Suddenly the lift improves considerably. As I climb through 8000 feet I advise Cold Lake tower of my intention to head for Glendon, 60 km from home and a qualifier for Silver distance. "X-Ray Quebec Lima, Cold Lake tower checks your remarks and Glider Ops wants you to press on if able. They are planning on retrieving you if you land out." Good! My pals at home haven't forgotten me.

Between Bonnyville and Glendon lies Moose Lake. Full of confidence, my first attempt to skirt to the north edge of the big lake results in my limping back to Bonnyville for some extra height. Armed with almost 10,000 feet, I attacked the lake a second time and was rewarded with a clear view of the grass strip at Glendon far below me.

4:00 pm

My Silver distance was in the bag! Now what? I was only two hours into the flight and, except for a cold and wet right foot, I didn't feel like just circling over Glendon for another three hours to complete my five hour duration requirement. Quick check of the map. The St-Paul airport was 35 km to the south. It has a long paved strip. Lots of flat bottomed cu around that just scream, "Fly over here!" A quick call to let Cold Lake know my new intentions and away I go! The next 45 minutes to St-Paul were too easy. Strong up-drafts suspend my Schweizer iron and I between 7 and 10,000 all the way. No problem!

5:00 pm

As soon as I reached the St-Paul airport I tried unsuccessfully to advise Cold Lake tower of my arrival, but Perry Stadler flying the Grob 103 over the base heard me. He relayed my intentions of thermalling over St-Paul airport until 7 pm for my five hour duration and then landing there.

So there I was, mission essentially accomplished, 85 km from home, right foot very cold, floating 2000 feet over the St-Paul airport, feeling somewhat bored watching a Cessna 172 pounding out some circuits. Whap! A strong kick in the pants and I see my vario rising through 700 fpm. Up we go. As I level out at 10,000 I hear a little elf on each of my shoulders whispering to me. "Go for some more distance," says the one on the left. "Stay where you are, you've got it made," says the one on the right. What to do, what to do? I look at the map. Hmm. Two Hills is only 45 km further southwest ... and there's Chipman not far past that! Boy, would those Edmonton guys be surprised to see me! Decisions, decisions. Instantly, the elf on the left wins as I hear Trevor Duff over Cold Lake in my old Cessna 140. I pick up the mike. "November Echo Hotel, glider X-Ray Quebec Lima, please advise Cold Lake that I'm trying for Two Hills."

6:00 pm

Did you ever get the feeling that you made a bad choice even though you were sure it was the correct one? That was the feeling I was having since I left St-Paul. Now I was over halfway to Two Hills, down to 6000, and starting at a thin wall of rain showers ahead of me. Maybe I'll just thermal for a while in this weak stuff until those showers pass. Each turn in the thermal forces me to look back to St-Paul. "I told you so, I told you so!" says the little guy on the right. "Shut up!" I say to him. I level out and "penetrate" through an open area in the drizzle. The 1-26 is a good little ship in thermals but it has the penetration ability of a dust bunny. Two Hills appears in the distance as I leave the rain behind. I try not to look at my altimeter as I hear the vario

continued on page 12

MY SECOND cross - country

Flying 346 km when Murphy is absent

Sylvain "Bingo" Larue

Cold Lake Soaring Club

THE DAY WAS PROMISING. The cus were starting to form up around 11:30. Looks like it's going to be a good day indeed. It's a day for cross-country. I have maps with altitude rings drawn on, and route information to Goodsoil and Glendon. At noon I'm strapped in and ready to go. Master on, radio on, vario on ... I love my new instrument panel. Well, the winds are coming from the east so I decide to go to Goodsoil.

The take-off was challenging because of the crosswind. Each sailplane has its peculiarities, and having an off-centre C of G hook makes the Dart an interesting sailplane to take off. After releasing at 2000 feet I found myself in a good thermal and climbed rapidly to 4500 feet. Cus are everywhere for as far as I can see.

Last week, I tried a cross-country to Glendon (31 nm to the west) but turned around at Bonnyville — that was my first cross-country in a sailplane. This time I knew I could make it to Glendon and back, so I changed my goal from Goodsoil to Glendon. When I left Cold Lake airport, I never expected that this flight would last over six and a half hours.

When I arrive at Glendon and work a 600 fpm thermal back to 6000 feet, I had to make a decision — should I turn back, or keep going, and where? There are a couple of factors to consider. It's only 12:40, the average thermal is over 600 fpm, the day could overdevelop and there is a strong wind from the east. But the primary factor is my level of experience in cross-country flying. It's a difficult decision but I have to make one — I can't fly over Glendon all day. So I decide to go further southwest to St-Paul. If Randy can go to Two Hills in Spam Can, I think I can make it to St-Paul and back.

Thirty minutes later I'm abeam St-Paul, looking further west. I'm halfway between Cold Lake and Chipman. It's time to make a decision again. So far it doesn't look like it's going to overdevelop. The last two thermals were

over 800 fpm. I also have a few options: I can always land at Chipman or at any other airfield marked on my map. Being prepared sure makes a difference. In any case, I decide for Chipman. Besides, I'm having fun.

Around 2:40 I arrive over Chipman with 4500 feet to spare. I've made it. I manage to call Chipman Ground and ask them to call the boys back home to let them know my whereabouts. I was surprised when I heard one sailplane pilot asking if OAK was the Dart. I replied, yes, wondering how come everybody knows my sailplane? It's nice to thermal with an ASW-15 for a change.

Well, time to go home. It's 3 o'clock and I have a good headwind for the return flight. The thermals are stronger than ever, averaging 900 fpm. A few miles east of Chipman I work my way up to 10,000 feet. Flying at 75

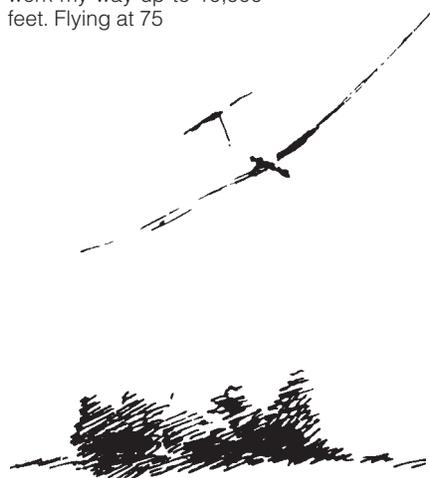
Lake is northeast of me. I enter a thermal to get as much altitude as I can before leaving. While circling, I glance down and realize that something is wrong with my instruments. My electric vario needle is pegged at 11 knots up and it isn't moving. I'm climbing at over 1100 fpm! Before I realize it, I'm back to cloud-base around 11,000 feet. Looking ahead I know I am going to need every inch of it.

It's 5:10. I've been up for 5 hours now. I'm down to 2000 feet and I can barely make Glendon. Looks like I'm going to be landing there ... there's no cu for miles around. I pick a couple of landing fields, just in case, and arrive over Glendon at 1500 feet. I fly around trying my best to find lift. A little bit here, a little bit there, and I can now make it to Bonnyville. It's late in the day and Cold Lake is still 25 nautical miles away. There is no more lift. I call the tower and request the towplane to pick me up at Bonnyville. Larry gets my message and tells me it's going to be a while. I might as well try to stay up in the meantime. Forty minutes later, I'm only three miles east of Bonnyville at 2500 feet, and then the "Big One" hits me. I don't know where it came from, but I am in a 400 fpm climb that takes me to 8000 feet. A quick look at my final glide calculator and I realize that I can make Cold Lake. Could this be true? I set up the best glide speed for the headwind that is still present, and go.

It was a great feeling to be flying across the runway again, and six hours and 40 minutes after takeoff I was landing on position 7. This was the end of an incredible flight. I learned a lot during the flight, and I had been doing a lot of reading in the past few weeks about cross-country soaring. Some of my decisions were based on the lessons learned, and all the preflight preparations really helped.

I think I will always remember this second cross-country flight in my sailplane. •

Unless someone else in Alberta comes up with a late season flight to another club, he should earn the Alberta Soaring Council "Boomerang" trophy for this fine effort. editor



knots, I pick up a cloudstreet and fly for 20 minutes without a turn. Near Two Hills, thinking about Randy's landing there in Spam Can, I have to switch to another cloudstreet about seven miles to the north. This time I'm flying at 80 knots, and after 30 minutes I'm only 500 feet lower than when I started — I'm almost doing better than a Cessna 150! Unfortunately, I have to leave this cloudstreet since Cold

A Climb to the Cairn

Quest II — trekking to Centre Peak

Linda Tittle

AS DAWN BROKE on August 2, 1990, ten Cowley campers assembled to begin the 1st Annual Glider Pilots Climb of Centre Peak. It was inspired by Steve Weinhold's successful 'quest' (see *ff 5/89*) to place a plaque dedicating the mountain to soaring at the top of the peak in 1989. Steve was pleasantly surprised at the number of us who accepted his offer to guide a day hike up Centre Peak, not only for the enthusiasm we had but also for the confidence we showed in him.

We did have some doubts at the beginning — the last road we travelled on up the western side of the Livingstone Range was more promise than fact. Al Stirling's borrowed transportation negotiated all hazards, and "Long live the Vista Cruiser" became our chant. On arriving at the meadow which was our parking spot we could see the tiny cairn silhouetted above, and this gave us a sense of determination which compensated for the intimidating view of the mountain.

Steve told us in our briefing, "it's an easy climb after the agony of the trip through the brush." After a short walk up a survey cutline towards the mountain, he directed us to turn into the woods at a fallen log. We bushwhacked through a forest, following no trail, and got very wet from the dew, but that discomfort didn't last long. Eventually we came to an open section of rock that was a chance to practise for what was to come, then back up another steep wooded slope before we reached the treeline. We stopped for our first long rest period and for a substantial snack, while Steve pointed out most of the route that we would climb. We started out across the loose rocks, those of us without experience staying close to Steve, those with more going ahead. It seemed to be quite steep at that point and it seemed that the rocks were falling off the mountain. Lee Coates decided to stay at treeline because he is wary of heights when he doesn't have wings attached. He was able to follow much of the climb visually; he also took photos of wild-flowers and spent time building a chair from rocks: it will be there for others to sit on for many years.

The one and only casualty came halfway up — Fred Guest stood up under a ledge and cut his scalp. Some of us welcomed the rest while the bleeding was stopped. Fred wor-

ried later that his laughter (while bleeding) was a sign of a serious concussion.

There was another welcome rest period while a climbable route was explored by the experienced climbers since we were off course a bit from the original path taken by Steve. Following a democratic discussion we continued up the mountain! Gradually the sights became more dramatic — we could almost always see our parking area far below, the mountains of British Columbia appeared, Crownsnest Peak got taller and taller, Montana's mountains appeared, and we finally came around a corner and the Cowley valley spread out in front of us. At this point it became an "easy stroll" up along the ridgeline to the top (at least it would have been easy if we weren't already tired).

Being on top of the mountain after the five hour climb was an experience with varied emotions for everyone. We radioed Cowley Ground when we were near the top and two gliders did beat-ups that could not be equalled. "Being buzzed on the mountain top

was fun", understated Dave Arthurs. "Memorable flypast by our Cowley gliders" — Mario Saba. "Seeing ...spectacular flybys ...has made me determined to continue with soaring so I can come back someday in a glider."

"Looking around from the top of Centre Peak I made up my mind not to transfer to ... Tulsa ... since I cannot imagine a better place to live than Southern Alberta and I would not like to leave the Cu Nim and Cowley gliding facilities." (This was Fred making important life decisions *after* his bump on the head.) Yuro 'the mountain goat' Ihns had fun, a small workout, and said that, "seeing the gliders buzz us that close really made me want a licence!" Tony Burton was aware of, "the bigness of the mountain, seeing the movement and power of the airflow around the peaks, the formation and swirling of the clouds on both sides of the ridge, the powerful contrast of the colours — beige of the rocks, the black of the gathering storm to the north, the white of clouds forming in the sun closer to the peak." Steve's emotions were a bit more elaborate. "This was my third visit to Centre Peak.



Steve Weinhold (on left) and Rupert Hooper work their way up the broken rock of the ridgeline of the Livingstone Range. At this point, Centre Peak is about 200 feet higher and 20 minutes away. The view is to the southeast.

photo: Tony Burton



Tony Burton

A proud and tired Linda stands beside her goal of the gliding cairn as storm clouds quickly develop north of the peak.

On both previous occasions a falcon had flown by. As I sat now, watching the sailplanes come by from the north, I again spotted a falcon fifty feet off the spine coming at us. He would fold his wings and stoop when in sink, spreading them and pulling up in the stronger lift. After passing overhead he banked westward and pulled into a thermal coming off the flank of the mountain. Effortlessly he climbed until I lost him to sight. I believe my father talks to me here. In that I find great peace."

The three hour trip down was a fairly uneventful reversal of the trip up, although the storm did arrive as the last climbers reached the bottom of the rocks. Though there was thunder and lightning, the rain was gentle and did not last long. We had removed our rain gear by the time we got to the cars.

At the pilots meeting on Friday, I tried to summarize the day — with apologies to the Academy Awards:

I would like to thank my parents without whose efforts I would not be here today. I would like to thank all the pioneers who inspired Steve to climb the Peak and erect the cairn. I would like to thank all those who attend the Cowley Camp who make this such a special experience.

I'd like to thank the whole group of climbers; they followed the guideline that the group would go no faster than the 'least common denominator' (the slowest) and that was me.

When the line stretched out (or scattered to explore different routes), there was always someone who stayed to bring up the rear, right behind me.

Special thanks to Russ and Tony for holding hands on the "super highway" (the cutline): the very small inclines on it were overwhelming after eight hours walking. They didn't pull me up, but holding hands gave me a transference of energy that got me back to the car.

The very best part of the day was, for me, being on top for the airshow: the unbelievable fly-by from 6A (Eric Greenwell), the glider on tow coming our way, the towplane rocking his wings at us. Words cannot describe what it felt like to have AM (Stewart Tittle) fly by! In a week of Cowley flying where only a few pilots were getting away each day, it was wonderful that August Moon was one that day.

The biggest thanks goes of course to Steve Weinhold. He called this a non-technical climb and I'm sure that, technically, he is correct. I'm also sure that I have never worked harder in my life. When I hinted that I would stop if I was holding the group up, he said that I was going to get to the top because I would be the first woman to do so. As he stuck with me, I realized that the challenge for Steve was to guide me safely to the top. We speculated going up about what I would say to people about the climb. Would I recommend it to others? Would I do it again?

Yes, I would do it again.

Yes, I would recommend it to others. Thank you, Steve.

Later Friday, Russ Flint spent an hour circling Centre Peak. He says, "... my eyes (traced) each bit of the route we took. I was astonished at how impossible it looked from the comfortable and secure vantage point of a cozy reclining seat in a beautiful cloud-white fantasy machine, free to choose to leave the mountain at any moment and soar freely away to other beckoning peaks and valleys. How different this was from the touching and feeling of the trees, brush, and the rocks of yesterday. The substance of Centre Peak had made its mark on my body in cuts and bruises, aches and blisters. But the essence of Centre Peak will still be for me, the glider pilot, the entity which in the morning glows in the sun as it rises over the Porcupine Hills on the other side of the valley; which gives rise to those early puffs of clouds to tell us it will be a good soaring day, and which so often had rewarded us with wave ...; and which in the evenings remains silhouetted against the western sky, a sight that thousands have seen over the millenia, but only glider pilots have seen in their special way.

And now, that extra small bump on top will tell the thousands of others who see it in the future just a little bit of a different way of seeing things around us." •

Linda and Stewart Tittle ('August Moon') from Springfield, Oregon have been regulars at the Summer Camp for years. Tony

COGNITO ERGO ...

SOMETHING OR OTHER

— The mind/body conflict in flying

Steve Longland

CFI, Cambridge University GC

from *Sailplane & Gliding*

THE DAY IS BRIGHT with a gusting wind straight down the runway. The pilot is preparing for his first flight, a winch launch, on a new type. His preparations are few. He doesn't believe in a walkaround and doesn't notice the unusual set of the wings to the fuselage, suggesting a different flying attitude from gliders he has flown before (they were also glass and had T-tails). Nor does he sit in the cockpit for five minutes prior to launch to familiarize himself with the panel layout, also different. The duty instructor, who is not feeling very well, has briefed the pilot once already, but he didn't really listen. Knowing the pilot is resistant to advice, the instructor feels he ought to give another briefing, but because of the pilot's usually bumptious manner he really doesn't feel like facing him again. Gliding's supposed to be fun ... no point in unnecessary grief.

This pilot has effectively been at the scene of the accident you know is about to happen for years, and he is just about to bring the aircraft with him. The winch is not very reliable. Everybody knows that. The pilot also knows that at the end of today's rather short run there is a large wood, so a low break or winch failure requires quick reactions. But as he is more concerned with making an impression, these "known" things don't quite register.

He straps himself in, finding that he's deeper in the cockpit than he's used to, and not very comfortable either. Never mind, no problem. All clear; upslack; all out. At 400 feet the cable breaks. This is a surprise to the pilot who takes a few seconds to realize what has happened. He remembers to check the speed, but the ASI is in a different position on the panel and his brief glance shows him the vario. The needle is well up, in about the same position it would be if it were the ASI in any of the other aircraft he's flown. The speed seems okay! In fact, the glider is not in normal flying attitude but slightly nose up.

There is still time to do something, but the pilot is getting further and further behind events. The release is not in quite the usual position. Precious seconds go by as he fumbles for it. He is now a lot lower and suddenly

realizes the wood is almost beneath him. No-where to land. Must turn back. The glider sags round the turn. The down-going wing feels very tired and the nose starts to yaw and drop. The pilot looks at the vario, realizes it isn't the ASI but hasn't time to look for the real one. Having never really come to grips with spins, and with his brain escaping to some far corner of the universe, he instinctively hauls back on the stick and does a proper spin straight into the ground. The aircraft is destroyed; he is seriously injured.

The overwhelming majority of gliding accidents are caused by pilot error of one sort or another. Some of you may find that rather depressing. I don't believe it need be. Rather the opposite, in fact, since it also means that you are not obliged to have accidents!

The above sample accident was a definite case of pilot error but, as you may have gathered, one with a long, involved and largely unspoken history.

Before I get down to the main subject of this article, a few words about luck. Reliance on luck can take many forms, most of them extremely dangerous. Some pilots seem to regard luck as their birth (or is it divine?) right, so that when the accident that ought to have occurred as a result of their negligence/overconfidence and/or ignorance does not do so — due to the random intervention of a new factor such as the sudden arrival of a spaceship from Aldebaran, for example — they regard the whole affair as being entirely to *their* credit and a mark of their considerable skill. This is quite clearly not a realistic attitude to take, and it pays us to remember that "luck" is not Mum and Dad coming to help us, but a cloud of uncertainty that could just as well do exactly the opposite. Reliance on luck is asking for trouble. What we *can* do with luck, however, is increase our utilization of the good and avoid the bad by becoming more skilful

pilots and much more aware of what's going on around us. Our chosen sport is supposed to be interesting, challenging and fun. It's much more fun and all the rest if we don't practise it in a daze!

Psychology The best way to get you to turn off is to talk psychology. This isn't very surprising. Psychology is almost always unflattering (depends on the brand name) and seen as an implied if not actual criticism of personal, and thus sacred, behaviour.

Nevertheless, in its broadest, most philosophical sense, psychology should offer you a view of yourself that is both objective and, at the same time, from your point of view! You are the only one to experience your world and you really ought to know it extremely well. The fact is none of us know ourselves well. We feel that we are what we are; that our programming is our programming. Ipso facto it must be okay. But for all any of us know there may be internal programs (running virtually without our consent) that have "self-destruct" written all over them. I don't mean that we are likely to commit suicide, but that there may be attitudes and ideas embedded in our mental processes that can have exactly the same effect.

Since most accidents are caused by pilot error, perhaps we should start by asking who or what is in charge! Is there anybody there, is there an "I"? There are philosophers who write book after book about the non-existence of this "I" — and yet still have their names on the cover! We — you and I — believe that there is somebody here! We also believe that give or take the odd moment of incoherent rage, we are rational human beings. This view has no more to support it other than our saying it is so! This does not mean that we are swept hither and thither by dark and unsavoury conflicts or lurid gales of tabloid emotion, but we are certainly not as in charge of what's going on as we like to think.

Let's take an example. Probably best for you to choose you for this. That way you can only offend yourself.

To outsiders, ie. everybody else in the whole world, you exhibit certain characteristics which are recognizably yours. You may also recognize some of them yourself. 5/10 if you do! You also recognize that you are conscious, and this seems a perfectly reasonable thing

to assume; you know that you are because if you weren't you wouldn't know it! Consciousness seems supreme. Yet by far the largest part of the corporate structure that you and everyone else regards as you, is completely automatic. Your glands secrete; your nerves telegraph; your lungs heave; your heart squeezes, and your bowels go about their nefarious business. Without wishing to be rude, I'll bet that until you read this sentence you probably weren't even aware of your bowels going about their nefarious business, or even noticed that you were breathing, for that matter! And why should you, when there is a very good reason for the automatic "you"? It is amazingly complicated, and were you to suddenly become conscious of everything that went on within it, and then have to consciously monitor and direct it all, you would probably be dead shortly afterwards. Most of "you" runs itself perfectly well without any help from "I", so why bother with something that seems to spend most of its time suffering and demanding attention?

The "I" is just a tiny part of "you" — a pimple on the back of a whale and the only part showing above the "surface" of consciousness.... Do not despair, this "I" does appear to have some function. For better or worse it can direct the greater part of "you" to do something that left to its own devices it probably wouldn't have done. For example, if the "you", the body, malfunctions, the "I" takes it to the doctor. The point appears to be that if the "you" asks for something to be done the "I" doesn't necessarily have to comply. So one function of "I" is just to put a spanner into the works. It's not a very big spanner, so its scope for action is rather limited.

Most of what goes on in the physical "you" is automatic. Regrettably the same goes for the majority of our thought processes. Here the function of "I" is that of Resident Conscious Reprogrammer. This is a powerful but slightly unreliable function.

If you're still not convinced of the generally second fiddle role of the "I", think about panic. When the "you" is really frightened it can totally swamp the "I". You may not have any idea what you are doing, and afterward you probably won't remember what you did.

It is most important that your "I" does not either take or get sent on holiday at crucial moments. You simply can't rely on raw instinct in some situations — spin recovery, for example. Instinct is millions of years old. The programming is antique and extraordinarily powerful. Don't forget that the "you" machine has not been up in the air for long and when all the higher, human functions like intelligence have been blown to smithereens by over-stress, it may react with something more appropriate to the depths of a primitive forest than to command of a piece of twentieth century technology. If it becomes paralyzed in order to blend motionless into a long forgotten background and your head has gone missing at the same moment, then tough on you both if the "enemy" happens to be an equally paralyzed fellow pilot!

On the other hand, if you (never mind the poor old instructor!) have spent time training the "you" to fly as well, sensibly, and as sensitively as possible; in other words making

the appropriate reactions second nature, then the "you" can react quicker than "I" can think! Even so you will still need to be conscious of these reactions.

I think most pilots probably have some mild degree of anxiety about flying and usually all it produces is a temporary heightening of general awareness. It has a positive effect. Nothing actually stops working or goes out of control. Fear is a different matter altogether. It is usually destructive and the scale of the result depends on who is being frightened, by what and by how much.

It is not always the pilot's fear — ranging from the *ulp!* of imminent death, to a simple fear of just looking like a complete banana — that causes problems. There is another fear that in the long run is much more dangerous. This is the fear of those who have been put in charge of the pilot's conduct (for want of a better word). This fear is not for the pilot, but for themselves, the job, etc. etc. This is the fear that creates bad rules.

The law of rules It is often thought that the easy way to make everything safer is to create more and more rules and regulations. If that is what flight safety is aiming at, then it is heading straight for complete failure.

Rules and regulations are thoroughly incestuous, breed amongst themselves, and become more and more complicated. This seems inevitable. The people asked to formulate rules must be seen to be doing their job (otherwise why employ them). Eventually we, who are asked to abide by their decisions upon pain of punishment, find it impossible to remember them all, even to recall the simple fact that rule 2/V9 only applies to situation 3Qrt/B5. Is there a rule to cover every situation? If not, and we are relying on the rule in order to be safe, we've had it if we find ourselves in a non-ruled situation. In an emergency you don't usually have time to refer to the book.

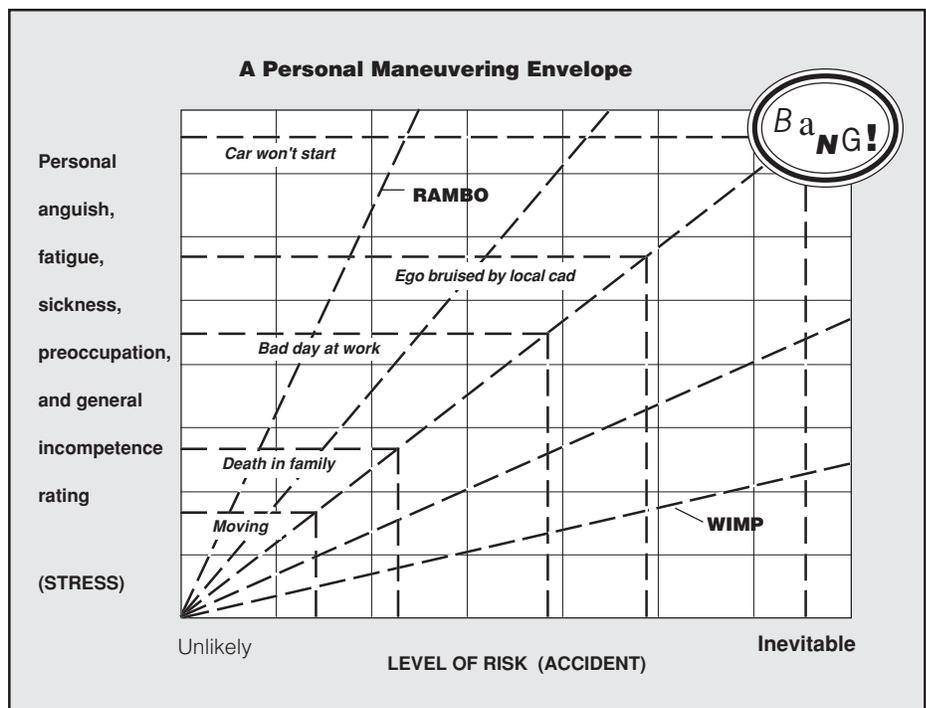
A fundamental point about being alive, I would have thought, is that life is not completely safe and does not come with a guarantee of survival. Personally, I have a good deal of sympathy with the view that states, "protect people from the results of their own folly and you end up with a world full of fools."

The seeds of future disasters

As a result of fear, regulations are often quickly and thoughtlessly created that hold within them the seeds of future disasters. This does not mean that all regulations are stupid. At their best they form a code of agreed behaviour — we have "agreed" to drive on the left whichever direction we happen to be going. At their worst, rules are made to protect everyone except the person who ends up having the accident. In addition, laws and rules don't make people good any more than wagging a dog's tail makes it happy. This is where you come in. If *you* can't take responsibility for yourself, then somebody else will, and that will make you even less capable of being responsible for yourself. You will then be more of a hazard than you were before and yet another rule will come into being.

The aim of flying instruction is, or should be, to help you safely gain sufficient skills to be able to look after yourself. Anything which goes beyond that would seem to be counter-productive. In addition, to be truly able to protect yourself you must know something about what makes you tick (unless you're a digital watch). You don't have to like all of what you see, and some of it won't be flattering. But do at least have a peek!

Stress The level of risk to which you can expose yourself varies. There will be times in your life when you are much more at risk. Stress can kill, and so can the preoccupation that often goes with it. Some stress may be essential for you to keep your psychological tone. Too much can do you in. The figure below is a sort of "Personal Maneuvering Envelope". Various stressful events in life pile



up and lead up to a **bang!** — you could keel over with a heart attack, or you could just as easily have an accident in your car. The extreme right edge of the area represents deadly danger, brain stopped working, life functions critical, etc. The topmost edge simply represents a very high level of stress. Rambo *never* meets his personal Max Permissible Stress level. Life can't stand the strain and does him in before he does any more damage. Wimp cracks up as soon as he runs out of teabags. You, hopefully are neither extreme...

If you are under stress and preoccupied at the same time, you may find that when a further emergency occurs (and all the items on the diagram are emergencies of a sort), there won't be enough of your brain left free to cope with what, in other circumstances, might be pretty trivial. The final straw could be the movers dropping the piano on the cat. The kids are screaming and everything is awful.

You escape to the airfield to fly. Because you're so busy fighting off overwhelming feelings of anger and depression (wishing you were elsewhere, never been born, want to kill somebody etc.) you don't pay attention to what's going on and you have an accident; possibly a fatal one. All your problems are solved!? Right! Preoccupation did you in. You committed a sort of suicide.

Regardless of the richly chromatic scale of life's disasters your personal reactions to what is called stress will differ from everyone elses. You may not be very good at coping with stress. In itself that doesn't matter. What *does* matter is whether you realize that *you* aren't good at coping with it. In any event, you ought to be aware of when it's all just

about to become too much and be able to make a tactical, hopefully gracious, getaway.

It is most important for your own safety, not to mention other people's, that you are able to assess yourself, and have a realistic appreciation of your relative strengths and weaknesses. Any idiot can bowl merrily straight into the jaws of danger, supremely confident in their ability to pick its teeth, but the person who can see what's coming, assess its true implications and then back down without severe damage to the ego, is far less likely to come to grief. If you find that a chip off your old ego is more awful than a broken back then you probably could do with a new ego. Whatever else, you'll certainly be dangerous. If you do find that this is a problem (and real egotists are most unlikely to think that ego's a problem), then in that very instant you're less of a danger than you were before.

Don't allow yourself, whatever the reason, to get into a situation from which you cannot extricate yourself. It is much less heart-rending to think, "I could have done it" rather than lie there in the wreckage wishing you hadn't. This shouldn't stop you from taking calculated risks, but they must be calculated using as many of the relevant factors as possible, particularly the less obvious ones already outlined.

Be spontaneous! The big snag in all this is that the most useful weapon against premature self-destruction is a constant *relaxed* attention, which probably isn't a realistic possibility in a world geared to creating maximum unconsciousness with minimum effort. The world's most benign religions have long advertised the general life-enhancing qualities of relaxed attention, of awareness. The evidence seems to be that we still aren't

taking any notice! A realistic (that means warts and all) appreciation of some, or all, of your inner make-up seems to me to be absolutely essential. I don't mean the kind of neurotic agonizings we are apt to pass off as self-knowledge. The key point is that *nobody is immune* from the risk of accident.

Summary Arranged in approximately descending order of importance, the following is a table of things to do if you desperately want to have an accident. You may permute any combination to produce the most depressing result you can think of —

- 1 Think that it can't happen to you.
- 2 Either don't know or take no notice of your own or your glider's limitations.
- 3 Think about everything except the matter at hand.
- 4 Don't keep a good lookout.
- 5 Put right a mistake by plastering an even bigger one over the top of it.
- 6 Believe that you are always right, or if not that exactly, then don't ever admit to being wrong (ever).
- 7 Fly when you're ill, tired, emotionally upset or otherwise partially or totally unravelled.
- 8 Always be in a hurry...
- 9 And don't bother with a DI because you flew the thing yesterday (or whenever).
- 10 Don't improve your flying skills, either by flying infrequently or by just aimlessly wandering about when you do. •

Spam Can concluded from page 6

drone out a consistent 200 down, down, down. My glide calculator tells me I'm going to make it, but it sure doesn't look that way! And the Glendon to St-Paul leg was so easy. Looking at my watch confirms why I'm not finding much lift. Lots of landing fields down there but the Scout won't be able to retrieve me. I press on.

6:30 pm

As I cross the North Saskatchewan river, I suddenly find myself in 500 fpm sink. Arrgh!! C'mon, penetrate you pig! The little guy on my left shoulder is nowhere to be seen as the one on the right screams, "I told you so!" I have an odd feeling in the seat of my pants. Ah yes, so this is pucker power! Flying straight for the airport, I bank just enough to pick up residual lift from a black field. Stretch ... stretch ... Down to 1500 above ground and about five miles from the airport I still have that strange feeling in the seat of my pants, but I think I might just make it. Only mild sink to the airport, no other traffic around, and nobody wants to talk to me on the radio. Dispensing with a normal circuit, I set up for final. At 800 above ground and the airport now within reach, I look at my watch. The duration since release is 4:45. I still need 15 minutes! I take another look for traffic and make two turns over a black field on final, desperately hoping for some lift to sustain me for just 15 minutes.

It is not to be. Oh well, at 120 km I've at least got my Silver distance. I touch down and roll to a stop on the taxiway.

6:42 pm

If anyone was watching me I'm sure they were laughing. After extricating myself from the small cockpit I discovered that I had two semi-frozen feet attached to two badly cramped legs attached to a pucker that must have been visible from the nearby farmhouse. In this condition I attempted to motivate myself over to the airport payphone to let Cold Lake know I had landed. I was told that the Scout had just taken off to get me. It should arrive in an hour. Good ... that might just be enough time to find out if the lower half of my body is permanently paralyzed.

7:30 pm

The drone of the Scout breaks the evening silence of the Two Hills (I never did see any hills) airport as I hear George Szukala, our CFI, call on the radio. He lands, hops out, and tells me to wipe the silly grin off my face. We move the 1-26 onto the runway, string out a tow rope and hook up. Three attempts to convince George to fly the glider back while I tow, end in failure. "You got it here, you get it back. Besides, you owe me supper. Let's go." I guess he didn't want to give up the warmth of the Scout. At least he let me wear

his Nanook-of-the-North vest on the return trip. Flying back on tow, I realized just how far I'd travelled. By fibreglass standards 120 km is not a long distance, but it was a significant first cross-country for me in "Spam Can."

9:15 pm

Arriving back to a quiet Cold Lake, I release very gently from tow and chuckle as I watch George pull the towrope another 1000 feet higher. As I slowly float down through the still air, I watch the lights of Grand Centre below gradually come on. It's been a great day, but I realize it is not quite over when I line up for a long final approach only to see a C-130 Hercules lumbering along the same piece of real estate that I want to land on! Don't these military guys ever give it a rest? Two quick turns over the golf course give the big green beast enough time to take its exit. I touch down and roll in to our ramp area where George is waiting to go for supper.

- Epilogue -

Two days later, I finally got around to digging out the rules and regs for FAI badges to see what paperwork is required to claim a Silver distance. Oops ... I knew I should have read this stuff last winter. I had always assumed that a barograph was only required for altitude attempts. Darn! Oh well, I can always try it again next weekend, but you can bet that I'll have a barograph on board. •

Foot-launched soaring news

Stewart Midwinter

Stewart is an experienced hang glider pilot, he has competed internationally, holds one Canadian hang gliding record, was editor of "Flypaper" (the Alberta Hang Gliding Association newsletter), and is past president of the Hang Gliding Association of Canada. He is also a Silver C sailplane pilot and a member of Cu Nim, and for a couple of years had a partnership in a Blanik. Employed in the oil industry in Calgary, he has spent most of this year's soaring season in Turkey, where he did some fascinating paragliding.

Welcome to the slow end of the speed polar! You may be accustomed to saying, "that 1-26 just doesn't glide well at speeds over 60 knots". Well, in this column we'll be bringing you news about gliders that don't even glide well at speeds over 30 knots, or 15 knots, respectively. Yes, we're talking about foot-launched gliders — namely, hang gliders and paragliders. We will be bringing you the latest news and developments about hang gliders and paragliders in Canada, emphasizing items that might be of interest to SAC members. This might include notable flights, Canadian records, international competitions or new technology. By way of exchange, a similar column by Tony Burton will appear in the Hang Gliding Association of Canada's quarterly National Newsletter. These columns will serve to emphasize the similarities, rather than the differences between the (present) three branches of the sport of soaring.

There are now close to 3000 soaring pilots in Canada, yet SAC's membership is less than half that number. The rest? For financial reasons, or just because it strikes their fancy, they have chosen to fly cross-country in aircraft that have a worse glide ratio than a 1-26 in a sideslip with the spoilers open! And flights over 300 km have been accomplished. Obviously though, the pleasure of cross-country flying is not related to the absolute magnitude of the distance flown, or no one without a Discus or the like would be having any fun. Rather, the pleasure comes from challenging yourself to better your own limits or those of friends flying similar craft. In this respect, all soaring pilots are the same, regardless of glide ratio or price of their equipment. And all unpowered pilots are involved in the same sport — they have merely specialized in one class or another.

It's been a poor year for foot-launched soaring. The number of long flights is way down from last year due to the wet spring and early summer. Whereas last year, spring yielded a bumper crop of 100+ mile flights from tow launches on the prairies, this year there were only a few. One of the more notable ones was by Chris Müller, 14-year old son of the Canadian open distance record holder Willi Müller. Chris was towed up near Longview, Alberta

and flew 101 miles to land at Three Hills. He came down from 12,000 feet asl because his hands were frozen. Landing in a field beside the local medical centre, he scared his mother when he called home with the words, "I'm in the hospital at Three Hills, Mom!" Chris appears to be the youngest 100-mile pilot in the world.

The Canadian hang gliding championship was also washed out by bad weather. Held at Mont Yamaska, 100 km SE of Montreal, it could only offer competitors one valid round after an entire week of trying. Very disappointing for what is normally the best x-c site in eastern Canada.

Not until mid-July did better weather arrive, just in time for the Golden Open, held at Mt. Seven at Golden, BC. This relaxed competition featured a daily race to goal 101 km south to Invermere. Pilots could count the best four of eight days, which greatly reduced the tension at the launch site. Many pilots flew 12 days straight, with several logging over 40 hours and at least a few making the goal every day of the contest. Fastest time of the meet was 2:02 hours, or 50 km/h. This compares with a "usual" average speed of 25-30 km/h for cross-countries in the mountains.

The Columbia River valley produced several other records this summer. Jean-Claude Hauchecorne completed a 202 km out-and-return in 6:45h, the first ever in Canada, giving him the Canadian O&R distance record, a possible world record for speed over a 200 km O&R, and half his FAI Gold badge (the other half being a 300 km free distance flight). The next day, Sean Dougherty, in his first ever week of thermal flying in his paraglider, flew 58 km from Golden to Spillimacheen ... imagine cruising along under a cloudstreet in a craft with a 5:1 glide ratio! Sean's flight took him 3 1/2 hours. Unfortunately, he flew without a barograph, so the flight will remain an unofficial record.

During the competition, Hauchecorne set a Canadian record in the new FAI category of free distance with a single turnpoint (dog-leg), with a flight of 250 km south to Jaffray.

A week later at Golden, I flew a 106 km out-and-return in 3:45 hours, qualifying for a Canadian record in the FAI 100 km O&R Speed category if my documentation is accepted (third time lucky?). Just a week later I flew the same distance a full hour faster but, as has been said no doubt by many sailplane pilots, "if only I had declared the task ahead of time!"

Air turbulence in the Columbia River valley ranks at times with the worst experienced in the famous Owens Valley of NE California. (Note that the effects of air turbulence on an aircraft is generally proportional to its stall

speed.) This year, on a moderately windy NW day, Martin Henry was suddenly tumbled as he flew along the peak tops. On the second revolution he managed to grab back onto the base tube of his control bar and regain control. Structural damage was limited to two broken ribs in the sail and a leading edge bent inward 30 cm at the tip. He was able to glide down and land safely without having to deploy his parachute, but he scared several other pilots out of the air when he radioed his predicament over 123.4 MHz! (By the way, the HGAC has been in contact with Communications Canada for a dedicated hang gliding frequency. 123.4 is shared with flight training, and sometimes someone tries to tell us to get off the air. Due to our small numbers, we may be granted a channel to share with balloon pilots, but this should not be a problem given that they mostly fly early in the mornings. Our request took a turn for the better when I pointed out that British pilots have been given not one, but five, separate channels for hang gliding use.)

The Columbia River valley sports on its east side one of the best mountain ranges in western Canada for x-c flying. When the upper winds are light easterly, a slight convergence sets up, and an unbroken cloudstreet forms for 50 km at a stretch. Foot-launched pilots wonder why someone in a sailplane doesn't come out there and easily pick off one of several unclaimed SAC records — O&R speed for 750 or 1000 km, speed to goal on 400 or 500 km, or even O&R distance (stuck at 615 km since 1970). As a 10:1 hang glider flew 321.5 km in 9:30 hours in the valley in 1986, a 40:1 sailplane should be able to fly at least 1200 km there!

A problem has been identified with the use of auto-winding time-imprinting cameras. Uneven tension in a roll of film may cause the camera to decide it's at the end of the roll and rewind the film. It's a good idea to fly with a totally manual camera as a backup. The cost of a spare camera and second roll of film on each record attempt is insignificant if the main camera malfunctions on the best day of the year!

After flying a 4:1 paraglider or a 10:1 hang glider, flying a 30:1 sailplane is a real treat. The higher glide ratio and top speed enable one to enjoy feats simply not possible in a foot-launched glider, such as wave soaring to 26,000 feet, or starting a final glide 80 km from home; and flying out at an airport provides certain creature comforts you just don't find on your average mountain top! The price of sailplane performance, apart from the cost of the aircraft, is the highly structured club organization required to operate an airfield and a towplane, and large amount of volunteer effort needed. I like all three flavours of soaring; each one is the same, but different.

On a closing note, did you know that the French name for *free flight*, "Vol Libre", means the sport of hang gliding and paragliding?! It is also the name of the largest French language publication devoted to these sports. •

Note to sailplane pilots: if you come upon a hang glider on a cross-country, call up on 123.4, the pilot may be wondering what you are going to do next! Tony

THREE GOOD REASONS FOR INTERNATIONAL AIRSPACE LIAISON

A paper presented to the *International Gliding Commission* in Paris, March 1990

Bill Scull

Operations Director, British Gliding Assn and Chairman, OSTIV Training and Safety Panel. from *New Zealand Gliding Kiwi*

The ever-increasing demands of commercial aviation impose increasing restrictions on sporting aviation, particularly gliding, in the form of more and more regulated airspace. Yet more restriction is possible with the harmonization of airspace categories arising from the recommendations of the Visual Flight Operations Panel of ICAO. These proposals for the standardization of airspace categories will be introduced before 1992. Given the likelihood of a 'lowest common denominator' factor the outcome is likely to be even more restriction. This paper aims to set out the various factors that influence the trend towards total regulation and possible ways in which such developments can, at least, be delayed if not prevented.

Why more Airspace? This is really a theoretical question since the answer is obviously "there's a lot more traffic". But there are other reasons which are perhaps less obvious and these need to be considered.

- The first is the commonly prevailing attitude of "we must make it safer". This approach is often not soundly based on risk analysis and later in this paper I will give some examples. An approach such as this is a difficult one to argue against since the antagonist (in this case gliding) is either accepting that,
 - the situation could not be made safer, or
 - the risks are acceptable

The false premise is that absolute safety can be achieved and yet in other fields different degrees of risk are recognized. For example — the transport of hazardous chemicals, the siting of nuclear power stations and the space shuttle. I will also return to the comparative risks later.

- The second approach common to aviation authorities/government agencies arises in response to a particularly serious accident. Considerable efforts may be made to prevent a recurrence of such an accident, particularly if the solution is a simple one. Such "solutions" may simply be political. Someone has to be seen to take action whether it will have any effect or not and the applied "solution" may only be political, that is being seen to take action. However, they have to be expedient — no one would accept checking in three hours before a flight for total security screening. It is conceivable that "solutions" of this sort may actually have an adverse effect, that is to reduce the level of safety of the

activity itself in some other respect. For example, more regulated airspace means more VFR traffic channeling around or under the regulated airspace.

- The third factor is the concept that safety overall is improved with more air traffic control. The problem here is that such control is provided in various degrees:

- Positive control in IFR airspace where the principle of see-and-avoid (or see-and-be-seen) is not regarded as necessary or relevant. This, even though controller-created conflicts (potential collisions) are often only averted by the see-and-avoid principle.

- Advisory services using radar (Radar Advisory Services) provide information on traffic known to the "controller" who also gives separation or avoiding advice.

- Radar Information Services provide information on known traffic but do not attempt to provide separation, this being the pilot's responsibility.

The fundamental consequence of these services is a significant decline in lookout. Since such services were first provided, the connotation to each has been "control", although it is only provided in IFR airspace. The increasing use of radio navigation aids has brought a further decline in airmanship and lookout.

These three factors together frequently make a case for more airspace which is very difficult to challenge. In making the points (for more airspace control) some of the possible counter arguments have been suggested. But the key point is really the *actual* level of safety (or risk) and whether or not this is quantifiable or merely subjective (qualitative). If the degree of risk in a particular situation can be determined, then this in itself is no use unless the acceptable level can be agreed. If it cannot be agreed, then the likelihood is that more regulated airspace will be created on subjective grounds alone.

Before going on to examine the safety considerations in some detail I will consider the "three good reasons" of this paper's title.

Three good Reasons

1 The first of these might be termed "*united we stand, divided we fall*".

The process of negotiation (if such exists) in the design stage of new airspace carries the risk of such division. For example the parachutists can continue to climb in the airspace if their aircraft are transponder equipped. But gliding cross-country is difficult, and flying training in aeroplanes (especially stall/spin training) is potentially fraught beneath it. However, the latter two activities can continue, but without cross-country flying a gliding club will gradually die and flying training costs may become prohibitive. United opposition might just stand a better chance of stopping, delaying or minimizing the increase of regulated airspace.

The implications on the international scene are equally serious. What chance will the countries with relatively little gliding activity have when the gliders in Germany are all required to have transponders. The American stand on this issue may have done us all a service.

This scenario leads to the second already alluded to.

2 "*Death by a thousand cuts*" was known as a standard form of torture.

In aviation terms it is an over-statement; three, four or five cuts may be all that is required. Each "cut" in itself cannot be represented as devastating or even serious, but three or four such cuts may be terminal. For example, there have been no glider cross-country flights across the River Thames (to the east of the London Terminal Control Area) since the base was lowered from 3500 to 2500 feet, this despite the best weather in living memory during 1989. The clubs affected by this are starting to atrophy (for reasons already given).

3 The last "good reason" is the need for a concerted international approach to counter the "*lets-make-it-safer*" syndrome.

The rational approach to show that there is no significant risk has worked in the past (for example the paper, "The Probability of Collision between a commercial aircraft and a Glider", by Rear-Admiral Nicholas Goodhart). More recent research in the UK has not been successful in persuading the authorities that decisions should be based on a realistic assessment of risk.

The Benefits of International Liaison The "good reasons" should give a sense of purpose and the possible benefits be recognized

if all parties are to be motivated towards international cooperation, through the IGC or any other forum. Some recent issues should be sufficient to convince you. Consider:

- In 1988 the Soaring Society of America and others fought a proposal which would require the carriage of altitude reporting transponders in gliders flying at or above the lower of; 6000 feet AGL or 12,500 feet ASL and, operating at all altitudes within 40 NM of radar-equipped terminal locations.

This proposal was stopped by strong representation, both technical and political. The international implications if this proposal had gone ahead could well have been serious, the "domino effect".

- The Gliding Federation of Australia was the only voice (in that country) against the proposal requiring radio calls to be made when a glider climbed above or descended below 5000 feet altitude. In addition when above 5000 feet, the pilot would have to report his position, heading, track, speed altitude and destination if requested to do so. The number of transmissions required on a typical 500 km flight would have been in excess of one hundred. The reasons behind this proposal were that all aircraft above 5000 feet were receiving a "service" and wanted information on other traffic, rather than look out for it.

Such proposals may well indicate the future pattern of control and progressive restriction for our sport. The grounds are often spacious and only: that the authorities want to "make it safer", and more controlled (as opposed to uncontrolled) flight must make it safer. A recent TV program suggested the future possibility of controllers feeding data directly into the Inertial Navigational System of aircraft, thus fulfilling the belief that many controllers already appear to have that they are in total control.

The fundamental point is that where there is such an irrational approach it must be challenged, especially if the grounds for the proposal are specious. To illustrate this point consider the following:

- By the time of the moon landing, Risk Analysis was becoming highly developed, and one of the agencies that had played an important role in that development was NASA. However, not long before the actual moon landing, NASA had specifically excluded risk analysis from its considerations. The immediate reason for this was that the chances of returning for the astronauts who had landed on the moon was distinctly pessimistic. The techniques which replace risk analysis were both qualitative:

- Failure Modes and Effects Analysis and
- Qualitative Hazard Analysis

Based on these categories a critical list is established and corrective action considered, and if not possible a waiver is granted by a committee. On its fatal launch, Challenger was apparently the subject of more than 4000 waivers concerning items of hardware. The Rogers Commission was set up in the aftermath of the Challenger accident, and NASA has agreed that consideration should once more be given to probabilistic Risk Analysis.

Conclusion The various approaches which are used to justify increasing regulation and control of air traffic vary from:

- "we must make it safer" on purely emotive grounds, through
- quantitative risk analysis (which is seldom, if ever used), to
- accepting a level of risk which, in QRA terms, is not acceptable.

Since (b) above is accepted in aircraft design and operation it seems illogical not to do the same in air traffic management. It can only be assumed that the emotive ground of (a) overrides all other reasonable or scientific approach, the thesis being that in the cause of preventing one mid-air collision virtually any restrictions can be justified.

In the light of the points above, there must be some strenuous representation to rationalize the approach towards risk analysis. •



A cool clear day in May

Chuck Keith
SOSA

ON TUESDAY, 29 May, a cold front went through the area. Naturally, that meant Wednesday's outlook would be of consuming interest. The forecast was promising, indicating a cool, sunny Wednesday, with a high of 15°C and 25 km/h winds from the north. I worked my courses out on the map with headings for either direction (depending on the conditions) around the SOSA — Granton — Varney task, which has come to be known as SOSA's "House 300". In this case, it turned out to be clockwise: a westerly trip to Granton, north of London, then northeast to Varney, approaching the Bruce Peninsula, and then home to Rockton. After a busy Tuesday evening getting my stuff together and poring over the chart, I went off to bed at a reasonable hour.

Wednesday — awake with a case of nervous anticipation. It's 4:30 in the morning. The coming flight is weighing on my mind, and I can't get back to sleep. Eventually I headed downstairs and had an early breakfast, made my lunch and loaded the car with all the Tuesday evening stuff. Finally I was on the road to the field, an hour's drive away. I got there after 10 am, finding several people eager to go flying. Chris Herten was there, with Terry Macartney-Filgate helping rig the Herten Jantar. Terry said that although he'd like to

take SOSA's Hornet for a long flight, he had no task planned, so I was welcome to the aircraft. He would be happy to fly the club's single seat Astir. I thanked him for his generosity and set off to arrange for the declaration board and barograph.

At the clubhouse, Dixon More got the barograph ready, took on the job of Official Observer ... and then he promptly offered to crew for me. I was delighted. Dixon knew what had to be done and led me through it, making sure everything was done correctly and in order. We set up the declaration board, using prepared strips for everything ... signatures, date, turnpoints, goal and sailplane type. Dixon put a new roll of film in the camera, sealed it, and I took pictures of the board as required.

Next stop was the hangar where my steed was waiting. Some kind people had already unstacked the hangar and pulled out the Hornet, C-GQMB.

I gave the ship a thorough DI, made out a flight ticket, and changed into my flying gear: warm socks, jacket, jeans, 'Tilley' hat, and my special flying leg made by Walter Herten. Paul Heely helped to put on the parachute, tucking cushions into the right positions for comfort and support. Dixon, who had stood by patiently during all this, stowed camera,

maps, lunch, water and folding cane after me into the snug Glasflügel cockpit.

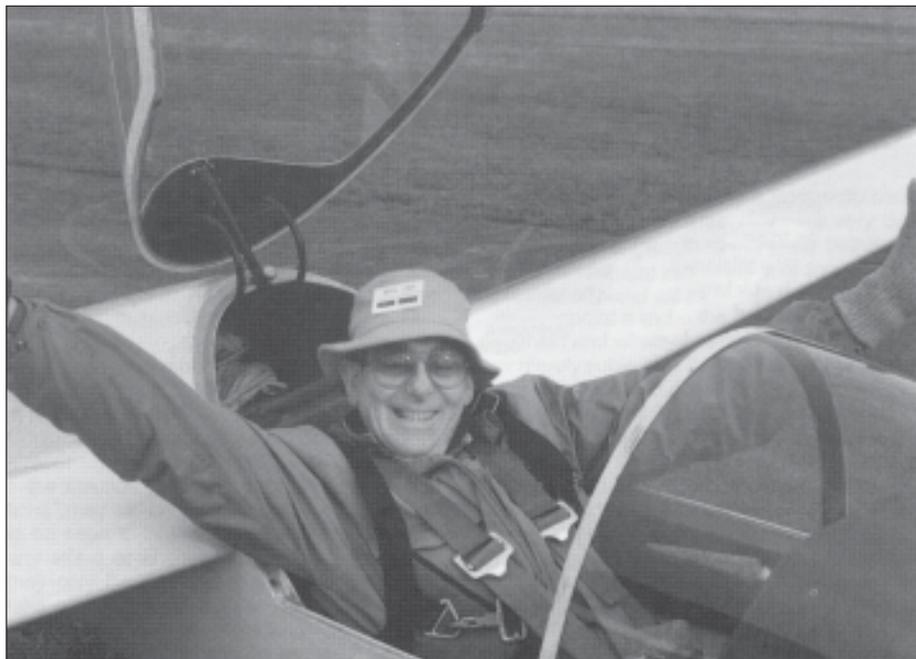
Terry towed Chris and the Jantar, then returned to haul the Hornet to 3000 feet, dropping me off in a good blue thermal. I had a look around and spotted wispy cu to the north and west. Nothing was useable, so I stayed in blue lift until I was twenty nautical miles out on course where I found my first well defined cumulus cloud, with a three to four knot thermal beneath it, good to five thousand feet.

Visibility was fantastic. I could see well beyond thirty miles in the clear spring air. Map reading was a snap. Spotting landmarks on or near my course was easy. As I headed in a westerly direction, short streets of widely spread, wispy windblown cu lined up almost at right angles across my track. Here, lift was also in the blue, and thermals appeared to lean about 45 degrees downwind from their sources on the ground.

About five miles from Granton I found strong lift coming from a gravel pit which gave me height for turnpoint pictures. Chris spotted me from five hundred feet below as he was coming out from the turnpoint. I zipped in, got the pictures, and as I headed out the clouds were starting to street just about on course for the second turnpoint, which was dead into a twenty knot wind. Progress in this direction was on the slow side. However, most of the time the lift was strong enough to allow straight ahead dolphin flight. By following the best energy as indicated by these two solitary streets of thin clouds I circled infrequently and then only in the strongest lift in order to stay high. There were good thermals just about everywhere — they were produced by large, dry fields, gravel pits and towns.

Eventually, Varney appeared in the distance. The town is just south of Durham. Local lift was weak but a very large bare field south of the village produced enough so that I could fly in and take pictures with the hand held camera. (Hand held? Never again!! I promise to repair the stripped screw holes in the canopy so the camera mount will stay firmly in place!) In the process of picture-taking, I got low and into sink. I took four shots; the last one was a half mile past the turnpoint and in the process I nearly got shot down. Whoops. Pucker time. I headed over towards the gravel pit at Durham — nothing there. I headed southeast into the blue towards some distant clouds. Some weak lift appeared in the middle of nowhere a thousand feet above ground. I hung on to that, gingerly, for fifteen minutes. Finally, the ship climbed away while I watched a pair of hawks just below.

From then on it was all UP. I headed for promising cu while flying over the best looking dry



Chuck Keith finishes another enjoyable cross-country in the SOSA Hornet, this time on the ridge in Pennsylvania in April. photo: Rod Crocker

fields, occasionally striking some two to three knot stuff in the blue which allowed me to reach the more distant clouds to the southeast. I found the wind had slowed and shifted toward the northwest. The cloud shadows were almost stationary. The lift on course, towards the south, was marked by clouds but they were thin and dying out.

I got lucky again. I hit a good steady, smooth thermal northeast of Arthur which got me back up to five thousand feet. A few wispy clouds appeared ahead on course. I flew under them, dolphining in lift. The last cloud on the task, formed between Fergus and Elora, provided a final glide from six thousand feet and twenty five nautical miles.

I heaved a sigh of relief as I crossed over highway 401, three thousand feet over Reid's Field and seven miles from home. It was time to lower the nose to pick up speed to 75 knots. I finally crossed SOSA at a thousand feet, with 120 knots on the clock.

Six hours and eighteen minutes. Slow for 300 kilometres, but very satisfying for an "old fart" who has dreamt for a long time about completing the magic triangle. Successful cross-country soaring, like successful sex, leaves you with a terrific feeling afterwards and a strong desire for more.

Returning to Earth ... I wish to thank my friends Rod Crocker and Terry McElligott for urging me to fulfil my dreams and fly my 300 before the end of June 1990. Thanks also for all the stories and tales told and written by experienced cross-country pilots. The bits and pieces of information gleaned from them helped me fly my first successful triangle. Last, but certainly not least: thanks to Dixon More, for his knowledgeable and encouraging support as OO and crew on Wednesday, 30 May, 1990 when — I DID IT! •

Chuck Keith, who is in his 70th year, learned to fly while serving in the Royal Navy. He trained and soloed in the Stearman, at US Naval Air Station Grosse Isle, just outside Detroit; then moved on to Pensacola, where he flew the Vultee Valiant and the North American Texan. His left leg was amputated above the knee early in 1944 and he retrained to become a Link Trainer Instructor (an early instrument flying simulator). Chuck then returned to England to help set up, test and operate, a pilot selection system developed by the RCAF, using a super-sensitive open cockpit biplane version of the Link, operated in a visual setting. He returned home to Canada and civilian life late in 1946. In 1976 he joined York Soaring Association and learned to fly gliders under Walter Chmela's supervision. Chuck moved to SOSA in 1982. He got his special flying leg in 1989. It has a quick release just below the knee, so he can get in and out of gliders easily. He is instructing now, and his goal in soaring is to get the other two diamonds before his 70th birthday.

A killer within us

Csaba Gaal York Soaring

On final approach the sailplane was low, coming in a little hot. The pilot seemed to force the PIK-20 down onto the runway. The glider bounced, took off again, the pilot corrected, hit the runway again, bounced back up into the air, ... textbook PIOs resulted. On the last down cycle, the aircraft disintegrated, instantly killing the pilot. At another club, a veteran glider pilot took a power pilot for an intro flight in the Puchacz glider. The glider was coming home, and from base to final it turned and spun into a cornfield. The passenger was killed instantly; the glider pilot died a day later in the hospital.

Why? Were they incompetent? The PIK-20 pilot was in his late fifties, countless hours of airtime on his logbook, seasoned glass pilot. The Puchacz pilot was in his early sixties, with similar long flying carrier behind him. It could not have been a lack of experience. Structural failure of the aircraft? The investigations of the aviation safety authorities are still going on, but it is unlikely that the cause would be there. What then?

The indications are that the culprit is probably a great enemy of all pilots, particularly high time flyers: COMPLACENCY. When we examine the grim statistics of air accidents in our sport, many deaths occur as a result of complacency. We have done that turn from base to final so many times, it is a piece of cake. Little low, little slow? Well, I am tired, I want to turn faster, give it a little more rudder... We are setting things up for a very nasty incident. Show me a glider pilot who claims never to have done this, and I show you a liar. We survived it, perhaps never even realizing the danger we were in. We don't know what happened to these three pilots, perhaps the official investigation will give the answer, perhaps we will never know for sure. However ...

Complacency is a *factor fatale* that comes to us in a variety of disguises. Sometimes it looks like overconfidence, it may look like boredom, other times it is indistinguishable from carelessness. It is a state of mind characterized by contentment. In this respect it is unlike other mental stress — as a matter of fact you might consider it a kind of anti-stress.

The origin of complacency is found in confidence, an indispensable trait for the successful soaring pilot. All pilots have confidence levels which are determined by their past experiences, training and types of personalities. As a pilot's learning curve in a new machine is starting to flatten out, decisions become easier, flying becomes more routine, automatic. A pilot transitioning into a new ship will experience greater stress which is also a strong motivating force in acquiring the skills and knowledge necessary to master a new bird. However, as the combination of training and experience give rise to confidence, stress

is no longer a factor and complacency frequently replaces it. Complacency then may be defined as a state of confidence plus contentment. The higher accident rate for power pilots who have 1000 to 3000 flying hours as compared to the lower rate of those with less flying experience is often explained by complacency.

The earliest effects of complacency are subtle erosions of the desire to remain proficient. The preflight, prelanding checks become less complete and more automatic. Like a pilot who suffers from hypoxia, the complacent pilot is unaware of the gradual deterioration of his performance. He loses his ability for critical self-appraisal. His adrenal glands seem to have gotten drowsy.

Boredom and inattention is the chief cockpit manifestation of complacency. *Fat, dumb and happy* seems to sum up the condition better than any erudite psychological term. To make things worse, complacency is reinforced by a club's good safety record. Often a club goes for long periods without a major accident — or even minor ones — only then to have a rash of incidents which often can be traced back to complacent attitudes. Instead of profiting from the incidents and accidents of others, the complacent pilot says, "It can't happen to me!" These cherished thoughts about one's immortality may bolster the ego, but expose the flesh to a variety of adversities. Although complacency may be the cause of a major event like a mid-air collision or a spinning-in on landing, for the most part it induces minor accidents and incidents. Towing incidents, or other minor ground incidents are frequently the result of a complacent pilot's actions.

Complacency is easier to prevent than cure. Some complacency is inevitable in all pilots. Only a vigorous program of proficiency checks (that should be offered by each and every club) can ferret out complacency that can be the killer in every skilled pilot. Each pilot, in addition, must develop high personal standards of flying skills to prevent it from setting in, and must strive for perfection not only with his performance in the air, but for his physical and mental condition as well. Because of the disarming nature of complacency and because it is associated with experience and confidence — both qualities of high time pilots — it is a frequently overlooked factor. Only increased vigilance and determination of the pilots can prevent its effects.

I hope that the above thoughts are not misconstrued to relate specifically to the recent accidents described. I simply feel that it is a very good time to mention this subject, a good time to remind all of us that complacency can kill, and each of us already has some small part of that attitude within! •

Adapted from an article by Dr. William Evans III which has appeared in several publications.

Club News

SIDE-EFFECTS AT STARBUCK

The Nationals are long over, but the enthusiasm in the Brandon area remains strong to organize a gliding club there. Under the direction of Ken Schykulski and Art Grant, two club members who live in the Brandon area, an information meeting was held in late August to promote the sport of soaring and possibly get enough people involved to get a club together. By Art's account the meeting was not as well attended as was hoped, however there were several who could not attend but were still keenly interested.

The Winnipeg Gliding Club's involvement in Brandon will consist of having the two-seat Lark and a towplane available on the 8 and 9 of September to give intro rides. Another member will take out his Bergfalke II to assist this endeavour. At the time of writing this event has not taken place so the success cannot be reported at this time.

A more direct off-shoot of the Nats was the signing up of two new students. While signing up new students is not new, the manner in which they started their flight training is. They spent their honeymoon at our field at Starbuck (they are from Brandon) and for one week they flew every night and also on the following weekend. We hope they will continue on towards their licence and become the nucleus around which a future club in Brandon can revolve. Good luck to both of them!

On to our own operations at Starbuck Gliderport. After a dismal June and the flooding out of the Nationals, we have regained our footing and have lost only one or two days due to weather. While our flights are down compared to the same period last year, the executive is confident that we will end the year with as many flights on average as in previous years. Our first season of having a flat rate glider rental imposed seems to be encouraging more members to get out and fly, even on a non-soaring day. This has had a positive side effect in that our members are flying more and therefore are more current. Again, as was done last year, Friday nights have been set aside strictly for introductory rides. To the end of August over 20 rides have been given, with a list of over 80 more to draw from. This has been a real money maker as well as gaining the club a few new students.

The annual corn roast was held in mid August with a highly successful turnout. It seems as if participation by the club members in non-flying activities has diminished over the years, but with organized events such as this we are able to draw them out. Also with improved washroom facilities it is hoped that more members will bring their families to the field and enjoy the club atmosphere.

Towplanes continue to be a source of problems. In early August our veteran Citabria cracked a cylinder causing a week's downtime. No sooner had that problem been taken

care of and the aircraft back on duty, when a routine 100 hour inspection on our other towplane found a cracked motor mount. The crack was just visible beside a weld joint near the firewall. As a result the engine was removed and the mount taken into the local overhaul/welding shop for re-work. Needless to say this has taken its toll on our pocketbook. A committee has been formed to look at possible replacements including the merits of a winch operation. If anyone has any information that they would like to share with us on their experiences with club winch operations we would like to hear from you.

Mike Maskell

YES, VIRGINIA ...

"Brandon tower, Victor Bravo."
"Victor Bravo, this is Brandon tower, over."
"Brandon tower, Victor Bravo has just taken the picture of the smoke stacks." (*This was a mandatory close-in finishing turnpoint 10 km south of the airport prior to entering the control zone.*)

"Victor Bravo, report crossing the Trans-Canada highway."

100 knots and two minutes later: "Brandon tower, Victor Bravo crossing the highway."

"Roger Victor Bravo, will this be a rolling finish or a flying finish?"

"A flying finish."

Roger, Victor Bravo is number one for a flying finish."

Two minutes later after a 120 knot, 200 foot tower flyby: "Victor Bravo downwind for the grass strip."

"Roger, Victor Bravo is number one for the grass, check gear down."

"Victor Bravo."

Land, get out of Ventus, smile at Canadian Airlines passengers all staring at you from aircraft about to depart on runway.

"Yes Virginia, you *can* have a Canadian National Gliding Contest at a controlled airport."

Rick Zabrodski, Cu Nim from *ASCent*

NOT EXACTLY "AU VACHE"

Au vache, "with the cows", is the French expression for an outlanding, but Jim Feyerer might now call it something else. On 31 Aug, the last day of a cross-country clinic at SOSA, he was on a low final glide from Guelph in his Jantar. Although he was assured by Jörg Stieber that he could make it home, when he could no longer see the field for the trees, he made a command decision followed by an immediate left turn and a landing.

Jim touched down in a large mammal enclosure of the Lion Safari Game Park! "Stay in your glider" are the watchwords here, as the rhinoceros has been belligerent towards the tour vehicles in the past and the buffaloes are

also territorial. Fortunately for Jim, the rhino had been penned just 20 minutes earlier, and Jim only suffered some tailwheel damage.

Thanks to two *free flight* spies (SOSA tried to hide this story from us).

GHOST AIRFIELDS

A little hospitality goes a long way. A couple of pals of mine at SOSA were wondering who to thank for putting a very nice deserted airfield just where we needed it midweek one day last summer. Now we know — it's the Guelph Gliding and Soaring Association. Dave Croft's piece on GGSA in the Club News of the last issue cleared up the mystery.

This one particular day (a Tuesday, I believe) a lot of people showed up at SOSA for a day's flying. A number of ships launched and disappeared over southern Ontario. The wind was out of the south, and as one crept closer to Lake Erie, cloudbase got lower and lower. It appeared south was not the *direction du jour*. North proved to be a lot nicer. Eventually cloudbase approached 6000 feet and there was good lift at regular intervals.

Later there was a wind shift and the new air-mass calmed down quite a bit — and you know what that means. Three ships, Dugald Stewart's, Rod Crocker's, and your miserable ink-stained scribe's, all wound up far from home in the dead calm and outside gliding range. Dugald put in at York. He had the whole place to himself but eventually got retrieved. Rod and I headed home at limp speed, catching a bump here and a knot or two there. Then Rod got on the radio:

"Do you see the red roof up ahead?"

"What red roof?"

"The one next to the runway."

"What runway?"

"Never mind, just follow me in."

"Follow you into what?"

Actually, I'd spotted the GGSA field miles out. It's along a railroad, power line, and highway leading into Guelph. Rod shot his usual textbook approach and rolled to a stop off to the side. As I burned off height while sizing up the strip a thermal came up from a quarry and pushed my ship skyward. Passing through 4000, it dawned on me that leaving Rod there was quite unsporting.

A few minutes later, I rolled to a halt right by the 1-35. We had a huge laugh. We found a phone at a nearby house, and after a while Jörg Stieber arrived to aerotow us home. Thank you GGSA. Soaring's a wonderful thing.

Terry McElligott

Flying high ad

SAC AFFAIRS

MISSING FREE FLIGHTS – PART 2

Thanks to Mike Kiss of Calgary for offering many missing issues of the mid-60s as a result of my request in 4/90.

I'm trying to assemble a complete set of *free flight* issues for both SAC historical and for research purposes (Ursula has found old back issues a vital resource in compiling our records history, for example). I hope that there are more senior members of SAC out there who are both packrats and willing to part with selected copies if they haven't really looked at them in the last few decades. If you do have some of these but can't bear to part with them, SAC will cover any expenses you have to make photocopies. Note also that I would be happy to loan out or copy selected back issues for members who are pursuing their own research efforts.

The following are issues which I still need:

1951–Sep, 1955–Apr, Oct(?), Nov(?)
1958–after Mar,
1959–Jan, Feb, Mar, Jun to Aug, Nov, Dec,
1960–all except Jan/Feb, 1965–G3(?),
1970–Mar.

There is the possibility that some of these don't exist in the first place, as *free flight* was irregular some years. Therefore I would also like information on which of the above list were never printed. Thanks to Gordon Bruce and Bob Gairns on info about "non-issues".

Tony Burton, editor

TECHNICAL COMMITTEE

After several years of effort, the editor has succeeded in getting me to put a few words together to describe the activities of the Technical committee.

The primary function of the Technical committee is to assist SAC members with technical matters affecting the aircraft which we operate. This function has historically concentrated on matters which require liaison with sailplane manufacturers and with the Airworthiness branch of Transport Canada. This activity includes: Airworthiness Regulations, Glider Type Approvals, and Continuing Airworthiness.

Commercially produced sailplanes are designed in accordance with airworthiness regulations that stipulate minimum standards of flying behaviour, structural integrity, systems function, etc. These regulations are frequently amended in order to keep them consistent with current technology. Proposed amendments are published for review by the industry and by affected users in order to allow opportunities for comment and revision before they are adopted by government regulatory authorities. The Technical committee participates in these reviews and in the commentary process in consultation with Transport Canada.

The committee's activities in the glider type approval process are probably the most time-consuming and involved. Canadian regulations require that all aircraft (with the exception of amateur-built and ultralight aircraft) must have a type approval. Since all of our gliders are imported, the Canadian Type Approval is issued on the basis of the certification in the country of origin. However, Transport Canada first requires a review of the certification data and a flight evaluation. The review for models originating in eastern Europe and for powered sailplanes is handled by Transport Canada. The SAC Technical committee conducts the review for all other models. This process can sometimes be lengthy and frustrating. Delays can be caused by incomplete information, workload, availability of a glider (and suitable weather) for the flight evaluation etc. On the other hand, when everything goes well, the job can be done within a few months. On the continuing airworthiness side, the Technical committee maintains a liaison with Transport Canada on maintenance problems and airworthiness directives which affect gliders.

In my tenure as Chairman, Type Approvals or Type Approval amendments have been completed for the Ka6CR-PE, LS6b, and the ASW-20 variants (C, L, BL, and CL). In process and nearing completion are the DG-600, Ventus a, Ventus tip extensions, and Ventus gross weight increases (up to 500 kg AUV depending on model) to agree with German approvals. The paperwork is beginning for the DG-300 Club and the Mini-Nimbus C (carbon spars).

Herb Lach, Chairman

ALBERTA ZONE REPORT

Different ways to increase membership have been tried in Alberta with varying degrees of success but all have resulted in bringing in new members. Mall displays and membership nights have been tried by all, and they do help, but they need additional interest generators such as a free flight lottery, just by entering one's name. A further interest generator has been the sale of a package of three flights to be used by the purchaser to give to a family member as a gift. Another package used with considerable success is a set of four instructional flights, including a rebate on club membership if joining within a specified time. This allows prospective members to have a chance to find out if the sport is compatible with them.

The Edmonton club this year moved their membership drive from the month of March, with a membership night in a city meeting place, to late April with a pancake breakfast and flying at the gliderport. Power pilots were invited to fly in. This was very successful. There were at least 300 visitors to the field and 74 flights were booked. Several four-flight packages were also sold. Another open house was held on the Labour Day weekend with another pancake breakfast and evening barbeque. This

again was successful in generating interest and obtaining prospective members.

The Alberta Soaring Council, in conjunction with the clubs, dispatches the Council towplane and sailplane to fly-in breakfasts being held at various airports around the province and offering flights. This has generated interest in soaring and may be a way to encourage the formation of new clubs.

All these methods help to obtain new members, but it is still of primary importance to keep the ones we already have, which is not happening with any great success. I believe all clubs lose about twenty percent of their previous members each year. Let us hear from other groups on ways to stop this attrition.

Alan Sunley, Alberta Zone Director

PRAIRIE ZONE REPORT

This summer has seen a fairly stable situation with our clubs, membership has remained relatively constant except for Winnipeg, which dropped a few. In May, a cross-country clinic was hosted by the Regina club with Mike Apps doing the honors along with Jim Oke, who flew in from Winnipeg in his ASW-20. June was a washout for many clubs in the Prairie Zone which also resulted in the relocation of the Nationals from Starbuck to Brandon.

The summer camp at Cowley saw attendance by pilots from almost all the prairie clubs, with the largest group from Regina (which took along their Grob Twin, and also helped out by ferrying in their towplane after an accident with one of the Alberta towplanes just before the camp started left the organizers short).

Brandon again saw soaring activity on the September 8-9 weekend when Winnipeg aerotowed two gliders in to give fam flights. A Bergfalke II and a Lark were used and were able to do four flights an hour with one towplane. Forty-nine fam flights were made! There is now great interest in Brandon towards the formation of a new club, and several meetings have already been held. Also, the airport is no longer controlled (due to the low traffic volume) which will make a soaring club operation easier.

Paul Moffat, Prairie Zone Director

Coming Events

Oct 6-13, Cowley Wave Camp, a week-long event again in 1990 to guarantee a wave. Contact Buzz Burwash, ESC (403) 465-2394

Oct 12-14, SAC Directors Fall meeting, Québec.

Jan 12-13, SAC Directors Winter meeting, Ottawa.

Jan 16, Toronto Glider Pilot Ground School, a 10 week comprehensive course to meet the DoT licensing requirements, at Bathurst Heights Secondary School, 7-10 pm each Wednesday. For registration info call (416) 789-0551. Instructor Paul Moggach (416) 656-4282.

Mar 1-3, SAC AGM, Québec

Hangar Flying

RHJ-8 AT ALBERNI

The recent article by Kurt Moser on the building of the three RHJ-8s in the 4/90 issue of *free flight* caught my attention. I'm sure you would like to know of the whereabouts of one of the aircraft mentioned. Werner Kilsch sold his aircraft, # HP002, to Al Martini of Tiburon, California in 1971. It carried US registration N51AM and is shown on page 57 of the 1983 *SSA Soaring Sailplane Directory*. Mr. Martini had several modifications done including removing the CG hook and locating an aerotow TOST hook directly under the control columns, added a hydraulic brake, made the wheel fully retractable with gear warning buzzer, and replaced the tailskid with a swivelling tail-wheel. The dash panel, all the canopies, turtleneck and fuselage to wing fairings are new. He flew it 269 hours over the past 18 years for a total of 314 hours on the ship when I purchased it in July of 1989. It has since been reimported to Canada, and re-registered as C-FAJT as this was still available and appropriate.

The sailplane is based in Port Alberni and I fly as a member of the Alberni Valley Soaring Association. These past few months I have been attempting my Silver badges with it, and just completed a 1400 metre gain and a 6.6 hour flight on 27 August. Incidentally, I have the original logbook and note that Werner Kilsch also did a 6.6 hour flight, 2 August, 20 years previous to the month.

It is a nice handling ship, thermalling flapless at 48–50 knots, 44–48 knots with +5 flap and will centre tight thermals at 42 knots and +15 flap. It has full control, still flying at 35 knots full 90 degree flaps. Best L/D is around 37 at around 55 knots and she cruises 60–75 knots nicely with –5 flap. All stalls are docile with flap, much like a trainer. With no flap the elevator buffet is crisp several knots above stall, so releasing a little back pressure has her flying under complete control. RHJ-8s fly beautifully and are a credit to their creators — and yes, it still whistles loudly with flaps extended in a steep decent.

Don Matheson



GROB SUSPENDS INFO SERVICE

Early in 1990, Grob began issuing Service Information Letters, offered on an irregular basis to owners, maintenance facilities, etc. However, as the response to this service was less than 5%, it is being discontinued. Grob states however, that they are always available to owners with advice and assistance.

Note: there is a current Service Bulletin (TM 315–38/1) for all Twin Astir and G–103 Twin II gliders on the replacement of attachment bolts in the aileron connectors at next annual inspection.

Flying is a fascinating sport; it calls for the greatest exercise of self-control and requires as essential elements for success: bravery, daring, courage, confidence in yourself, your men and your machine, good judgement, clear sight, intuitive knowledge, quickness of thought, positiveness of action, all combined with the most delicate sense of feeling and acute powers of perception. Good health is both a result and a prerequisite of good flying, and your mind must be free and clear.

Augustus Post
"Outing" magazine, May 1911

1000 km SPRING IN GERMANY

The May 26–27 weekend in West Germany produced 1000 km flights for 18 pilots, one flying the distance three times that week! Typical was a flight by Julian West, a British pilot living in Germany, completing a 1009 km quadrilateral on the Saturday in a Nimbus 3 in under 11 hours. Flying from Burg Feuerstein in north Bavaria, his turnpoints were Linz, Austria, and Bamberg and Passau in Germany. The following day he flew a 835 km triangle.

"TOP" AUXILIARY ENGINE FOR ASW-24 TESTED

Wind tunnel trials have been conducted in Germany on an ASW-24 fitted with the TOP auxiliary engine system (TOP is a self-contained shrouded engine package which attaches directly on top of a sailplane fuselage like a limpet). It can be installed in only about five minutes. At 90 km/h the additional drag created by the unit was only 140 grams — astonishingly low according to the Akaflieg researchers who conducted the trials. With TOP fitted, the ASW-24's sink rate at 70–90 km/h was calculated to be only about 1 cm/sec higher than that of the clean version — negligible for most mortals. At 115 km/h it increased to 5 cm/sec. The comparison is of course only valid at equivalent wing loadings, thus the "clean" glider was assumed to be carrying 40 kg of water. Fitting the TOP reduced the best glide angle by 0.8 (41.2 at 110 km/h).

from *Sailplane & Gliding*

LICENCES RE-ISSUED

The implementation of the new Transport Canada licensing system occurred on 14 June 1990. As a result, all valid personal licences and licence validation certificates are being re-issued to reflect the privileges of ANO Series IV, No. 1 and 2, and the licence standards of the Personnel Licensing Handbooks, Vols 1–3.

Because of processing delays for medical renewals and additional licence privileges which may be occurring at the same time for some pilots, the re-issued licence may not reflect the current status of those personnel licences. In these cases, the licence holder should maintain both old and new documents. The anomalies will be resolved upon processing of the outstanding licensing or medical documents and subsequent issue of the licence or licence validation certificate.

SAILPLANE FLIGHT PERFORMANCE TESTING

Dave Marsden is currently developing some instrumentation and flight techniques for performance testing of sailplanes. Airspeed and altitude are measured using pressure transducers that have considerably more resolution and sensitivity than mechanical aircraft instruments. The data is stored in an on-board computer and is later downloaded to "floppy" disc which can then be analyzed on a PC computer.

Automated data collection makes more efficient use of flight time, and the subsequent data reduction allows for compensation of minor variations in flight speed and for the application of statistical analysis that may not be practical with manual methods.

This system of data acquisition provides information on the performance characteristics of sailplanes or changes in sailplane configuration (winglets, sealing changes, etc.) with fewer flights and less pilot workload.

FAI Badges

Larry Springford, 45 Goderich Street
Kincardine, ON N2Z 2L2 (519) 396-8059

The following Badges and Badge legs were recorded in the Canadian Soaring Register during the period 1 Jul to 31 Aug 1990.

SILVER BADGE

798	Paul Scott	ESC
799	Robert Harte	MSC
800	Claude Gosselin	MSC
801	Brian Henderson	WGC
802	Jack Humphreys	York
803	Csaba Gaal	York

DIAMOND GOAL

Roger Laroche	Champlain	306.0 km	Diamant 16.5	Julian, PA
Michael Steckner	London	301.0 km	Ka6CR	Embro, ON
Charles Keith	SOSA	306.0 km	Hornet	Rockton, ON

GOLD DISTANCE

Roger Laroche	Champlain	306.0 km	Diamant 16.5	Julian, PA
Michael Steckner	London	301.0 km	Ka6CR	Embro, ON
Charles Keith	SOSA	306.0 km	Hornet	Rockton, ON

SILVER DISTANCE

Paul Scott	ESC	71.5 km	ASW-15	Chipman, AB
Claude Gosselin	Champlain	66.0 km	Std Jantar	St-Dominique, PQ
Roger Laroche	Champlain	150.0 km	Diamant 16.5	Julian, PA
Paul Moffat	WGC	113.0 km	BG12B	Starbuck, MB
Csaba Gaal	York	62.0 km	Libelle 301	Arthur, ON

SILVER ALTITUDE

Paul Scott	ESC	1980 m	ASW-15	Chipman, AB
Claude Gosselin	Champlain	1900 m	Std Jantar	St-Dominique, PQ
Karl Suchanek	SOSA	1530 m	Grob G102	Rockton, ON
Brian Henderson	WGC	1980 m	1-26	Starbuck, MB
Jack Humphreys	York	1420 m	Ka6E	Poitiers, France

SILVER DURATION

Paul Scott	ESC	5:18	ASW-15	Chipman, AB
Csaba Gaal	York	5:22	Libelle 301	Arthur, ON
Karl Suchanek	SOSA	5:11	Grob G102	Rockton, ON
Brian Henderson	WGC	5:25	1-26	Starbuck, MB
Robert Harte	MSC	5:04	1-26	Hawkesbury, ON
Lloyd Weber	SOSA	5:16	Ka6	Rockton, ON
Richard Willems	MSC	5:29	Astir G102	Hawkesbury, ON
Nick Pfeiffer	VSA	6:37	Blanik L13	Hope, BC
Douglas Campbell	Saskatoon	5:34	Phoebus C	Cowley, AB

C BADGE

2233	Paul Scott	ESC
2234	Dave Carlson	Bulkley Valley
2236	Karl Suchanek	SOSA
2237	Brian Henderson	WGC
2238	Richard Willems	MSC
2239	James Russell	ESC
2240	Nick Pfeiffer	VSA
2241	David Mathieu	MSC
2242	Douglas Campbell	Saskatoon
2243	Michael Mullane	ESC



Jim Oke performs a low flypast in his ASW-20 at the Winnipeg Gliding Club field during an open house. photo: Mike Maskell

ACCIDENTS

The Soaring Association of Canada is saddened to hear of the three recent fatal accidents which occurred at the Windsor and Kawartha clubs over the Labour Day weekend and extends sympathy to the families.

At this time, the SAC Flight Training and Safety Committee have little firm detail on the fatalities or the events related to the accidents. The Canadian Accident Investigation and Safety Board is investigating, and a more complete report will be presented by the FT&SC in the next issue of *free flight*.

The following list is of accidents, known to the SAC insurance agents, occurring in 1990 to date:

Citabria, C-GQIH, 7 Apr, Gatineau. On landing, nose gear damaged.

1-35, C-GYSO, 7 Apr, SOSA. Canopy cracked on landing.

Scout, C-GOVY, 26 Apr, COSA. On engine run-up, brakes failed and aircraft hit another aircraft, truck, and farm tractor. Further possible liability claims on third party equipment.

Jantar Std, C-GCGJ, 28 Apr, Winnipeg. While moving aircraft glass door broken.

Pilatus B4, C-GHES, 5 May, Vancouver. Aircraft blown over in high wind following landing. Total loss.

DG 400, C-GURJ, 23 May, Windemere. Aircraft rudder and tail-wheel damaged in transit when fuselage came free within trailer.

1-26, C-FAZF, 30 June, Champlain. Aircraft struck power lines on landing. Further possible liability claim to Quebec Hydro.

Jantar Std, C-GVTZ, 12 July, Vancouver. Damaged in short landing/undershoot.

Cessna L-19, C-GRSX, 21 July, Cu Nim. On takeoff aircraft veered off runway and groundlooped. Wingtip, rear fuselage, and elevator damage.

LS-4, C-GIZC, 4 Aug, SOSA. Nav computer electrical damage.

C-GVGJ, 19 Aug, Outardes. Aircraft ran out of fuel and flipped on landing.

C-GDQK, C-GRVS, C-FYAA, 28 Aug, RVSS. Aircraft damaged as result of hail.

Jantar Std, C-GEMF, 31 Aug, SOSA. Outlanding in field with minor damage.

Puchacz, C-FHTL, 1 Sept, Kawartha. Hermann Ksander, 63, of Peterborough, flying with an intro passenger, Mark Caporal, 32, a drummer with a Toronto-based band, were killed when the glider crashed as a result of a possible stall-spin entry prior to landing. Aircraft destroyed.

PIK-20, 2 Sept, Windsor. Brian Butler, 58, of Sarnia, was killed when the glider crashed during landing as a result of a reported severe PIO incident.

Blanik, C-GAUK, 2 Sept, Cu Nim. Pilot undershot runway with open spoilers and struck trees. One wing destroyed, other minor damage.

Blanik, 9 Sept, Gatineau. Aircraft fell in hole on landing, undercarriage torn off.

