# free flight · vol libre



4/01 Aug/Sept

# PRIORITIES

AM WRITING THIS just after returning from the 2001Nationals at SOSA. It was encouraging to see the good level of participation in the event, both from Canadian and American pilots. Having been absent from the competition scene for four years, I had forgotten the level of skill and stamina required. Competing again was a reminder of the amount of practice and commitment required. The weather was hot and very hazy most days, reducing visibility and requiring the contestants to exercise extra caution, which was addressed by the valuable safety seminars that were held as part of the morning briefings. Many thanks to the sponsors, committees, and individuals involved for putting on a very professional event.

During the Nationals news came of a tragic gliding fatality. While the Flight Training and Safety committee are obtaining details of the accident, it must serve as a reminder to us all of the need for constant vigilance in our activities, not only for ourselves but also for our bretheren.

Concern over the level of membership continues. Present numbers suggest a continuation of the slow decline that has been the trend during this decade. Several clubs seem to be having serious membership difficulties from which it is hoped they recover, but that is by no means certain. Several large clubs have not yet reported any membership information to the SAC office, which puts their insurance coverage in jeopardy.

Unfortunately, it is an annual chestnut that at current membership levels, a functioning head office is not sustainable. That we continue to do so is a measure of the additional efforts put in by your Board to try and make ends meet. However it is clear that we cannot continue indefinitely with the present structure. While some may not have great concerns for the organization, I think for the majority this would be a dark day.

Richard Longhurst SAC president

Après une absence inévitable de quatre ans, j'étais plus que content de participer à la compétition nationale à SOSA cette année. J'avais presque oublié les degrés d'habilité et de savoir-faire qu'exige ce niveau de compétition. Bravo pour les bénévoles, le club, les participants, ainsi que ceux qui ont accordé leur parrainage; tous se sont comportés très professionnellement. En ce qui concerne ma performance ..., en un mot, zut!

J'ai le regret de devoir vous informer qu'un de nos membres a expiré récemment suite à un accident de vol à voile. Cet événement nous rappelle la vigilance extrême que requiert notre sport et l'importance du travail de notre comité d'entraînement et de sécurité.

Notre communauté de pilotes de planeur au Canada demeure restreinte. Malheureusement le nombre de membres a décliné dès le début des années quatre-vingts et a atteint maintenant un niveau qui menace le bon fonctionnement de notre organisation. Nous espérons vivement que dans un avenir proche, il remonte!

# free flight

# vol libre

4/01 - Aug/Sept

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"Astir on top" – another fine cover photo by Steven Liard.

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# a Nationals overview

Larry Springford, Competition Director

a fine contest was held at SOSA - more stories in this issue

Weather The weather started out hot and steamy, then gave us a cold shot just as most of us were running out of hot weather clothes. The unique aspects of the weather boggled minds. For the two practice days and the first three contest days the weather was hot, hazy and humid. In Toronto, there was a smog alert. Typically with a forecast like that, glider pilots go to the beach. In fact, lift was strong to 5–7000 feet. Then after a cold front went through, bringing hopes of a great day (everybody gridded for a noon launch), the sniffer fell out of the sky twice before the day was scrubbed.

Organization Dave Springford put together the Contest committee last fall and work was started to identify the requirements. With a lot of hard work, the committee brought in the largest number of sponsors ever seen. Great Lakes Soaring were approached to provide their Pawnee and it was replaced with the SOSA Citabria when they wanted to soar on the weekend. With lots of assistance the grounds maintenance guy, Ray Wood, had the airfield looking like a golf course at the beginning of the contest.

Tasking Tasks for the 15m/Std classes were set by the Task committee of Ed Hollestelle, Jörg Stieber and the CD based on the soarable hours forecast and on the speed expected based on the strength of the lift. The Club class tasks were set 20% smaller. However, all the Club tasks were set as TDT tasks (see description of the TDT task on page 9) to take into account the wide range of pilot and sailplane capability. On one day, the top Club class pilot outflew half the 15m and Standard class pilots! The first day was undercalled — Dale Kramer in K1 devalued the day by 22% with an amazing speed of 98.3 km/h after a forecast of thermal strength of only 2-1/2 knots. Landouts were high only on two days, the worst being 20% on Day 1. Other than that, there were only two landouts out of 35 contestants on each of three other days.

Scoring With the creative mind of Dominique Bonnière available to create a new scoring program for the Nationals, the scoring quickly reached the point where the two scorers, Darek Andrzejewski and Andrew Corrigan had final scores available a couple of hours following the last glider returning after 1800. As with any new system there were glitches to work out, but as the scorers and pilots learned how to work with the system, it became an (almost) smooth routine (more on the new program on page 18).

**New features** There were a number of new features to this contest. Some of them as a result of rule changes and some of them administrative within the operation of the contest. Safety was the number one consideration during this contest. During two practice days and 5 contest days, there was no significant damage done to any glider. The worst damage encountered was a minor puncture of an aileron on an outlanding. That's significant when one considers that 35 gliders flew on 7 days for a total of nearly 1000 hours!

Safety was also paramount in the establishment of restricted areas to keep gliders away from commercial traffic as much as possible. The new scoring program automatically analyzed .igc files for any incursions into restricted areas. The Air Traffic Control Centre and towers were contacted ahead of time to let them know we would have a lot of gliders in the air. Following that, Toronto Centre, Hamilton Tower, Waterloo Tower and a local flying club were advised by fax or e-mail of the planned tasks and times of launch and return. Also a new addition was the voluntary safety briefings given at the pilots meetings on most mornings.

This was the first contest where motorgliders were permitted to fly without sealing their engine. This was an effort to encourage motorglider pilots to participate. The reason many of them have engines is because they don't want the hassle of land retrieves. Have a look at the rules to see how they were included. One motorglider was in the contest. This was also the first contest to permit aerotow retrieves. Suitable airfields for such retrieves were identified ahead of time and about five such time and labour saving retrieves were provided.



# 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 representing Canada in the Fedération 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 Canadian team pilots for world soaring championships.

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Images may be sent as photo prints or as hiresolution greyscale/colour .jpg or .tif files. Prints returned on request.

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 Zone Director.

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January, March May, July September, November

# L'ASSOCIATION CANADIENNE DE VOL À VOILE

est une organisation à but non lucratif formée d'enthousiastes et vouée à l'essor de cette activité sous toutes ses formes, sur le plan national et international. L'association est membre de l'Aéro-Club du Canada (ACC), qui représente le Canada au sein de la Fédération Aéronautique Internationale (FAI), laquelle est responsable des sports aériens à l'échelle mondiale et formée des aéroclubs nationaux. L'ACC a confié à l'ACVV la supervision des activités vélivoles aux normes de la FAI, telles les tentatives de record, la sanction des compétitions, la délivrance des insignes, et la sélection des membres de l'équipe nationale aux compétitions mondiales.

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Des photos, des fichiers .jpg ou .tif haute définition et niveaux de gris peuvent servir d'illustrations. Les photos vous seront retournées sur demande.

vol libre sert aussi de forum et on y publiera les lettres des lecteurs selon l'espace disponible. Leur contenu ne saurait engager la responsabilité du magazine, ni celle de l'association. Toute personne qui désire faire des représentations sur un sujet précis auprès de l'ACVV devra s'adresser au directeur régional.

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# opinion

# Let's change our competitions — Jim Carpenter, COSA

N 1999, Bruno Gantenbrink, an eminent German competition pilot, wrote an open letter to the IGC to focus attention on the problem of gaggle flying (see free flight 2/2000). He advocated changing the scoring system to take away the advantage afforded to pilots who fly in the security of large gaggles. In this case, "security" refers only to the score a pilot might achieve using this tactic since the security (or safety, to use a better word) of the pilot is at increased risk while in the gaggle. Gantenbrink's letter has apparently fallen on deaf ears, because gaggle flying is still very much with us and the rules have not been changed so as to have much of a discouraging effect on this practice.

Competition pilots are all quite aware of the very real risk of collision while flying in a gaggle. Because of the blind spots, visibility from sailplanes is very restricted. We can all practise safer flying, but more has to be done by the soaring movement itself to minimize the risk of collision. One place to start is to examine the rules and how they promote gaggle flying. As Mr. Gantenbrink pointed out, our scoring system is skewed to protect the majority. At times the gaggle will mill around in even gradually descending air, waiting for the leaders to show the way to the next thermal. If a pilot is exasperated with the inefficiency of the gaggle and decides to dash on alone, he does so at his peril. If his gamble results in an outlanding and the gaggle gets back, this pilot will be not be given any speed points and any real chance of winning the competition will have been lost, because we have a scoring system which is terribly punitive.

The message is: do not land out; stay with the gaggle or you may be severely punished.

And what happens if the gamble pays off? If the gaggle corkscrews itself down into a field, or decides too late to start the task and our entrepreneurial pilot wins the day, once again the punitive rules protect the majority and this pilot will be punished by having his score devalued. Stay with the gaggle or you may be severely punished.

Today we have basically two types of tasks: assigned and pilot selected. An assigned task places a large responsibility on the task setter, who would like almost all, if not all pilots to finish, but if a pilot is unfortunate to burn around the task under 2–1/2 hours (this is a rule in the Canadian Nationals and may be different in other countries), punishment is once again doled out in the form of reduced points. (Perhaps the task committee should be punished, not the pilot!) The same is true of pilot selected tasks, where the pilot would normally have more control over the duration of the flight, but in either case, if the best flight is under 200 kilometres and there are no finishers, once again the winner is punished and receives reduced points.

So, a pilot can be punished for poor performance and be also punished for having too good a performance! Having a pilot's score dependent on how well his competitors do is just not logical. Is there any other sport where a winner's score can be adversely affected by the performance of the majority of competitors? If we are going to have a viable competition scene in twenty years from now, we have to take steps now to ensure our sport will attract new pilots. Younger pilots who aspire to contest flying are the ones most likely to be discouraged when they discover just how punitive our scoring system is.

Take the example of an aspiring pilot who decides to buy a glider for a specific competition. The investment is not small, particularly if the aspirant is serious. But all the planning, training and practice may be for nothing if the pilot is unfortunate to have only one outlanding. How many bouts of punitive scoring does it take to discourage a young pilot? Why discourage anyone? Let's eliminate the punitive nature of our scoring system.

What takes place at a glider competition? Does the pilot who stays up longest win? Is the winner the one who flies highest or farthest? We have all heard questions like  $\Rightarrow$  p15

# Bank on tighter turns

Sam St. Pierre, Sailplane & Gliding

# this is as much about good manners as technique!

CAME INTO GLIDING in an unconventional way, with 26 solo flights before my first dual. No, I wasn't one of the pioneer self-taught aviators. I was already an RAF jet pilot.

It happened on my way to what was meant to be a sailing holiday in Germany in 1953. With a day to spare at Bückeburg, I went for a walk and came across a group of servicemen flying an SG-38 primary. Seeing my interest, and having asked about my flying experience, they offered me a go. After three medium hops without disaster, I found myself flying circuits with none of the aids — or encumbrances that previous flying had accustomed me to. Well, that was it. The Bückeburg pilots flew only on weekends, but said there was gliding all week at nearby Scharfoldendorf. So, sailing cancelled, I made my way to the Scharfoldendorf stop, distinguished from the generally-deserted countryside by no more than a signboard. But I saw a glider flying along the ridge behind the sign. There seemed to be no road and so I scrambled up what felt like a minor alp, only to find when I reached the top that the hangar doors were just being closed.

Next morning I met the CFI and told him my story. Bad news, "All the two-seaters are unserviceable." Then the good news. "I'm just going to do an air test on the Grunau; if it's serviceable you can fly that. Watch what I do, and I'll give you a briefing when I land." So I watched, he flew around the circuit and landed. The briefing was thorough: speeds to fly, heights to aim for at the landmarks around the circuit, use the airbrakes only when your wings level on the approach, and so on. The final words were: "If you get more than 600 feet on the launch, do a few turns over the winch to lose height — there's no one else flying."

I strapped in, and watched the tractor leave the winch. It then disappeared down a gully for an eternity, before reappearing a few hundred yards ahead. There was a long wait between "take up slack" and "all out" while the cable spanned the 200 foot-deep gully. But the launch went well, and I released at around 800 feet.

Something one learned in RAF training was to follow the briefing — exactly. If you were told to go off solo, climb to 20,000 feet and do half a dozen spins, you climbed to 20,000 and did half a dozen spins. Those instructors had eyes, and spies, everywhere. So when I did my first turn to lose height, I was disconcerted to find I hadn't gone down. There was a little green ball bobbing up and down in an instrument which from schoolboy reading I recognized as a Cosim variometer. "Must be one of those thermal things," I thought, "what to do?" I widened the turn. "That's better, but the green ball is still showing some of the time. Widen the turn some more. Good, it's red all round now." Of course, I hadn't been briefed to use the airbrakes — except on the approach.

So I descended to 600 feet and flew the rest of the circuit as briefed. While we were closing the hangar doors at the end of the day, the winch driver came to speak to me. He was an ex-Luftwaffe Me-109 pilot. The Germans were still banned from flying at that time but when no one official was around they let him have the odd launch. "Ach, you English pilots are all the same," he said. "I launch you into a good thermal, and you don't get the wing down, so you lose it." What could I say?

Forty-eight years on, and nothing much has changed. I believe the majority of UK glider pilots still don't "get the wing down" enough in thermals. There are practical and theoretical reasons for this belief. I do turn tightly, as a rule, and rarely if ever find gliders below catching up with me. I frequently find myself balked by gliders joining above flying wider turns than myself. The ones I don't catch up with are those flying tight turns. I have occasionally found thermals continuing well above an inversion when the climb rate has dropped just below it. Above the inversion the climb rate has increased again, giving up to 2000 feet more. I've succeeded in this only by flying very tight turns. On occasion I've watched other gliders ambling round below me, while I've corkscrewed up in a rotor and made the breakthrough into the only wave flight of the day. Tight turns again, although it is sometimes the other way that works best into wave.

The theory is lengthy but it is worth asking why T-21s, K8s and Olympia-2s climb so well. Is their minimum sink so much better than the average glass ship? Have you ever been outclimbed by a hang glider (I'm told the very best of those has a minimum sink of 1.5+ knots)? These all climb better because their slower speed means a smaller radius of turn at a given angle of bank. This, I believe, is the most significant factor when thermalling — getting close to the core. The objections I get when propounding my ideas include:

- If you can climb better in tight turns, why don't you do better in competitions? Answer: mea culpa I screw up between thermals, usually pick the cloud ahead that starts decaying just when I reach it, hang on too long before leaving a thermal, leave the flaps at the wrong setting, and so on. You name it, I'll manage to do it.
- "I climb as well as anyone else, and I only use 20–25° of bank". Answer (sotto voce): because you get in the way of anyone flying a tighter turn. You may think you are being helpful, or perhaps you aren't confident of your ability to fly steeper turns, but if you join a thermal at around the same height as a pilot already circling, then fly with a lower rate of turn (which for gliders of comparable performance means with a smaller angle of

bank), what you are doing is stopping someone from climbing faster.

We could argue forever about what angle of bank will achieve the best rate of climb in thermals. Your glider's basic performance, the strength and radius of a particular thermal, and the air's vertical velocity gradient pattern in that thermal all affect your glider's achieved rate of climb at various bank angles. Strengths, radii and gradient patterns will differ in individual thermals, and cannot be determined. Even in one thermal, the best angle of bank will change with time.

The manual, *New Soaring Pilot* (Welch & Irving), suggests as a general guide that the best angle for a Libelle is "a little over 30° in wide thermals and up to 10° more in narrow ones". This would indicate a little over 35° in average width thermals, or about 40° in narrow ones.

But, regardless of theory, the pilot who has found and centred on a thermal and is making a tight turn will have made his decision on what bank angle he wants to use. Maybe he thinks this thermal is narrow and needs a tight turn. Perhaps he finds centring easier with tight turns. Whatever the reason, he found the thermal and he should be allowed to continue with his chosen angle of bank.

What happens when another glider joins him but then turns more gently? The first pilot will be flying faster round a smaller circle. Even when the new arrival joins directly opposite it will not be long before the first pilot catches up with the newcomer overtaking on the inside. The first pilot will have to take avoiding action. Tightening his turn to overtake on the inside means not only that he will lose sight of the glider he is overtaking, but also that his original, centred circle will be disturbed. Tightening the turn would give a chance of recentring quickly once past the other glider, but it's a pretty scary idea. To have any chance of gaining enough height to be safely above before catching up again, rapid recentring would be necessary. This would entail reducing bank and flying in front of the other glider, which would then be out of sight behind. He would then have to rely on the other pilot not to suddenly tighten his turn, to be looking out in the right direction, and perhaps even to take avoiding action as the overtaker slid back to his original turn. Trying to get past on the inside is fraught with danger.

On the other hand, trying to overtake on the outside of the turn is futile. As soon as the overtaking pilot reduces bank to do so he will no longer be overtaking because he is now flying round a larger circle. He will be dropping back relative to the other glider, but in so doing will be flying into the weaker part of the thermal, and will lose height relative to the other glider.

The best he can then do is sit on the other glider's tail, and hope that the other fellow gets so worried by having lost sight of him that he leaves the thermal. Or he can drop far enough below that he can safely tighten his turn again. Whatever he does, he has been effectively balked and his climb has been spoiled.

Some figures for gliders with a minimum sink of 1.1 knots at 45 knots in straight flight are shown below. Note that the airspeed differences are quite small. The significant factor is the difference in radii and therefore circumferences of the circles being flown.

bank angle	Vmin sink in turn (kts)	turn radius (feet)	time (secs) for 360°
30°	48.4	359	27.6
35°	49.7	313	23.4
40°	51.4	279	20.2

The first pilot in the thermal, using 40° of bank, is gaining 3.2 seconds in each 360° turn on a pilot using 35°. He was half a turn or 10.1 seconds behind the second pilot at the time of joining. So he would catch up in a little more than three turns, or just over a minute. This is not usually time enough for a better rate of climb to put him safely above. If the joining pilot uses only 30° of bank, the first pilot is gaining 7.4 seconds per 360 and will catch up in less than one-and-a-half turns.

So, please, when joining another glider at about the same level:

- · Join on the opposite side of the circle.
- Initially use more bank than the other glider, so that you start to catch up in the turn. Then reduce your bank until you fall back to an opposite position again. Adjust your bank angle to maintain this position for a few turns.
- If the thermal changes and it becomes apparent that recentering is necessary, give the other pilot a chance to recenter first. If you do make the first move, return to the original angle of bank as soon as possible.

A thought for discussion: in any thermal with more than one glider at around the same level, the pilot turning tightest is not getting in anyone's way. In the turn, he is pulling further ahead of those behind, and catching up with those in front — which he can see. If he is using more bank than the thermal warrants, he will be losing height relative to those using less bank, so he will soon be clear below.

So if you see someone below in your thermal, turning tighter than you and climbing faster than you are, wouldn't it be a good idea to tighten your turn? The most likely reason for his climb being faster than yours is that he is using a more suitable bank angle than you are. If you tighten your turn, your rate of climb should improve and you won't then be blocking his climb. The glider (if any) behind you should, on seeing you start to outclimb him, have the wit to tighten his turn — and so on round the circle until the whole gaggle is climbing better.

You won't then have the situation where the one who has caught up starts dodging around below you to see if there's any way to get past safely. This could of course be a ploy to distract you to the extent that your rate of climb gets even worse and you all go away and leave him to it!

If you can't cope with more than gentle turns, perhaps you could move out of the way until the others get past you — then when you land, ask for an instructional flight. Of course, if there are just two of you, and he is above you, turning tighter, and leaving you standing — well, what an ideal time to practise steeper turns than you normally fly!

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# 2001 Nationals diary

Larry Springford

# Practice Monday, 25 June

Forecast: A high to the west over Windsor is expected to bring light winds and cloudbases to 6000 feet.

Tasks — 15m/Std, 208 km Stratford-Mt Forest-Guelph Club: 170 km New Hamburg-Palmerston-Guelph

The launch was delayed from 1230 to 1300 hours waiting for the top of lift to rise. After a first flight of three reported lift of 4 knots to 3100 asl, the rest of the grid was launched at 1310. There were two landouts and several pilots who did not start or cut the task short.

# Practice Tuesday, 26 June

The high has moved to the east over Rochester. Winds are expected to be out of the south a little stronger than yesterday with lift at 3.5 knots. The lift turned out to be stronger than forecast — up to 6 knots with top of lift later in the day reported up to 7000.

Tasks — 15m/Std: 208 km 2 hour TDT, mandatory first TP Woodstock. Club: 2 hour TDT, mandatory first TP Brantford. We launched as planned at 1300.

# Day 1 Wednesday, 27 June

Forecast: Top of lift is forecast at 5000 feet with a strength of 2.5 knots. Visibility is forecast to be down to about ten miles with winds in the 10–15 knot range out of the west.

The lift was slower to start today. A sniffer was sent up to grind around until the top of lift and thermal strength improved. The launch of the Club class started at 1330. As it wasn't clear that the Club class was getting away successfully, the 15m/Std classes were held for about five minutes, but the remaining classes were launched when reports of top of lift as high as 5000 feet with lift at 3–4 knots down low and 1 knot close to top of lift were reported.

The tasks were changed downward on the grid to Task B since the day didn't seem to be developing as well as expected. In retrospect it was a bad decision since the fastest guys in each of the 15m and Standard classes went around so fast that the day was devalued for both. For the 15m/Std the task was a pure vanilla Assigned Speed Task (AST) with three TPs for a total of 191.5 kilometres. For the Club class, it was a 3 hour TDT with four TPs and a return to Rockton mandatory for a minimum distance (if all TPs were made) of 155 kilometres.

The top speed was posted by Dale Kramer in the Standard class at 98.3 km/h. In the 15m class, Wilf Krueger flew the course at 85.8 km/h, and the longest distance posted in the Club class was 172 kilometres. This was quite incredible when you realize that seven pilots out of the 34 landed out and another two didn't leave the airfield.

# Day 2 Thursday, 28 June

Forecast: The high is now to the north and moving to the east. Winds of 10–15 knots from the west are expected with cloudbase at 4000 feet. Lift is forecast to be 2.5 knots. Visibility is again forecast as a low 3–4 miles.

The sniffer was sent off at 1230 and reported lift at 3–4 knots with altitude of more than 3000 agl and indicated that visibility was better than expected at 6–10 miles.

Once again the day didn't look good when we were on the grid, so a new task was assigned to all classes. The original task had been small triangles twice around to keep everyone close to home on a day that looked like there might be a lot of landouts. (Day 1 had the most landouts of the contest — I guess we were a little gunshy.) For the 15m/Std it was a 3 hour TDT with two TPs and a return to Rockton mandatory for a minimum of 89.8 kilometres. Same thing for the Club class with two TPs and return to Rockton for a minimum of 83.5 kilometres. Because the day looked very undependable, the intent was to keep everyone close to home.

The weather for tomorrow looks like a repeat for an incredible five days of great soaring despite haze, humidity and high temperatures which has caused temperature and humidex warnings.

# Day 3 Friday, 29 June

Forecast: There is now a warm front to the northeast, moving east and a cold front quite a distance to the north. The weather looks like a repeat of yesterday. Cloudbase is expected to be 5000.

The sniffer was sent off at 1230 and reported lift at 3–4 knots with altitude of more than 3000 agl. The classes were launched at the planned time of 1300. Cloudbase was slightly above 5000 and the conditions deteriorated during the day.

Since yesterday's task had encouraged a lot of pilots to do small triangles close to the airfield in the hazy weather with poor visibility, the 3 hour TDT tasks assigned to all classes today tried a new approach. There was one mandatory first TP, with the option of selecting one of three. Each of these TPs was at least 50 kilometres from the airfield. The three were in the south, west and north west quadrants to avoid scuppering the day if a big cell developed over the one mandatory TP. Another restriction was added — only a maximum of eight TPs could be claimed, including the last one the pilot was headed towards when his time expired. The aim of this restriction was to eliminate the small triangles, to make the contestants fly longer legs and to keep the gliders separated in what continued to be hazy weather with poor visibility. The day turned out to be a lot tougher than anticipated and six gliders landed out, but all within reasonable distances from the field.

# the Time Distance Task (TDT)

We are now anticipating a cold front to come through tomorrow, with, in the words of weatherman Bob Carlson, "lots of noise and everything getting wet." After four great and sometimes tough flying days, the pilots and particularly the line crew can do with a rest day.

#### June 30

Forecast: The weather is predicted to be similar to yesterday but with stronger winds and lower cloudbases. The tasks set are a short triangle (Brantford/Ayr) twice around for 134 kilometres for the 15m and Standard classes, and a 2 hour TDT for the Club class with the same turnpoints as the 15m/ Std as mandatory TPs.

The first three pilots in the Club class were sent off as sniffers and when they reported 3000 agl with 2.5 knots lift, the full grid launch was started. However, by the time most of the Standard class were in the air, several reports of solid overcast coming in from the southwest, the direction of the first turnpoint, made it reasonable to scrub the day.

#### July 1

Unfortunately the cold front will go over us today, so the day is scrubbed at the pilots meeting. That turned out to be a good decision since the front went through before noon and was followed by very strong winds. With the frontal passage we're hoping for a "gangbusters" day tomorrow.

#### Day 4 Monday, July 2

Forecast: The cold front rolled through yesterday bringing with it optimistic hopes of a great day today. The expectation is for lift of 4 knots to 5500. Winds are expected to be from the northwest at 15–20 knots aloft.

The sniffer was sent off at 1145 and reported lift at 3–4 knots to more than 3000 agl. The classes were launched at the planned time of 1200 hours. Cloudbase was lower than

forecast, particularly to the north where it was only 4000 feet

Again, a new task was assigned on the grid when it was not obvious how good the day was going to be. From experience we had learned that the weather north of Kitchener was not dependable and it was difficult to set a reasonable task without using TPs there. Each class was assigned a 4 hour TDT with mandatory TPs. We had finally figured out that there was no need to include Rockton as a final mandatory TP. It was better to leave the contestants some distance away from the field at a last mandatory TP since they were eventually going to try to get home anyway. For the 15m/Std there were 4 mandatory TPs for a minimum of 294.6 kilometres. For the Club class there were 3 mandatory TPs for a minimum of 197.8 kilometres.

As it happened, the clouds started to disappear about the time the contestants were going through the start gate. The reduction in the tasks was appropriate since almost all of the contestants reported difficulty at some time in the flight. The day was reported to have deteriorated after the first couple of legs were flown. There were two landouts, both within 50 kilometres of the field, and a few pilots shortened the task in order to get home and claim the airfield bonus.

Tomorrow's weather is uncertain. We are expecting a trough to come through tomorrow. If it comes through late enough, we may still be able to get a day in.

## July 3

The weather doesn't look good today. A warm front will be moving over us with overcast and occasional showers. The day has been scrubbed. Tomorrow looks worrisome too. There seem to be several Midwest cold fronts headed our way. We can only live in hope! 

p p17

# The Time Distance Task was used at the last Worlds in Germany (Bayreuth). One of the three classes flying there was assigned this type of task each day. During the rewrite of our contest rules by the Sporting committee over the winter, this task was added. At that time, the Pilot Selected Task (PST) was not removed from the rules since it was felt that some experience with the TDT was necessary before the PST was eliminated. The concept of the TDT task is that the contestant keeps chalking up distance until the allotted task time expires. This type of task was obviously not possible before the advent of GPS flight recorders, since the task ends at a specific time rather than at a specific geographic point.

The rules have a couple of provisos. The first is that the contestants must stay inside the task area since distance is only measured towards a turnpoint. The second is encouragement for the contestant to return to the home airfield since there is a 10% bonus on distance

if the pilot lands at the home airfield. The pilot does not have to return to the airfield within the allotted time, but needs only to get back. The speed of return is not a factor. This overcomes to a large extent the tendency for a contestant to final glide to the earth on a downwind glide well away from the airfield.

The main advantage of the task is that contestants are being measured on only one parameter — distance. With the PST, the contestants were measured on both speed and distance. So one of the conflicts that had to be resolved (and which never was resolved satisfactorily to a lot of people's minds) was how to give credit for the two. Is a 100 km/h flight over a 300 km course better (ie. worthy of more points) than a 110 km/h flight over a 270 km course?

As the TDT task was used during this contest, there were usually a number of turnpoints assigned as mandatory. The advantage of this approach was that all

the pilots flew through the same air mass for much of the flight, but at the end of the flight, there was still an opportunity for the faster pilots to add up more distance. This approach was particularly useful for the Club class where there is inevitably a large spread in glider and competitor capability. With this task, more competitors can make it home and the faster competitors can continue adding kilometres.

An ideal use of the task was demonstrated on the last contest day for the Club class. None of the pilots completed all the mandatory turnpoints, but only one landed out. The leg to the last mandatory turnpoint went overhead the airfield, so as the contestants "timed out," they could turn towards home and finish up at their own airfield. To my mind, it is the task of the future. If it were to be used exclusively, the scoring system could also be changed from our current very complex set of rules to merely adding up the number of kilometres flown.

# A day at the races

Dale Kramer, SOSA

# describing a very winning day

AND THEY'RE OFF ... 5300 feet above ground, heading west toward our first turnpoint 35 kilometres away. It was a bit of a struggle to get a good start so I'm a full 65 minutes behind the first starter. It turns out I will be the last starter that makes it home today.

This is 27 June, the first contest day at the 2001 Canadian National Soaring Competition in Rockton, Ontario. My home club, SOSA, is hosting the event. I have never seen the club in such good form. The contest is as well organized and run as any I have been to. Dave and Larry Springford, a father/son soaring combination, has assembled a team of volunteers that shows there is still a significant interest in this crazy, individualist sport of ours. It's good to know that there are a lot of glider pilots out there that aspire to be able to fly a task like the flight I'm about to describe.

The task is a 192 kilometre triangle with one leg bent a

# THE TROPHY WINNERS ARE

MSC Trophy – 15m class champion 4653 points of a possible 4893 Walter Weir

Wolf Mix Trophy – Std class champion 4608 points of a possible 4780 Dale Kramer

CALPA Trophy – Club class champion 4170 points of a possible 4465 Adam Zieba

**Dow Trophies** (best assigned task flown)

- 15m class 307.5 km @ 102.5 km/h
   3 hour TDT, mandatory TPs of Rockton,
   Cathcart, Plattsville, Rockton
   Ulli Werneburg
- Std. class 311.5 km @ 103.8 km/h 3 hour TDT, mandatory TPs of Rockton, Cathcart, Plattsville, Rockton
   Dale Kramer
- Club class 278.3 km @ 92.9 km/h
   4 hour TDT, mandatory TPs of Rockton,
   Tilsonburg, Waterford, New Hamburg,
   Rockton Adam Zieba

SOSA Trophy - novice Roger Hildesheim

O'Keefe Trophy – team Pierre-André Langlois and Bob Katz

Since only TDT tasks were assigned to the Club class, and also used frequently for the 15m and Standard classes, they were also included in the comparison for the best task flown for the Dow Trophy.

little to bring us home through a corridor between two areas of controlled airspace. It takes us west to New Hamburg, north to Mt. Forest, southeast to Guelph and then home. The wind is from the west at 20 km/h.

K1, my LS8, and I launch at 1405. My tanks are full of water and I spent an hour and twenty minutes getting a feel for the day. The cumulus were small and lift was weak until I ventured off to Brantford where I finally got to a 5800 agl cloudbase at 1505. This 5 knot thermal is probably what gave me the confidence to keep my water which puts my wing loading at 10 psf.

I have decided to go left of courseline to keep a good sky in front of me to the turnpoint. Visibility is good so I can project my course almost to the turnpoint. Bumping the clouds has paid off on this leg, but my first thermal nine kilometres

from the turnpoint is only 1.5 knots, so I leave after four turns.

I now see a few gliders on my right who went down the courseline. I think I have done better with the course I took. Again, just before the turnpoint, I try a thermal and get 2.5 knots and only stay for three turns. I make the turnpoint at 3700 agl and look ahead to see an endless blue hole a few kilometres ahead. The first leg was done at 110 km/h and I have lost 1500 feet from my start altitude. I am going to have to get back to cloudbase soon. Another two-turn thermal at 2.5 knots is still not good enough so I push on.

I head to a cloud forming near the edge of the hole and begin thermalling and am now more or less committed to use this thermal to get back up. Fortunately it is 3.5 knots, but at 4500 agl I decide to leave. At this point there were two other gliders in the thermal and I think they must have thought I was nuts to leave as I headed into this endless blue hole. I did have a reason though, I saw a wisp forming about 5 kilometres ahead and thought that would be a better stepping-stone into the blue. It was only 2 knots but it got me to 4200 agl and now I could see a wisp growing way in the distance that the others could not see. I think they decided to skirt the hole with a large deviation to the right. I was lucky to see this and headed out again.

Eight kilometres later I was rewarded with another 3.5 knot climb to 4500 agl that would get me back to the clouds. As I left I was joined by a couple of others that were well below me now. Things are getting tougher now as I approach the second turnpoint — the clouds that were there are falling apart. A two-turn thermal in 1 knot is all I get. Reach second turnpoint at 2800 agl. The second leg was done at 100 km/h but I lost another 900 feet on that leg.

I have to change gears now. I'm trying to catch up to good clouds but I'm low. I do five one-turn thermals in the first 5 kilometres out from the turnpoint. Finally, after getting down to about 1800 agl and having my hand on my dump valve, I take a 700 foot climb in a 2.5 knotter. The day is definitely dying and I limp along taking a couple of 1.5–2 knot climbs for a few hundred feet, still looking for a good one. I'm rewarded with 2.5 knots to 4500 feet 20 kilometres out of Guelph. K2, the 15m class winner for the day, joined me in this thermal just after I centre it and at the same altitude. He had dumped his water and I was full. He outclimbed me and we left on final glide together. I finished the third leg at the same altitude I started it but only achieved a speed of 80 km/h on it.

The last leg was an easy final glide at 200 km/h but guess what — after starting from an equal altitude, 

⇒ p13

free flight 4/01

10

2001 CANADIAN	27 June	28 June	29 June	2 July	6 July	
CHAMPIONSHIPS	pos km km/h pts	pos km pts	pos km pts	pos km pts	pos km km/h pts	total score
15 METRE CLASS	191.5 km	3 hour TDT	3 hour TDT	4 hour TDT	293.1 km	
` `		303.1 307.5 282.6		_	2 - 90.1 967 5 - 83.3 870 7 - 82.6 859	4653 4607 4527
4 Heri Pölzl LS-6 KC	- 82.1	5 261.5 850	1 242.0 1000	1 311.5 1000	_	4431
5 Wilfried Krueger ASW-27 K2	- 85.8	4 262.6 854	8 187.0 z673	3 302.8 972		4392
6 Dave Springford LS-6 F1	9 - 74.7 738	6 259.4 844	5 216.3 894	9 *218.2 637	4 - 84.4 886	3999
7 Lorry Charchian ASW-27 LJ	6 - 77.3 775	8 174.5 567	9 *172.9 649	6 295.4 948	3 - 88.9 951	3890
8 Willem Langelaan DG-800 OX	5 - 77.9 783	9 164.0 533	6 *207.7 780	7 219.1 L683	5 - 83.4 870	3649
9 Bob Leve Ventus OS	7 - 76.5 764	7 197.9 644	7 176.5 729	8 *230.1 671	9 - dnc 0	2808
STANDARD CLASS	191.5 km	3 hour TDT	3 hour TDT	4 hour TDT	293.1 km	
1 Dale Kramer LS-8 K1 2 Dave Mercer Genesis 2 DM 3 Jörg Stieber LS-4 JS 4 Ed Hollestelle Sr LS-8 LS 5 Andy Gough LS-8 44	1 - 98.3 780	1 311.5 1000	4 198.2 855	1 325.4 1000	2 - 83.9 973	4608
	2 - 86.1 694	2 294.7 946	3 201.6 870	2 318.1 978	5 - 83.0 962	4450
	7 - 65.6 549	3 292.6 L940	1 231.8 1000	3 303.1 931	1 - 86.3 1000	4420
	3 - 82.1 665	4 278.9 895	2 204.7 883	3 302.8 931	3 - 83.7 971	4345
	6 - 66.2 553	8 240.4 772	5 *210.0 824	7 293.3 901	4 - 83.3 966	4016
6 Kerry Kirby Discus Al	4 - 77.8 636	5 260.3 L816	10 146.0 630	8 288.1 885	7 - 80.8 937	3904
7 Ray Galloway LS-8 P1	8 - 78.0 2537	6 247.2 794	8 *165.3 648	6 294.6 905	6 - 81.7 948	3832
8 Ian Grant LS-4 ZT	10 - *96.2 218	11 229.9 738	7 165.3 713	5 299.2 920	8 - 76.0 881	3470
9 Dave MacKenzie Discus 2 1 DM	9 - *108.0 244	7 242.9 780	9 *161.3 633	10 145.3 447	9 - 69.6 807	2911
10 Tim O'Hanlon SZD55 TJ	5 - 67.3 561	10 250.9 t756	6 167.1 721	12 150.1 2361	10 - *205.1 350	2749
11 Alain Berinstain Genesis 2 BB	12 - *60.2 136	9 235.7 757	12 *52.8 207	9 241.2 741	12 - *132.7 226	2067
12 Richard Longhurst SZD55 4Q	11 - *93.8 212	12 220.6 zt558	11 138.4 597	11 137.7 423	11 - *212.8 2263	2053
CLUB CLASS	3 hour TDT	3 hour TDT	3 hour TDT	4 hour TDT	3 hour TDT	
1 Adam Zieba HP-18 AZ	6 *68.3 - 170	1 264.4 1000	1 232.2 1000	1 275.8 1000	1 214.6 - 1000	4170
2 Hans Berg Std Cirrus HB	1 171.9 - 465	4 200.6 751	3 174.5 744	6 238.1 855	4 199.9 - 922	3737
3 Marco Raaijmakers DG300 TD	9 *38.7 - 100	3 211.3 760	2 217.6 891	2 264.9 913	2 211.6 - 937	3601
4 Steve Burany Kestrel 19	5 150.8 - 350	2 237.6 764	7 183.8 2573	3 294.6 908	7 214.1 - 848	3443
5 Ed Hollestelle Jr HP-18 A2	11 *21.4 - 57	6 201.4 745	4 174.7 736	5 249.5 885	3 203.2 - 926	3349
6 Gene Rinke SZD55 AG 7 Roger Hildesheim DG300 ZA 8 Ron Walker 304CZ CC 9 Katz/Langlois PIK-20D O2 10 Spencer Robinson Hornet DW	3 153.3 - 390	7 207.7 732	9 107.0 429	4 266.1 899	5 205.9 - 894	3344
	2 158.9 - 412	5 208.5 750	5 157.5 645	7 234.4 808	9 153.7 - 681	3296
	4 150.8 - 356	8 209.7 686	6 155.2 578	9 220.1 690	8 208.3 - 839	3149
	10 *37.3 - 89	9 167.3 611	10 101.4 422	10 194.5 681	10 166.4 - 680	2483
	8 *55.9 - 135	11 134.2 448	11 84.1 351	11 167.1 588	11 144.8 - 655	2177
11 Andrew Parker Pegasus HN 12 Dugald Stewart Cirrus 75 HG 13 Ian Sutcliffe Ventus 26 14 Colin McKinley ASW-24 N20	12 dnc - 0	13 dnc 0	13 dnc 0	8 200.0 697	6 199.0 – 891	1588
	12 0.0 - 0	10 147.6 553	12 30.5 130	12 124.2 446	12 98.5 – 454	1583
	7 *72.5 - 160	13 dnc 0	8 116.3 446	13 116.7 377	13 75.5 – 313	1296
	12 0.0 - 0	12 18.6 62	13 0.0 0	14 0.0 0	14 dnc – 0	62

Values preceded by an asterisk are distances if pilot landed out.

A character preceding the daily score denotes the application of a penalty:

"z" 100 points – entering restricted or closed airspace
"t" 50 points – a near miss on turnpoint observation zone entry
"L" 20 points – incorrect landing card Scoring notes

Distances in the Club class are true (airfield distance bonus not applied), score is handicapped.

# a Yank at the Canadian Nationals

Bob Leve, Oscar Sierra

ARTY AND I began our Canadian Nationals with a seven hour trip through New York State. I should explain that Marty Nazadowski is my loyal crew and we have a relationship similar to that of Don Quixote and Sancho Panza. As I joust at imaginary thermals rather than windmills, he follows and rescues me from the latest alfalfa patch I have picked to park my glider in.

Leaving the New York Thruway we arrived at the Canadian border ... an hour and a half later we arrived at Customs. My irritation at all the delay was tempered by the realization that at least Canadian Customs let you in, whereas US Customs is a dictatorial agency whose main purpose seems to be to hermetically seal the border, protecting our citizens from the Mexican and Canadian barbarians.

We were greeted by a very pretty young Customs official who asked the usual questions about citizenship and whether we were armed. (This is a question that really only applies to Texans who don't think they are Americans anyway.) The fact that my pickup was being followed by something rather long and thin seemed to raise some questions in her mind so she asked what was in the trailer. I patiently explained about gliders and the Canadian Nationals whereupon she wished us good luck in the speedboat contest. Since she was the first pretty young woman in at least four decades who has listened to this grey haired old guy, I again explained about soaring while she gave me understanding nods and at the conclusion of my oration agreed that it must be a very fast speedboat to need such a long trailer.

I chose not to press the issue since people in cars behind were unhappily leaning out their windows and seeming to not share her interest in the trailer's contents.

We arrived at Rockton and decided that we must have taken a very wrong turn and ended up in a Costa Rican rain forest as the blistering 31°C temperature was only matched by the oppressive humidity. This remarkably paradoxical state of Canadian meteorology was often commented upon by my sweat-soaked Canadian friends who blamed it all on Bush's rejection of the Kyoto treaty. I reminded them how they liked to flock to the warmth of Florida and the Bahamas in the winter, but they rudely commented that while they liked to go south, they didn't want the south to come to Canada.

Our compassionate contest director, Larry Springford, immediately issued an edict that no one other than contest personnel were allowed in the only air-conditioned space, a large and spacious trailer. I quickly learned that pilots were allowed in the air-conditioned trailer to pay their bills so I managed to arrange to pay mine in small installments.

I began the first practice day by landing out in a place called Palmerton, a pleasant little community but one that is not likely to come to the attention of the Ontario Tourist Board. Upon my arrival I found that the field had already been initiated to the sport of soaring by the presence of one Marco Raaijmakers and his DG-300. This made me feel better as incompetence always loves company and since Marco is a real fighter pilot (F-16 type), I felt protected from any Iraqis.

Marty drove the 110 kilometres to retrieve me and then drove past the Palmerton field three times while I shouted and waved my arms in frustration. About forty-five minutes later my telepathic invectives finally got through to my loyal Sancho Panza as he managed to find the dirt road that led to the airport and we drove back to Rockton arriving near midnight.

Landing out upon arrival at the contest did not seem to increase my status among the Canadian 15 metre pilots. I began my first contest day by deciding to follow the example of my betters (which is a convenient excuse for leeching), so I followed Walter Weir, Ulli Werneburg, Jörg Stieber and Ed Hollestelle around the Ontario countryside for as long as I could. Eventually they left me which I considered very poor manners, and I had to find my way back to Rockton which I managed to do.

Feeling very pleased with myself I was accosted by my Contest Director who informed me that my flight recorder disk had errors and had to be redone. He adopted the haughty belief that I was a cyber-challenged American. I corrected the problem only to find that now the disk had the wrong date. Eventually, I corrected the unfortunate disk three more times as each time there was a new glitch which had to be corrected. (Actually, I didn't mind doing this since it allowed me to spend some time in the air-conditioned trailer.)

After the fourth glitch I think Larry was becoming very suspicious of my motives, but that time it turned out the computer disk given me by the contest was defective. I, of course, adopted the hurt attitude of a falsely accused foreigner which made me feel very self-righteous, but unfortunately did not allow for any more trips to the trailer. However, when the scores were posted I was ecstatic. I was not last.

Bob Carlson, who was our weather guru, is a true Canadian phenomenon. In the USA, the weather guy feeds his brand of meteorological falsehoods to the pilots at the morning briefing and hides for the remainder of the day. He avoids being brutally attacked at the next morning's briefing only because the evening's beer drinking has mellowed the pilots' sense of outrage at his inconceivable inaccuracies. This foolish man waited for pilots to land and walked among them asking how accurate his forecast were. The fact that he wasn't tarred, feathered, and run out of town on a rail, shows the good and gentle nature of the Canadian personality. Last I knew he was still alive at the conclusion of the contest.

The second contest day was a blur for me. I suppose that was because the air was a blur. It was now so hazy that Environment Canada issued a smog alert and warned old people to stay indoors. Watching the rest of  $\Rightarrow p16$ 

# Thoughts on one Club class contest day

Adam Zieba, AZ

LIKE TO FLY CONTESTS — provided they take place at SOSA. Numerous limitations have prevented me from more active participation so far. Recently, my partner Chris Bieniecki and I bought a neat HP-18, built by Terry Healy from Toronto Soaring. It took me quite a few hours to get a feel of the ship, but the more I fly it the more I like it. So it looks like I am destined to fly in the Club class for the rest of my soaring days. I do not think it is a coincidence as the idea of level playing field has been firmly engraved in me since I watched national contests in Poland flown in monotype many years ago. But of course it is an unrealistic concept in Canada. Our attention should be directed towards other ways of making Club class more competitive. What happened during this Nationals at SOSA has triggered writing these words.

It was the third contest day. All three classes were to fly a three hour Time Distance Task. So off we went. There were three turnpoints, the first was mandatory and after that we were free to go to those which suited us best. I didn't wait long and after reaching cloudbase, five kilometres west of Rockton, I started towards Woodstock. Visibility was poor but I could still see a few clouds ahead, forming a fairly well defined street. My progress wasn't as good as I had expected because of the headwind. Briefly circling here and there I safely reached my turnpoint and went under a big cu over the southeast part of the city. I found a strong thermal and the next choice was obvious — Brantford. I reached it soon — decision time — what next? Before I had decided I ended up back at Rockton under a well-developed cloudstreet leading slightly to the north of Woodstock. I found myself in very good company heading the same way.

An explosively flying Heri Pölzl in KC lead the way with more "maturely" flying Marco Raaijmakers in TD and Ray Galloway in P1 intelligently dolphining along the north edge of the street. Heri and Ray left us behind very soon so I watched Marco steadily gaining on me. Being much lower, I could see connection clouds running southwest towards that big and old cu southeast of Woodstock that I used before. I looked at the top of it and found it was still "healthy". But the bottom of it looked murky and scary. I took a chance and went under it. No great lift, but no sink either. At around 2500 feet I reached the turnpoint and headed north towards the sunny area. I found a decent thermal in the blue and drifted eastwards towards Plattsville. More drifting after this TP took me to Rockton where I found myself at 2000 agl and there started the most interesting-to-me part of my flight.

With around 15 minutes to go I headed towards St. George hoping to make it back from there. As I kept going gingerly in the blue, I also kept my height so I was over 2000 agl at St. George. Still in the blue I flew towards Cambridge and with a few S-turns I got there at close to 3000 agl. Then there was a fast last dash towards Peters Corners overflying Rockton. I watched my clock and when 3 hours elapsed I turned around and comfortably made it home. Needless to say I felt satisfied.

But why am I telling you this? Because as far as I know, at the 2001 Nationals, Club class had, for the first time, a chance to share the sky with Standard and 15m classes along the same routes for most of the contest. That was brilliant task setting. This way of thinking helps Club class immeasurably. Contest Director Larry Springford, Ed Hollestelle and Jörg Stieber have initiated something very good. Thank you, guys.

#### Adam Zieba

Up until recently Adam was flying borrowed gliders, but now has his own HP18. At the '97 contest he flew extremely well also and won. Last year he flew the longest flight in southwest Ontario – 629 kilometres.

# a day at the races

from page 10

climbing for 8 minutes in a weak thermal and a 45 kilometre final glide, K2 (ASW-27 with no water) and I (LS-8 full of water to 10 psf) finished at the same time. It turned out that I had flown the course at 98.3 km/h. This was 12.2 km/h faster than second place Dave Mercer in his Genesis, also a Standard class glider.

After the flight I was able to analyze my GPS trace and found the following: I used thirteen thermals for an average climb rate of 2.3 knots. My average working height band was between 3000 and 3800 agl. My average cruise speed was 157 km/h. My average glide ratio at this cruise speed was 42/1.

I didn't think I had done that much better than the others, but I guess my horse was ready to win on that day. &

#### Dale Kramer

Dale is a computer guru. He has written a program which analyzes everyone's flight from the .igc files. He printed out the data and had it available and distributed it to all the contestants. The results fascinated them as much as the scores did. On a rain day he provided a briefing on the parameters he measures.

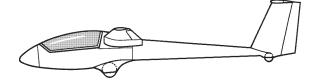
It was only a couple of years ago that he won the SAC 200 Trophy. He's a glider burn now and travels contest to contest, with very good results. From the Nationals results, you can see that he outflew everyone, including the 15m guys.

He dropped out of university to develop and manufacture the "Lazair", a very successful ultralight of some years ago. He's a brilliant individual who applies an analytical mind to flying extremely efficiently — thus winning contests.

# the L33 Solo

Dan Cook, GGC

a pilot report



ATINEAU HAS PURCHASED two new Blanik L33 single seat gliders to upgrade the fleet and I've had the opportunity to get checked out recently on them. I have made a few observations that could impact on safety and I thought I could pass them on to other club members who are considering a checkout on the L33. First of all when I get checked out on a new type I read the manual and get a proper briefing on the glider. You should assess your skills to determine if you are ready in terms of staying ahead of the aircraft. Fortunately the L33 is simple to fly and land provided you are capable of minimum energy landings. This includes good spoiler control, proper approach speed for conditions, proper approach angle (about 8°), and stall speed (38 knots) on touchdown. The key is to bleed the speed off during rotation and flare so that stall speed arrives as the main wheel touches.

The second part of a checkout is to get strapped in and pretend you are flying the takeoff and landing so you know where all the controls/instruments are (try them), what they should look like in flight and visualize emergency procedures. Get the ergonomics sorted out! Next have a plan for your first flight, stay local, and explore the flight envelope at sufficient altitude. How does it handle: turns at different speeds, slow flight, maneuvering, and 90% of Vne should be looked at if the air is not rough. In flight the sideslip is visually fairly flat due to the wing dihedral, but if you look at the up-wing side it is well above the horizon. Banking more with the other wing-tip below the horizon leads you to quickly running out of rudder to prevent yaw and is perhaps why there is an 8-knot crosswind limitation. What this means is that on windy days if you try a crosswind landing you may have difficulty maintaining directional control.

Next try some stalls with and without spoilers, incipient spin recovery, full spin, full spoiler dive, and slips at different speeds. Note the vario for different speeds/configurations (how fast can you push it into wind without losing too much altitude) and explore the thermal handling and climb efficiency. Make your first landing as normal as possible. Later, as you feel more comfortable you can try varied approaches. I did the above exercises and here's what I found. The control harmonization is good although ailerons are heavier than pitch control and much heavier than the 1-26 or 1-36 but still responsive. It only feels like a heavier glider. The control position for takeoff is neutral. If there is any back pressure it will leap into the air, but settle back down when you level off perhaps touching the wheel again. Tow hook location is near the nose and there's a winch hook position in front of the main wheel. If the ground crew connects you to the winching hook for an aerotow you could pitch up on takeoff with the potential to stall or cause a towplane upset. Release immediately if in doubt at any time.

The manual also noted that full spoiler use will increase stall speed and you will need 10 knots extra on approach speed if you use full spoilers so lower the nose when you deploy full spoilers. The weight and balance has a broad range. The mini-

mum weight includes pilot and parachute. Note that the maximum weight is 20 kilograms in the baggage compartment which is a closed off area from the controls/rigging. The ballast plate has a red seat cover so it's obvious when the ballast plate is in the seat pan. Watch that the canopy is opened properly and not by the Plexiglass window, as it is tempting since there is no obvious handle accessible.

I found the spin characteristics more like a Puchacz than a K13. A full rotation spin is slightly inverted at the start of recovery depending how briskly you move the stick forward. Other than that, the recovery is normal and the speed increase not excessive. Slow flight at 35 knots is possible but when you open the spoilers fully there is some complaining requiring unstalling the wing with coordinated aileron/rudder work to keep wings level. It was also difficult to maintain attitude as stall buffeting with spoilers made the nose drop now and then. At maneuvering speed or faster, some oil-canning noises can be heard, but they are well muffled compared to the 1-36. I tried some quick rolls from 45° steep turns left and right and found the roll rate a little slower than on our other single seaters. When you try to penetrate the wind you will find that at 60 knots or more you start to lose altitude very quickly. Pay attention on windy days when trying to stretch your glide back to the field.

The approach and landing was very stable, especially with just enough spoilers to see the first row of circular cut-outs in the spoiler. An increase in speed has to be planned because if you pull full spoilers out quickly the drag delays the increase despite lowering the nose. I recommend gradual spoiler opening once you have lowered the nose. Landing with minimum energy made the landing roll so short that I did not get to try the brake on the control stick, which looks very effective. I noted the instruments responded well, particularly the vario with all of its associated new plumbing. On landing there was a left crosswind of about 5 knots and the glider handled it well, but I had difficulty turning to the right off the runway to let another glider land, as the weathercocking and weaker rudder limited my ability to yaw. This is another signal to carefully watch the crosswind conditions for future landings!

I have a few other observations. The main spar upper and lower rigging pins have detents in them which require attention during assembly, and the tail horizontal stabilizer locking pin has special marks for confirming it is locked. The front canopy locking pin can be misaligned, so a visual check is required from within the cockpit when you lock the canopy. Overall, I found the cockpit comfortable for my 6-foot frame and the visibility and the low noise environment excellent. This ship is very pleasant to fly!

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# let's change our competitions

from page 5

these. We probably explain that a competition consists of daily races, ranging in size from 200 to 500 kilometres, with 3 or 4 turnpoints. Each sailplane is equipped with a GPS unit, linked to a flight recorder which verifies that the pilot completed the course; the winner is awarded a thousand points and the pilot with the highest point total at the end of the contest is declared the winner.

What kind of a race is it when all the start times are different, the distances flown by each competitor are different and even the sailplanes may be all different? What kind of a race is it when, after seeing the exciting finishes in late afternoon, nobody knows who won perhaps until hours later, or even the next day?

We should take a serious and open-minded look at a much simpler type of competition, which is not punitive and would encourage greater participation. The Australians have already had two soaring Grand Prix competitions and pilots, their crews and the contest organizers who participated are unanimous in stating their preference for this style of racing. Why is this?

The soaring "Grand Prix" competition is simple, a race between small groups of gliders around a pre-set task. In Australia, no handicaps were applied, but a restricted range of competing gliders was allowed to ensure consistent performance of competitors. Eligible sailplanes had comparable performance and included the Discus, LS8, ASW20, Ventus and the LS6.

Gliders compete in groups of 6-10, the actual group size determined by the total number of entries. Gliders are rotated between groups on each competition day so that each glider competes against every other glider at least once during the first six days. A *common* start time is declared for each group, but the start point could be different for each group. Spectators now know that the first glider back from a group is the winner.

In Grand Prix racing, the place scoring system rewards excellence without unduly punishing a poor performance and scoring is simple; here is the complete text of the scoring system:

#### Daily scores

- · A place scoring system will be used.
- All gliders who achieve the minimum scoring distance of 60 km will receive one point.
- One point is given for each pilot they beat or draw with.
- One bonus point is awarded to the pilot who places second.
- Three bonus points awarded to the pilot who places first.

(In the case of a draw, bonus points will be shared. Points are awarded to the nearest half point.)

If groups are of uneven size, scores will be adjusted so that the winner of each group achieves the same score, eg. points awarded for different group sizes are equal.

#### Total scores

In the case of a draw, places will be determined by counting back the relative placings when the pilots who are drawn competed against one another. If still a draw, there will be a countback on the total number of first places achieved, then the number of seconds, thirds, etc.

That's it. There's no twenty-page manual full of formulas, impossible to understand. No computers, no slide rules and no engineers or mathematicians are necessary to determine the winner. The first pilot back wins, or the pilot who flies furthest wins.

Instead of the traditional Standard, 15 metre and Club class contests, let's have gliders of comparable performance race one another in annual Canadian Soaring Grand Prix competitions. Pilots who really want to win will still invest in the newest equipment to gain an edge, but more importantly, pilots of modest income will be able to compete at a level appropriate to their investment. Such a competition could easily include older sailplanes no longer considered competitive in the FAI 15 metre and Standard classes. The Libelle and Standard Cirrus competed in the last World Club Class contest and similarly they could compete in a Grand Prix with other sailplanes of similar performance. This would be good for our sport and would surely be an incentive to more participation.

Bruno Gantenbrink's objective of lowering the frequency of flying in gaggles can be achieved in a Grand Prix style competition because gaggle flying is almost eliminated. Some congregating occurs prior to the start, but using a large start point area helps to keep this to a minimum. Having a common start time that begins only 20 minutes after the last launch of each group also helps to minimize congregating in a gaggle, but out on course, gaggles simply did not occur. No time can be wasted by aimlessly milling around. This is unheard of in the traditional FAI assigned tasks, where large gaggles are the norm.

An additional incentive to more participation in our sport is the fact that novice pilots would be grouped with those of much greater experience, thus affording the novice a wonderful opportunity of having a tutor show the way. And what a great thrill it is for an aspiring pilot to place higher than the pilot who has the winning reputation. In the traditional FAI class competition, if the majority of tasks are pilot selected, some participants may spend the entire contest alone — this can't be conducive to a positive learning experience or encourage participation.

We have been asked why we never see the results of glider races in the media. The answer is simple — nobody wants to publish old news. Sometimes the winner is not known until days after the event. The results of a Grand Prix can actually be supplied to the media complete with the photograph of the winning pilot crossing the finish line minutes after the event. This type of racing would garner much more publicity for our sport. Even spectators who know nothing about soaring appreciate knowing that the first sailplane they see cross the finish line is the winner. Pilots like Grand Prix because it is truly racing, crews like the immediacy of knowing who won, and contest organizers love Grand Prix because it is so simple to run.

Sailors have been doing this type of racing for centuries ... they just might be doing something right. If we want to call our sport racing, then let's start racing.

from page 12

the fossils in the 15 metre class grid their ships, I thought it would only be a matter of time before one of us expired with a terminal asthma attack, but none did so we flew a task with occasional glimpses of the ground and each other.

The strategy I adopted for the third day was to become the wingman for Wilfried Krueger, who had been the first day's winner. I thought this a very noble strategy in that I could protect him from any enemies attacking from behind. I decided not to tell Wilf of my strategy as I didn't want him to feel too indebted to me. Thus I compulsively followed as he managed to spend 45 minutes touring the five kilometre start area without finding a wisp of a thermal.

After watching other members of the 15m class fly off to the first turnpoint at cloudbase, I decided that perhaps he didn't need a wingman and I had chosen to protect the wrong pilot so I turned right when he went left. I ended up over a place called "African Lion Safari" ... I will avoid the anxiety-laden details of the next 25 minutes other than to say I was desperately circling in 0.2 knot lift at 1000 feet wondering if the lions were looking up and waiting for another tasty pilot to drop from the sky.

I was encouraged by realizing that I did have a choice between being eaten by lions or stomped to death by elephants. Eventually, the thermals got stronger, saving me from my grim decision. Wilf informed me afterward that within a kilometre of leaving me he found a 6 knot thermal that carried him to cloudbase and a great start. By 3:30 I managed to get high enough to go out on course and since it was a 3 hour TDT task I flew by my lonely self and was the last glider home landing at 6:40.

Again my point total didn't seem to frighten my competition, but I still had escaped last place. The next two days we didn't fly as a front came through. The term front has different meanings in Canada than the USA. In Canada it means that high winds, wild storms and bitter temperatures are the warning signs that Baffin Island has arrived in Ontario. Seldom have I seen so many Canadians shivering together in unison. I joined in the group shivers and will remember the contrary Canadian weather when I pack for my next Ontario trip.

Canada Day was also memorable as we all watched some of the younger SOSA club members hook themselves to a parachute behind a speeding golf cart. The object of this frantic endeavour was to fly. The actual result was to be bounced along the ground for various distances and in various positions. Miraculously, they survived with no injuries. Ah, to be young again! We also had fireworks and yet another wonderful dinner.

On Monday I flew a noble, but ignorant flight which embarrassment prevents me from discussing in detail. My landing in a local cornfield caused quite a sensation as two police cars (not a Mountie on horseback though), an ambulance complete with paramedics, a local reporter with photographer, and a horde of spectators arrived to save the life of the injured pilot. All were very concerned, but seeing me walking about unhurt they got bored and eventually went home.

When a copy of the newspaper was eventually mailed to me, I was delighted to see a picture of my glider and me on the front page. When I read the article I devoutly wished that it had been on the back page or better yet, buried in the classified. The headline started with, "Glider crash-lands in cornfield, American pilot walks away from plane."

Since I had paid Schempp-Hirth a tidy sum for my Ventus 2a, I resented someone assuming I would abandon it to some Canadian farmer. The reporter's explanation for my "crash-landing" was interesting, but strains the laws of accepted aerodynamics.

"The plane dropped out of the sky and skidded into the cornfield when the lift disappeared from under his wings"

Now I know why I stupidly ended up in that field — the damn lift was hiding under my wings. The next time I get low I'm definitely going to look under there.

Tuesday and Wednesday were vivid lessons in the violence of Canadian thunderstorms. Marty and I watched them pass to either side of the field and, impressed, concluded that our local version is a pale wisp of its southern Ontario cousin. Of course, we found that the best place to observe these interesting phenomena was at various Ontario wineries and pubs. Needless to say, we did not fly.

Thursday was the day after the front went through, and as everyone knows, a frontal passage means a great soaring day. Perhaps this bit of weather lore works in the rest of the world, but not in Ontario. After we gridded the sniffer went up and almost instantly came down. The air was so cold that any self-respecting thermal had fled south in self-preservation. The heroic sniffer sacrificed another tow, but soon found ground zero and joined the rest of us as we derigged and headed for different wineries.

I had to leave that night for a family commitment and missed flying on the last day, Friday. Now, everyone knows that the second day after a frontal passage is the very best soaring day so I am sure I missed the best flying of the contest. Then again, it's Ontario, so for all I know they might have suffered a tornado, a hard freeze, and a flood, but not necessarily in that order. Yes, I will return next year — who knows, I might finally get to meet a Mountie.

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# **Bob Leve:**

From Connecticut, Bob is at his second Canadian contest. He was the team psychologist for the USA at the Worlds. He has a doctorate in psychology which he teaches and practises. Bob was a US Army helicopter pilot back in the 60s.

#### a nationals overview

from page 4

**Thanks** There were a lot of people who contributed to this contest. SOSA prides itself on its cross-country and competition atmosphere. Therefore, there were people available to:

- · Staff the office
- · Marshal and launch the grid
- Score the results
- Launch 35 gliders in just over an hour with 3 Pawnees
- · Forecast the weather

Help from outside the club was particularly appreciated from Great Lakes who provided their Pawnee with towpilot Gerry Bunder and Gatineau Gliding Club's Bob Mercer who took a big load off the Contest Director by manning the start and finish gates. Also contributing significantly to weather forecasting was Ray Galloway from North Carolina with an analysis program developed specifically for contests.

And of course, every contest has its social side. Due to the continuous and strenuous efforts of Olga Burany and Kathy Vados, the meals every other night gave the pilots and crew an opportunity to get together and enjoy each other's company in the marquis tent outside the club house.

# 2001 nationals diary

from page 9

#### July 4

The forecast doesn't look good, but there is the thought that we might squeak in a task later in the day. After a check on the weather at 1200, it's obvious that the lines of thunderstorms won't permit any kind of a task today, so once again the day is scrubbed. However, the pilots were warned for an early start tomorrow — with the indication that I wouldn't want to see them back before dark! — just to make up for the last two days.

#### July 5

The forecast, in the words of the weatherman, is "uncertain"! The tephigram doesn't give a lot of encouragement. The thermal strength is predicted to be low, just a knot, and the top of lift is expected to be barely above the 3000 foot minimum for a task.

Despite that, the pilots were gridded and the weatherman kept checking the temperature in hopes that something would develop. When the trigger temperature for 2500 was reached, the sniffer was launched, but shortly returned to the ground. Temperature checks continued regularly and that was not encouraging either. Every other reading the temperature went down instead of up. The sniffer was launched again but again couldn't sustain, so at 1430 the day was scrubbed. To our

frustration, finally at 1630, the club operation reported that the lift had broken through to 5000 with lift to 4 knots. Great soaring, but too late to use! Once again, we live in hope for tomorrow, the final day of the contest.

# Day 5 Friday, 6 July

Forecast: There is a high to the west. The maximum temperature is forecast to be 22. Wind is expected to be 28 knots at 3000, reducing to 16 knots after 1400 hours. Lift is forecast at 3.1 knots average to top of lift at 5000, going to 6000 if the temperature goes above the expected maximum. It's also possible that the day will go blue.

This was almost the only day when Task A was flown as assigned! Actually Day 3 stayed with the original task, but it was the TDT with optional first TPs. For the 15m/Std it was a five TP AST of 293.1 kilometres which kept them reasonably close to home on the day of the closing banquet. It was really just a little more than a triangle, but two of the TPs were put in to keep the gliders away from the Waterloo Class D airspace. For Club it was a 3 hour TDT with similar five mandatory TPs for a minimum of 253.7 kilometres (which nobody completed).

An early report by a club ship indicated that the forecast was proceeding apace, so the grid was launched at 1230 hours as planned. The lift was strong on the first two legs, then as the pilots went north, they found once more that they had to change gears as they got into weaker lift. That caught two pilots who landed out. None of the Club class pilots made it to the Brantford turnpoint before running out of time. Several of them turned back before reaching Belwood Lake but made it home. For the 15m/Std classes, it was a slower day than I had expected with the top speed being 92.3 km/h.

So the contest ended on a high note, particularly with the forecast for tomorrow to be more rain and thundershowers! — a great contest due to the work of a lot of really good people.

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# SAC news

# Scoring - Bonnière style

Historically, it has been easy to identify the person who was scoring the competition. He would be the person that looked like a walking zombie because he was up all night evaluating the competitors' data. This condition, caused by sleep deprivation, would be worsened if the pilots flew 3 or 4 days in a row.

The 2001 Canadian National Soaring Championships, which were held at SOSA, used Nick Bonnière's new software to score the competition. Nick has developed software that will enable scoring to be quickly and easily done. This is accomplished by downloading data from the competitor's flight recorder to a computer that can analyze the flight. The software quickly determines how the competitor did and will assign a score to the pilot.

Today, the scorer's appearance cannot be blamed on the work. Scoring the 35 competitors each day took approximately two hours. Darek Andrzejewski and I were able to quickly and accurately do the scoring after learning the software over a couple of evenings. Anyone able to use an Excel sheet can easily learn this software.

In addition, Nick's software is bullet proof. If there is a problem with the pilot's flight or an incorrect key entry made by the scorer, a red flag will appear on the computer screen alerting on to a problem. When this happens, the computer specifies what the problem is. Such things as the pilot flying into a control zone or missing a turn-point are quickly pin-pointed.

Also, the scorer has the capability to review the flight graphically. Nick has provided a means of looking at the barograph and a 2D map of the flight. The scorer can see the pilot's route, turnpoints, and control zones on the computer screen. Highlighted infractions help the scorer to determine if, for example, the pilot has entered a control zone or missed the turnpoint by less than 100 metres. This is a speedy and efficient process.

Technology has made the scoring process simple. It starts with GPS in the glider sending data to a flight recorder. This data provides a trace of the glider flight in 3D. The pilot then downloads this information to a diskette that is submitted to the scorer to be examined. The data is then uploaded to another computer with the scoring software for evaluation. After the flight has been checked, the software will assign a score and rank the pilots in numerical order. The only way it would be simpler is if the glider sent the GPS data by radio to the scorer — that technology is out there.

The speed with which the software can analyze the GPS data makes it a powerful tool when scoring. The hundreds of hours that Nick has devoted to creating this software will have a huge benefit for the Canadian racing community. Well done, Nick.

Andrew Corrigan, 2001 Scorer

## New TC aircraft registration classes coming

At a meeting of the Transport Canada CARAC Technical Committee on 12–13 June, TC gave notice of proposed amendments to the CARs that would do away with Flight Permits – Special Purpose presently issued for the "Exhibition" and "Amateur-built" classes of aircraft. The "Exhibition" flight permit would be replaced by a *Special C of A – Limited*, and the "Amateur built" flight permit would be replaced by a *Special C of A – Recreational*.

There are other changes that affect the aircraft eligible in each of these classes:

The "Flight Permit – Special Purpose – Exhibition" was introduced as an interim measure some years ago under a policy letter, MPL-19, which has a rather narrow definition of uses for the aircraft eligible in the class, and specifies that it is not to be issued for strictly recreational purposes. Despite this restriction, several gliders have already been accepted in the Exhibition class by some friendly Transport Canada inspectors. The new Special C of A – Limited does not have the 'recreational' restriction and will allow non-certified gliders to be flown for recreational purposes. This will open up to importation all the gliders not previously type certified in Canada, but will specifically exclude aircraft in current production. The removal of the restriction will also remove the regional interpretations of what is recreational or not.

The Special C of A – Recreational will replace the Flight Permit for amateur-built aircraft. The old requirement that became known as the 51% rule has been eliminated. A new requirement is added stating that the applicant for the Special C of A acknowledges complete responsibility for the design, materials and methods of construction of the aircraft regardless of who does the construction. This will allow the builder to have any part or even the complete aircraft built by a third party if he so desires and still be able to fly it as an amateur-built.

The above proposals were passed at the meeting but this is only the first step in changing the regulations. The estimated time to have these amendments passed into legislation is two years.

Paul Fortier, Technical committee

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# Contest register needs corrections

Al Schreiter again asks that readers who have sailplanes with contest letters on the tail to go to the SAC Documents page and inspect the data in the register.

The register still contains lots of errors, especially related to changes of ownership or obsolete data. If you see anything wrong, please send a note to Al at <alschre@ican.net>

# Introducing Roger Hildesheim

Just a few words to introduce myself as your new FAI Records chairman. I have been soaring for over 20 years, soloing through the Air Cadet private scholarship program at York Soaring. Since then, I have flown at Rideau Valley Soaring, Fault Line Flyers (Austin, TX), and my current home with the Gatineau Gliding Club. Last year, my finances reached "critical mass" and I finally bought a nice ship (DG-300) with an even nicer partner (Bela Kasco) with the objective of getting back into cross-country soaring. As your new Records chairman, I'm still getting data/information from outstanding claims and should be in a position to formally process old and new claims by the end of July. I look forward to watching many old records fall!

Cheers, Roger

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WINNIPEG GLIDING CLUB Susan & Mike Maskell (204) 831-8746 www.wgc.mb.ca

SWAN VALLEY SOARING ASSOCIATION Brian Tigg (204) 734-5771

#### Alberta Zone

ALBERTA SOARING COUNCIL Tony Burton (403) 625-4563 www.soaring.ab.ca

CENTRAL ALBERTA SOARING CLUB Brian Davies (403) 318-4577 H ve6ckc@ccinet.ab.ca

COLD LAKE SOARING CLUB Box 5108, Stn Forces Cold Lake, AB T9M 2C3 (780) 594-SOAR www.jetnet.ab.ca/clsc

CU NIM GLIDING CLUB Al Hoar (403) 288-7205 H (403) 569-4311 B www.soaring.ab.ca/free-flt/cunim

EDMONTON GLIDING CENTRE (Air Cadets) Jason Acker 1203 - 11307 99 Avenue Edmonton, AB T5K 0H2

EDMONTON SOARING CLUB John Broomhall (780) 438-3268 www.freenet.edmonton.ab.ca/soar/

GRANDE PRAIRIE SOARING SOCIETY Terry Hatfield (780) 356-3870 www.soaring.ab.ca/free-flt/gpss/home

# Pacific Zone

ALBERNI VALLEY SOARING ASSN Doug Moore (250) 723-9385

Harry Peters (604) 856-5456 petersh@uniserve.com

BULKLEY VALLEY SOARING Norbert Klassen (250) 847-4710

CANADIAN ROCKIES SOARING CLUB Don Miller (250) 342-3201 Ernst Schneider (250) 342-7662 ews@soartherockies.com

PEMBERTON SOARING Rudy Rozsypalek (604) 894-5727 www.mountain-inter.net/soaring/

SILVER STAR SOARING ASSN Malcolm Rhodes (250) 547-9507 www.members.home.net/soar/

VANCOUVER SOARING ASSN David Clair (604) 739-4265 H

#### Canadian Advanced Soaring

Dave Springford (613) 634-2050 springford-d@rmc.ca www.sac.ca/cas

# safety & training

# Accidents in 2001

There may be no unusual reasons for the accidents listed and the clubs involved may be able to find organizational factors that may have contributed to the occurrences. Please look at your own operations and compare: briefings/training on Blanik spoilers (confusion between flaps or spoilers being sucked out unnoticed), crosswind limits for club operations, and checkout policy for pilots.

Write Off – L23 Blanik Wing struck a tree and glider rolled over in off-field landing attempt on a golf course when pilot undershot runway. Spoilers appeared to be open throughout approach. Pilot experienced but had low recent gliding time.

**Substantial damage – L-19** Wing struck ground damaging spar on a landing attempt during towpilot checkout. Pilot experienced.

#### Substantial damage - Citabria towplane

Prop struck ground during landing attempt. Pilot attempted a wheel landing and veered off runway. Hard braking to avoid ditch resulted in momentary nose over. Winds were forecast 80 degrees crosswind 15 knots gusting to 24 knots. Pilot experienced.

Fatal, RHJ-8, two-seat homebuilt glider. Pilot impacted a mountain at about 200 feet below ridge line after about 4-5 hours into his cross-country flight. Pilot was experienced.

Serious injury – HP-11. Crashed after lift-off 10-15 feet in air. Pilot fractured leg. Aircraft may be written off.

Dan Cook SAC Safety Officer

# Operations drivel - parachutes!

from Vancouver "Soaring Scene"

Heidi [Hope's past Safety Officer] used to go ballistic when she saw the chutes being mistreated. As she moved away, I will have to fill in as best I can.

"THE ONLY PLACES FOR A CHUTE ARE ON YOUR BACK OR IN ITS BAG!"

If you take a chute, put the bag in the glider with you. When you get out and take the chute off, put it back in the bag — the right bag. We have large bags (labeled "Security") for the large Security chutes and small bags

(labeled "L23") for the smaller L23 chutes. If you put a Security chute in an L23 bag you are abusing the chute and announcing to the world at large that you are functionally illiterate.

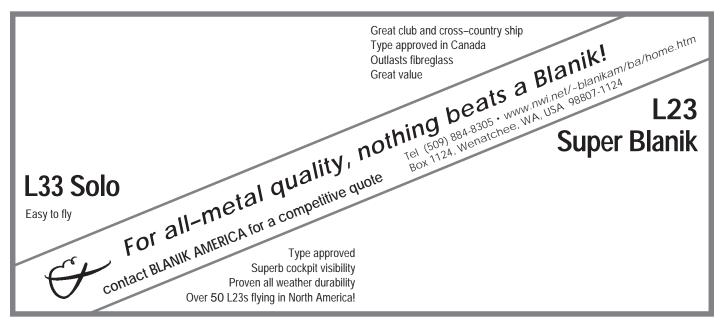
Ultraviolet, heat and dampness are bad for chutes. Last weekend I saw a chute stuffed in the flightline cart and one laid on the grass. If I see any more abuse of the parachutes I shall exact such terrible vengeance that you will wish you had never been born. Or, if you are thinking more clearly, that I had never been born.

Remember, abusing a chute could kill someone ... possibly you!

Malevolently yours Evil Director of Operations, Raybert



A happy (and perhaps relieved) Mel Blackburn of Cu Nim after the first flight in his new PW-5 at Invermere.



# Club news

# † Last glide

The soaring community lost a long time enthusiast with the sudden death of Wilbur Eley on May 13. He was an avid soaring pilot to the end. He flew his 1-26 in local and cross-country flights from Colonsay, SK at every opportunity, earning Silver, Gold and Diamond goal legs. He was an early participant at Cowley wave camps, attaining Gold and Diamond altitudes. He was an active member of the Saskatoon Soaring Club in its early days, instructing and towing.

Wilbur was also very much into power flying and he owned a series of planes suitable for towing gliders. He also built a Pietenpol airplane and was an eager member of the EAA, (Experimental Aircraft Association). He and brother Harold restored the family Zögling primary to flying condition and it is now displayed at the Western Development Museum in Moose Jaw.

More recently Wilbur moved on to several antique projects, one of which was restoring a 1926 Model-T pickup to new condition. In fact he was preparing for a local rally when he was struck down. However his first love remained with flying to the very end.

May his lift be good and his glides long.

**Harold Eley** 

# A lift for Cold Lake Soaring, the struggles of a small club

As with many soaring clubs across Canada, the CLSC has seen better times than it has in the past three years. For many reasons we have seen fewer and fewer members each year. This combined with the huge jump in insurance costs was taking its toll on our club. At the beginning of this season, the situation was desperate enough that the idea of completely shutting down the club was brought up. Fortunately we decided to make a positive change rather than a negative one.

Our club identified three main goals for this year: increase membership, increase flying activities, and balance the budget. I am pleased to report that the CLSC has already had progress in each of these areas. The club started the season with only seven members and has since increased its numbers to thirteen. This includes the recruitment of another qualified glider instructor. As for goal number two, the club only flew a total of 107 flights during the 2000 season. However, so far this year we have already flown 169 flights. The treasurer says all indications are good that we should break even this season after three years of budget deficits.

Many of our members are military or military spouses. This has its benefits and shortfalls. A primary benefit is that we often have unexpected new members being posted here from other bases. Many of these members were previous Air Cadet glider pilots or instructors. Often times they are current military pilots. There is an obvious flip side to this. We frequently lose some very keen and experienced members when they get posted elsewhere. The club must constantly be looking at ways to attract new members. Especially when posting messages are being cut.

Many of the executive's initiatives for this season have been very successful. Our club has a far stronger presence in the community due to our safari and open house. The club took up the Mayor of Cold Lake as well as two area journalists who gave us valuable exposure in the local papers. So far, two new students have joined after reading the newspaper articles and the club has been contacted for many fam flight packages.

New students have been encouraged by the lower membership incentive and our members are actively striving towards new qualifications. We started the season with only one gliding instructor and two towpilots (one of which was the instructor). Thus both of the individuals had to make it out to the field before any student duals could happen.

We have applied to SAC to get one new gliding instructor certified and there is a chance that two more former Air Cadet instructors may join. Also, our treasurer, Derek Brown took the initiative to complete a tail dragger conversion course near Edmonton. He has recently completed his towpilot checks with our club. He is very keen and available to tow gliders anytime he can get a crew together.

We cannot thank the Alberta Soaring Council enough for their support for our last goal (about \$2500 will be given to the club this year for various activities to get us over our rough patch). Things are already looking up for Cold Lake. There is a sense of rejuvenation among members and the love of gliding has been rekindled. Recruiting further members and building experience remains our prime goal.

Tim Woods, president Derek Brown, treasurer

## Clubs – check your contact info

All clubs should routinely check their access information that is published regularly in *free flight* in the SAC Clubs box.

We can't find you if your contact people, phone numbers, or e-mails have changed. Also, if you have generated a web site for yourselves, let *free flight* and the SAC office know.

Tony Burton, editor

# letters

#### Hold on there Mr. Liard

Regarding your objections to the cover of free flight 2/01, where does it say that only photography must appear on the cover of free flight? What about artwork?

Mr. Carpenter's illustration using photography and Photoshop was a well done, interesting expression of our sport. Getting people to submit material to any soaring publication is always like pushing on a rope. We should applaud Mr. Carpenter's efforts, it was a creative way for him to share his enthusiasm of soaring with us. I hope the editor looks at all submissions for publication with the idea it should portray our sport in a positive light, in a professional way, be of interest to the readers, and allow the artist the freedom of expression in any media.

Mr. Liard shouldn't feel threatened by new media. I'm sure his traditional photography can stand the competition.

Gee, I feel like breaking out the Crayolas!

**Dave Gillespie**, MGDC Professional Member Society of Graphic Designers of Canada

# The "guilty party" answers

I would like to respond to the letter from Stephen Liard in the 2/2001 issue of *free flight*, who is apparently upset at seeing a photographic illustration of me enjoying myself at Invermere in 1999.

I took the real photo of the background at about 6000 feet, after having flown about 300 kilometres, at altitudes up to 13,000 feet, over the mountains (every day on my Invermere trip, cloudbase was 10,000 or higher). By combining this with my daughter Nadine's shot, all I have done is recreate the very pleasant memory of an actual flight which I thoroughly enjoyed.

I want to assure Stephen that the smile on my face is both real and justified, and the photo is even more believable in colour! No one can dispute the quality of Liard's cover photo on the last issue of *free flight*, but as a graphic designer (ohmygawd, 46 years and still enjoying it) who has spent a great deal of his professional life working with both photographers and, from necessity, photoretouchers, I would like to remind "former photojournalist" Liard that the art of photomontage has been around virtually since the birth of photography, and I am really surprised at his stated intolerance of what is just another facet of the art.

Jim Carpenter

21

49 Maitland St. Box 1351, Richmond, ON KOA 2Z0 (613) 838-4470, < lucile@istar.ca>

The following record claims have been received and action is being taken to process the ones delayed from last year. Note that some of the claimed records have been superceded: nevertheless they will be approved (or not) for historical purposes.

Pilot **Tony Burton** 

Date/place 25 May 2000, Invermere, BC

Record type Free 3TP distance, Open & Club, territorial

FAI category DOG 3.1.4c RS-15, C-GPUB Sailplane type

607.3 km (since superceded) Distance claimed

Nicholson bridge/Bull R. dam/Parson bridge/return Task completed

Previous records Open: 559.7 km, Bonnière/Werneburg, 1998 Club: 527.3 km, Tony Burton, 1999

Pilot Trevor Florence (with Norman Marsh)

27 June 2000, Invermere, BC Date/Place

Record type 100 km Speed to Goal, Open multiplace, territorial

FAI category SAC record only Sailplane type Twin Astir, C-GVSX

Speed claimed 105.6 km/h

Task completed Mt Seven HG ramp to 50°36.5'N-115°57.0'W 65.3 km, Trevor Florence (Ernst Schneider), 1999 Previous record

Pilot **Trevor Florence** 

Date/Place 16 July 2000, Invermere, BC Free 3TP distance, Open, territorial Record type

DOG 3.1.4c FAI category ASW-20, C-GTRM Sailplane type

Distance claimed 680 km (since superceded)

Invermere/Mt Seven HG launch/Elko RR xing/ Task completed

TP near Harrogate/landing Fairmont a/p

Previous record 607.3 km, Tony Burton, 2000

Pilot **Tracy Wark** Date/Place USA

300 km out & return speed, Feminine, citizen Record type Record type 100 km speed to goal, Feminine, citizen Record type 200 km speed to goal, Feminine, citizen

FAI category SAC only

Speed claimed 131.0 km/h (for the 300 km O&R speed) all unclaimed in citizen category Previous records

Full information unavailable for this issue of free flight

Pilot **Tony Burton** 

Date/Place 23 May 2001, Invermere, BC Record type Free 3TP distance, Open, territorial

FAI category DOG 3.1.4c RS-15, C-GPUB Sailplane type

740.1 km (since superceded) Distance claimed

Task completed Invermere/Blaeberry forestry bridge/Elko RR xing/

Nicholson bridge/return

Previous record 680 km, Trevor Florence, 2000

Pilot **Larry Springford** 

30 May 2001, Invermere, BC Date/Place

Record type 100 km speed to goal, Open, territorial

SAC record only FAI category Sailplane type ASW-20, C-GVDO Speed claimed 125.5 km/h

Task completed Mt Seven HG ramp to Swansea HG ramp

Previous record Kevin Bennett 118.7km/h, 1985 3 Sumac Court, Burketon, RR2, Blackstock, ON LOB 1B0 (905) 263-4374, <waltweir@inforamp.net>

The following badge legs were recorded in the Canadian Soaring Register during the period 5 May to 22 June.

**GOLD BADGE** 

297 Robert Katz Montreal

FAI badges

SILVER BADGE

936 Robert Almgren SOSA

DIAMOND DISTANCE (500 km flight)

Allan Spurgeon Rockies 509.7 km PW-5 Invermere, BC

DIAMOND GOAL (300 km goal flight)

Robert Katz Montreal 306.2 km PIK-20D Julian, PA

DIAMOND ALTITUDE (5000 m gain)

Orlan Dowdeswell Regina 5190 m Cowley, AB Jantar Henning Mortensen Regina 5030 m Cowley, AB Jantar

GOLD DISTANCE (300 km flight)

PIK-20D Julian, PA Robert Katz Montreal 306.2 km

GOLD ALTITUDE (3000 m gain)

Orlan Dowdeswell 5190 m Cowley, AB Regina Jantar Henning Mortensen Regina 5030 m Jantar Cowley, AB

SILVER DISTANCE (50 km flight)

Robert Almgren SOSA 60.7 km 1-26 Rockton, ON

SILVER DURATION (5 hour flight)

Κ7 Birch Hills SK Robert Lohmaier Prince Albert 5:11 h Robert Almgren SOSA 5:30 h Rockton, ON Pegasus

SILVER ALTITUDE (1000 m gain)

Henning Mortensen Regina 5030 m Jantar Cowley, AB Robert Almgren Rockton, ON SOSA 1900 m Pegasus

C BADGE (1 hour flight - 30 min if winch launch)

2664 Henning Mortensen Regina see Silver, Gold, Diamond alt

2665 Robert Almgren SOSA 5:30 h Pegasus Rockton, ON 2666 Gilbert Smith Prince Albert 0:54 h Κ7 Birch Hills, ON

Pilot Tim Wood

Date/Place 30 May 2001, Invermere, BC Record type Free 3TP distance, Open, territorial

FAI category DOG 3.1.4c LS-3a, N57SS Sailplane type Distance claimed 776.1 km

Task completed Invermere/Blaeberry TP/Elko/near Golden/return

Previous record 740.1 km, Tony Burton, 2000

Pilot Charles Yeates (with Kris Yeates)

Date/Place 9 July 2001, Marfa, TX

Record type 100 km triangle speed, Open multiplace, citizen

DOG 3.1.4h FAI category Sailplane type PW-6 Speed claimed 102.8 km/h

Marfa/Mt Livermore/GPS TP/Marfa Task completed

Previous record 98.1 km/h, David Marsden (M. Jones), 1975

# Trading

Personal ads are a free service to SAC members (please give me the name of your club). \$10 per insertion for nonmembers. Send ad to editor, not to SAC office. (Address at bottom of page 5 masthead)

Ad will run 3 times unless you renew. Please tell me if your item has been sold sooner. Maximum ad length is 6 lines and subject to some editing as necessary.

# single seat

Tern, CF-BWA, 195h, basic instruments, enclosed trailer. \$5000 obo, Walter Mueller (780) 539-6991 or Karl at <ksoellig@agt.net>

1-23H-15, C-FZDN, built in 1960, 1095h, standard instruments, elec vario, radio, encl trailer. \$13,500. Located near Toronto. Call Eugene at (905) 452-0580 <luxy@home.com>.

1-23H-15, #68, built in 1964, 2500h, standard panel, open trailer is included. Good shape with a blue & white paint scheme. Asking US\$9,500. Rob Harling, <a href="mailto:harnai@pathcom.com">harnai@pathcom.com</a>, (416) 923-3080 W, (416) 425-6627 H.

L-Spatz-55, C-FFAG, excellent condition, encl trailer. This magnificent climber mixes a solid 29:1 L/D with light wing loading. A real joy to fly. \$11,000. Rich Stehlik (519) 743-4882.

**Ka6CR**, C-FRWO, Schleicher built 1964, 1900h, refinished Dec/89. Std panel with Delcom radio & boom mike, elec vario, Volkslogger, encl. trailer. Very nice Ka6 with red & white paint scheme. US\$8000. At SOSA. Call Les, (416) 693-0921 < phredfly@comnet.ca>

Std Jantar 1a, C-GXTS, 540h, all ADs done, no damage, basic instruments, ATR 720A transcvr, boom mike, two total energy varios with audio, trailer and ground handling gear, wing & canopy covers, solar charger, turnpoint camera, chute. \$28,000. Al Sunley (780) 464-7948, <alsunley@freenet.edmonton.ab.ca>.

Kestrel 19, 1380h, très bonne condition, instruments standard + directeur de vol Cambridge M-NAV, radio, remorque [trailer]. \$40,000. <pdaudin@total.net> (450) 621-2535 à partir de 17:30 h.

ASW-15, C-FKGB, 1971, 1400h. Std instruments, elec vario, radio. Located near Toronto. \$18,000. Call Eugene, < luxy@home.com> (905) 452-0580.

Phoebus B, 17m with trailer, ready to fly. call Kurt Meyer. Cell (416) 804-0204, (416) 482-8558 (H).

RS-15, C-GPUB, 2080h. Honest almost-Cirrus performance, Hollestelle winglets add large climb improvement. Cambridge & Filser varios, O2, chute, encl trailer, misc RS-15 plans & odds & ends. \$16,750. Tony Burton (403) 625-4563, < free-flt@agt.net>. For photo go to <www.soaridaho.com/Schreder/>.

ASW 20, newly refinished with Simtec Prestec, flipup instrument panel like a 20B, new water ballast bags, Dittel ATR 720 radio, Filser LX4000 glide computer, Filser LX20 recorder, Komet trailer. \$57,000 firm. Chris Eaves: <mail@xu-aviation.com> or (519) 452-7999 days, (519) 268-8973 evenings.

Ventus B, 1000h, NDH. Ball vario, Ilec SB8, LX400 GPS flight computer, ASR/GPS, flap position lights, Dittel 760 radio, Security chute, Masak winglets, O2, Cobra trailer. US\$37,000/Cdn\$56,000. Can deliver. lan Sutcliffe. View at <www.lanSutcliffe.com>, details (416) 817-1787, <iands@attglobal.net>.

ASK-14, motorglider, 910h, engine 145h, good cond. 28/1, launch for pennies. Gehrlein trailer, US\$14.000. obo. Willi Turpin, (250) 365-8378.

Mitchell Wing B-10, Self-launch ultralight glider, open cockpit, 24hp, 18:1, 24 mph stall. Like new, two tone blue, \$5000. Mark Johnston, (250) 754-3121 <rambo@island net>

# misc

LD200, electronic vario, audio, dual damping, no capacity req'd. \$450. Gilles Séguin, (450) 377-5737 <dgseguin@rocler.qc.ca>.

One man rigging system available. Call Larry Springford, <larry\_springford@hotmail.com> or (519) 396-

A14 regulators, diluter demand O2 regulator - serviced and pickled. Four avail. \$200 ea. Dave Fowlow, (403) 974-7541.

PIK-20 wing saddles, \$50. Tony Burton, (403) 625-4563, <free-flt@agt.net>.

Winch, 350 cu in Chrysler V8, on one axle with trailer hitch. Will launch all two-seaters. Call Kurt at (519) 948-8227 eves, (519) 966-7300 days.

Radio, Delcom Air 960, little used. Size 3"x3"x10". Call Kurt, (519) 948-8227 eves, (519) 966-7300 days.

# two seat

**2-33A**, C-FABE, #155, 3150h. Rebuilt fuselage, new interior, recovered in 2000, standard instruments. Located near Toronto. \$18,000. Call Eugene at < luxy @home.com> (905) 452-0580.

K7, C-FKZS, #7255, 727h. Like new condition, fully restored (fuselage 1996, wings 2001), Ceconite fabric. Basic panels front & rear, varios have TE and MacCready rings, front panel compass and a radio with PTT front and rear. Open trailer in good cond. \$15,000. Contact Don at (306) 763-6174 or Keith (306) 249-1859, <k.andrews@sk.sympatico.ca>

L-23 Super Blanik, C-GFCD, 1993, 900h. Excellent condition, current annual, 18m tips (32:1). \$45,000. Located near Toronto. Call Eugene at (905) 452-0580 <luxy@home.com>.

# suppliers

Canadian Soaring Supplies Borgelt instruments and soaring software. Svein Hubinette, 343-150 rue Berlioz, Ile des Sœurs, QC H3E 1K3, (514) 765-9951 <svein@videotron.ca>

MZ Supplies Dealer for Schleicher sailplanes and parts, Russia sailplanes, Becker radios, most German instruments, SeeYou flight software. Ulli Werneburg, 5671 Ferdinand St, Osgoode, ON KOA 2W0 ph (613) 826-6606, fax 826-6607 < wernebmz@magma.ca>

Glider repairs in all materials. Chris XU Aviation Eaves <xu-aviation@sympatico.ca>. (519) 452-7999, fax (519) 452-0075.

Flying High Parachute sales, repairs, repacking, custom containers. Al MacDonald (403) 687-2225 <www.flyinghigh.net>.

Invermere Soaring Centre
Schempp-Hirth sailplanes, PW-5. Glider import and brokerage, glider rental, mountain flying instruction.
Ernst Schneider / Trevor Florence, Box 2862, Inversity (1977) mere BC, V0A 1K0, ph/fax (250) 342-1688, cell (250) 342-7662, web site: <www.soartherockies.com> e-mail: <info@ soartherockies.com>.

# magazines

SOARING — the monthly journal of the Soaring Society of America. Subscriptions, US \$43price includes postage. Credit cards accepted. Box E, Hobbs, NM 88241-2100. *<info@ssa.org>*. (505) 392-1177, fax (505) 392-8154.

**NEW ZEALAND GLIDING KIWI** — the monthly journal of the New Zealand Gliding Association. US\$33/year (seamail). Private Bag, Tauranga, NZ. <gk@roake.gen.nz>

SAILPLANE & GLIDING — the only authoritative British magazine devoted entirely to gliding. Bi-monthly. British Gliding Association, Kimberley House, Vaughan Way, Leicester, LE1 4SE, UK. US\$43 per year airmail, US\$33 surface. <beverley@gliding.co.uk>

AUSTRALIANGLIDING/SKYSAILOR—monthly journal of the Gliding and the Hang Gliding Federations of Australia. \$A94.80 airmail. Pay by Bankcard, Visa, MC. Gliding Federation of Australia, 130 Wirraway Road, Essendon Airport, Victoria 3041, SA. fax: (03) 9379-5519. <AdminOfficer@gfa.org.au>

MOTORGLIDING INTERNATIONAL — bimonthly jointly published by the Soaring Society of America and the British Gliding Association. US\$34 per annum, (505) 392-8154. <info@ssa.org>

VOL À VOILE — une publication bimestrielle éditée par Aviasport. 300 F les 6 numéros. Tel 01 49 29 44 22 <info@volavoile.com>

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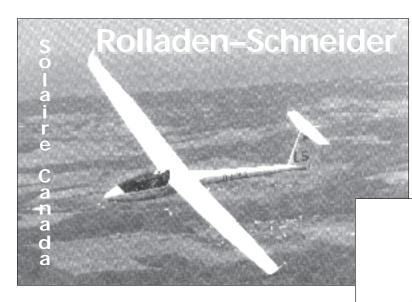
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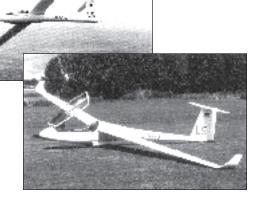
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