

# free flight libre



**A** COMMON ITEM OF DISCUSSION throughout this season has been the dwindling membership at gliding clubs across the country and what can be done to reverse this trend. One of SAC's mandates is to promote the sport of soaring in Canada and I believe SAC could be doing more to lead the charge on this front. However, I also believe that to effectively promote our sport, a collaborative effort is necessary between clubs and SAC.

At the AGM in Hamilton, I offered to chair a committee that would focus on the marketing and promotion of soaring in Canada. The committee is still in its infancy and its focus and its role have yet to be concretely defined; however, I expect that a heavy emphasis will be placed on marketing to Air Cadets (both current and former) and recreational pilots, as both these groups represent a largely untapped potential market.

The Air Cadets create 300 new glider pilots every year, yet the conversion rate from Air Cadet glider pilot to future gliding club member is very low. My expectation is not that an Air Cadet would finish his or her training then immediately join a club. For many Air Cadets, financial and time constraints prevent them from joining SAC clubs at this time in their lives. Additionally, most cadets have the opportunity to fly at cadet gliding zones free of charge and most take advantage of this. But despite the fact that we probably won't see them at a gliding club in the near future, I believe we still need to be making an effort to connect with these cadets so that later in their lives, when they are gainfully employed and have some disposable income, hopefully they'll decide to get back into gliding and join a club. My thoughts on how to market our sport to the Air Cadets can be found on the next page.

As the cost of powered flight continues to rise, I believe our sport will become an attractive alternative for those looking to satisfy their aviation craving. However, getting the word out about gliding as an exciting alternative to powered flight is a challenge. How do we reach out to these pilots and get them out to our clubs to experience soaring flight? A stronger alignment with COPA is certainly a good option on a national level and this is something the marketing and publicity committee intends to explore.

The Air Cadets and recreational pilots represent a very small fraction of the Canadian population, but I believe we have a high probability of seeing new members from these two groups if we put some focus and attention on increasing the profile of our sport amongst them. The road towards efficient and effective promotion of our sport is long and challenging; however, our community is more concerned about the long term viability of our sport than we ever have been before, which will no doubt motivate us to try new things and persevere. I believe the board's endorsement of the marketing and publicity committee is the first step in the right direction.

If you would like to share ideas on how to market our sport with me, please feel free to send an e-mail to <[allardyce.j@gmail.com](mailto:allardyce.j@gmail.com)>. ❖

# free flight

vol libre

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A great day at the Cowley Summer Camp this July. Pat, a Winnipeg member, is flying his DG-300, "ZA". Camera: GoPro Hero with a 24" monopod grip, lens setting 170° wide angle at 5M resolution.

photo: Patrick Pelletier

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# Selling soaring to Air Cadets

Jay Allardyce, chairman SAC Publicity & Marketing committee

**A**S MY PRIORITIES ARTICLE STATED, the Air Cadets produce a significant crop of glider pilots each year but their number, both current and former, who become members of our clubs is very low. Why is this, and how can we tip the scales in our favour to ensure that cadets trained today become fellow club members tomorrow?

I believe that marketing our sport to Air Cadets has to be a two step approach. The first step is outreach, which involves getting the word out about our sport when the cadets are young and still involved with the cadet program. The second step is finding ways to reconnect with these cadets now and in the future.

**Outreach** involves giving the cadets a different perspective on gliding than they get from the cadet program. Thermalling, cross-country soaring, wave flying and competitions are all topics they have little to no exposure to in the cadet gliding program but are the most exciting aspects of our sport. Probably the easiest and most convenient time to tackle outreach is while the cadets are attending the various Region Gliding Schools (RGS) throughout the country.

This summer, with help from Selena Boyle, I arranged for myself and two other members from the Winnipeg Gliding Club to visit RGS Prairie in Gimli, Manitoba, where cadets from Manitoba, Saskatchewan, Alberta and Northwestern Ontario train for the summer to receive their glider pilot licences. We brought a high-performance glider with us to show off to the cadets, did a short presentation and answered hundreds of questions from curious cadets. This visit will no doubt be a lasting memory in the minds of these cadets and gave them a better perspective what the sport outside of the cadet program is all about.

I arranged this visit to RGS with Selena, who represented Canada at the Junior World Gliding Championships in Germany last year and spent several winters flying cross-country and competitions in Australia. Selena is also an instructor at RGS Prairie during the summer and she shares her experiences and the wonders of our sport with all the cadets she encounters each summer. Thanks to Selena, the cadets at RGS Prairie are exposed to a variety of topics that wouldn't otherwise be covered, including thermalling, cross-country flying, badge flying, and competitions. They also have the opportunity to see pictures and hear stories from Selena's adventures flying throughout the world. Selena helps the cadets see gliding in a different light. Unfortunately, not every region has a Selena in their instructor ranks, but I believe a visit by a local gliding club to a Region Gliding School can still go a long way in increasing the profile of our sport. My goal for next summer is to coordinate a visit by a club to each Region Gliding School in the country. I believe such a visit can go a long way in spreading the word about our sport, which will ultimately pay dividends in the future.

More recently, the cadet organization is also helping to bridge the gap between the Air Cadets and soaring clubs in Canada. Four clubs in Canada held advanced soaring camps this summer at the end of August: Edmonton, Winnipeg, SOSA, and York. The camps at Winnipeg, SOSA and York were funded by the Air Cadets and were awards for the top cadets from the summer's training camps. The Edmonton camp was not funded by the Air Cadets and young people who wished to attend used their own funds to attend the camp. These camps are great exposure for our sport and give the attendees a different perspective on gliding. The positive experiences these cadets have at the various camps throughout the country will be shared with their fellow cadets and portray a positive image of soaring and our sport which will hopefully result in future new members.

These camps also help to shape the image of soaring clubs in Canada as friendly places to visit where cadets are welcomed with open arms. The camps also give the various clubs that host these camps a better perspective on the cadet's capabilities, and this helps to



## 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 Fédération Aéronautique Internationale (FAI), the world sport aviation governing body composed of the national aero clubs. The ACC delegates to SAC the supervision of FAI-related soaring activities such as competition sanctions, processing FAI badge and record claims, and the selection of Canadian team pilots for world soaring championships.

**free flight** is the official journal of SAC, published quarterly.

Material published in *free flight* is contributed by individuals or clubs for the enjoyment of Canadian soaring enthusiasts. The accuracy of the material is the responsibility of the contributor. No payment is offered for submitted material. All individuals and clubs are invited to contribute articles, reports, club activities, and photos of soaring interest. An e-mail in any common word processing format is welcome (preferably as a text file). All material is subject to editing to the space requirements and the quality standards of the magazine.

Photos: send unmodified hi-resolution .jpg or .tif files.

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## 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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eliminate those cumbersome and unreasonable checkouts that some cadets have faced in the past when visiting clubs. I know hosting one of these camps at my club has changed a lot of my fellow club members' perspectives on cadet glider pilots and has resulted in a better reception for these young people when they visit our club. I hope that the leaders of the cadet program throughout the country will continue to see value in these types of camps and continue to fund them in the future.

### Reconnect

After reaching out to the cadets and sharing our sport with them, the second stage is finding ways to reconnect with these cadets at some point in the future. Reconnecting with these cadets may seem like a very challenging task, but the wonders of social networking are making this task much simpler. A perfect example of this is an event I planned for the Winnipeg Gliding Club. On 29 September we hosted an Air Cadet Day at the club for former and current Air Cadet glider pilots. The goal of this day was to get the word out about our club, to get those former cadets back in the air who haven't flown a glider in a while, and to give those who are still involved with the cadet program a chance to fly something other than the 2-33.

To encourage attendees to take an introductory flight, we offered 50% off our regular introductory flight price. To get the word out about the event, I used Facebook and asked my network of friends who are current and former cadet glider pilots to share the event with their friends.

An event like this is a perfect example of how to reconnect with Air Cadets now and in the future. This type of event is fairly easy to put on and requires minimal effort and planning but has the potential to have a lasting impact on our club. If there are other clubs out there that are interested in putting on a similar event, I would be happy to share my insight and lend my network of current and former cadet friends across the country to help get the word out. Also, when you do happen meet an Air Cadet, be sure to "friend" them on Facebook as this connection may help you reconnect with them in the future and result in a new club member.

As discussed above, getting the word out about our sport to the Air Cadets is a two step process. The first step is outreach, which involves giving the cadets a different perspective on gliding when they are young and are just starting to learn about gliding. The second step is finding ways to reconnect with these cadets, both over the short term and the long term to keep our sport at the forefront of their minds. The Air Cadets represent a very large, untapped potential source of new members, and, with the right approach, I believe we will see more cadets joining our ranks in the future. ❖



Conor Lloyd

Keen interest during the Cadet Advanced Soaring Camp at the Winnipeg Gliding Club.

# Uvalde diary

edited from the Canadian Team blog



Maria Szemplinska

## Day 1 5 August

*Weather – 2 octas of cu. At 1600, 6-7 kts to 8-9000 feet over the task area with a risk of overdevelopment to the north. Team captain Ed Hollestelle figures that the speeds will be in the high 140 km/h (the 15m winner today clocked 138.2). There are 35 pilots in the 18m Class and 37 in 15m Class. Temperature: a mild 37C high for today. It has been hot enough for the sand to melt rubber off Dave's tailwheel and have it stick to the sand! There is a nervous energy crackling around the competition tent today. Let's go racing!*

*Dan Daly, assistant team captain*

**Dave Springford (F1)** For our first day we were given a racing (or assigned) task. The 18m task was 553 km and went east, then south, then up to the northwest. At the morning briefing we were told the sky would be juicier today and that some debris from yesterday's storms around the Gulf would blow our way. The forecast was that this would have limited impact on our task. A couple of the models that I looked at suggested it could be a bit earlier and at launch time, I could already see some storm tops off to the east.

We had isolated showers for the run along the second leg and the last climb was 39 km from the next turnpoint. I climbed with a gaggle up to 7000 feet and then we set off at best L/D to cover the distance to the turn through completely smooth air on the wrong side of the rain. In the ten minutes that it took gliding across the hole, a couple of cu started to develop just west of the turnpoint. I headed towards them and there was lift – saved! A group of us climbed up and then backtracked 5 km into the sector and then came back to the same clouds again and climbed to 6000 before heading across the rest of the hole westbound to another line of cu on the good side of the line. This required a deviation from the course line of about 50°, but when we arrived, the clouds worked and we were back in racing mode.

The sea breeze affected the task at the end of the day. For the 18m Class the effect was minimal as I was able to climb to 8200 about 5 km short of the turnpoint and then glide into the turnpoint and home. The trip home did require another large deviation to stay on the good side of the sea breeze, but once I knew I could make it, it was time to point the nose for home and glide into the dead air once again. The Open and 15m guys had more trouble with their last

turnpoints as they were 40 and 30 km behind the line. This caused most of the Open pilots to miss the last turn, but the 15m guys were able to glide in and then reconnect with the clouds in the hills and limp home. I averaged 131.6 km/h and that put me in fifteenth place with five other pilots either tied or only a point away.

**Nick Bonnière (ST)** A text message from the weatherman to the team captains, relayed by radio, indicated that the sea breeze front would be moving in an hour ahead of time. I decided not to delay and started early.

I hit rain on the last third of the first leg and it was quite overdeveloped to the east. The second and third legs were straightforward, but I got passed by the French team. There was a blue hole on the fourth leg and that required a significant detour and the lift averaged just 4 kts. On the fifth leg, I stayed behind a gaggle to get a good climb and caught up to some gliders that were quite low. The sixth leg wasn't working for me; I could not connect with lift and clouds were dying in front. I detoured to the right for a climb and got left behind. I could see the sea breeze in front, with high cloud on one side and low cloud beyond it. You had to climb as high as possible to penetrate the front as it looked bleak beyond it. I climbed to 9000 and headed through the frontal zone, flying above and through a gap in the low clouds; it was a 30 km glide at basically best L/D to the turn, and then 66 km at best L/D to the finish in smooth air, hoping I wouldn't hit a patch of sink and have to land short. A challenging day with many landouts.

## Day 2

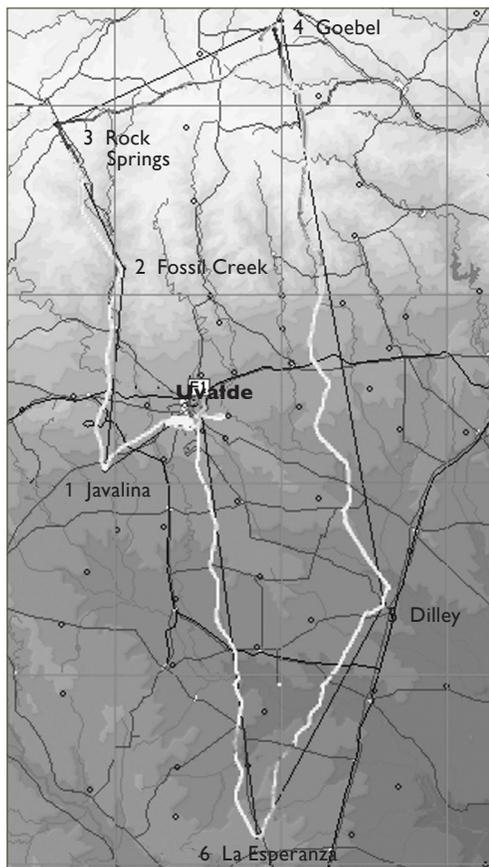
**Dave** The 18m task today covered a lot of our flying area, first we went north about 115 km into the hills, then 235 km south to put us 125 km from home at the final turn. The conditions were good, but not as good as Uvalde has to offer. My high point for the day was 8500 feet and best climb was 8.3 kts, but the average was 5.5.

The wind was generally light and easterly, so there was not much in the way of streeting on course today. The

easterly leg up north aligned reasonably well with the wind and gave us a pretty good run. The southerly leg, as you can see, required some zig-zags to align with little streets and to get around some blue holes. There were three blue holes of 20-30 km each that we had to cross. Fortunately, we were able to climb to 6-7000 feet before gliding across the holes.

Early in the flight, I was able to catch up with some who started five minutes earlier and was able to get ahead of some of them, then I had a bit of a slow spot coming south out of the hills and fell behind and ended up on my own until south of the turn at Dilley where I met a couple of other gliders on the way in to the last turn. I saw them a few more times on the final leg. I was probably too conservative on the final leg home, but the sky was going blue and I didn't push hard enough.

## Day 3



**Dave** The task today was a 612.5 km assigned TP task. We went south about 45 km and then headed well north into the hill country, in fact, as far north as I have ever been in Uvalde! Our most northerly turnpoint was about 205 km north of Uvalde, and even further north than Austin. Over the hills, we were able to climb to 9000, giving about 7000 agl. Overall average climb rate for the day was 4.9 knots and the best climb was 6.4 knots. Once again we had fairly light winds and limited streeting. I had a bad first 10-15 minutes out of the gate and found myself down to 3500 a couple of times and then everyone who had started 10 minutes later passed me. I ran along low, taking weaker than optimal climbs until I could find a good one

and get back up to 6500. Once I was established in the good working band again, I had a great run and was able to pass some of the group that had previously passed me and I finished about five minutes before them. Unfortunately, the damage had already been done. For tomorrow – I'll plan not to get low!

**Nick** A tough day for me. You'd pull up in 6 kts and ended up in -4 half a turn into the thermal. Very broken and rough thermals all day. After a while I'd just keep going straight, but you can only do that for so long. I just couldn't get good climbs today. After a bad start, I knew it was going to be a long day. Things smoothed out down south and I started to make some better time, but was down to 2500 feet at the second last turn. It recycled and I was able to keep going,

but it wasn't fun anymore, it was survival. I flew with ZL to the last turn and back. He had a bad day too. A slow day at 111 km/h for 644 km, but I'm glad I made it back, it didn't look so good for quite a while. Tomorrow is another day.

## Day 4

*A 4 hr AAT for 15m, 4.5 for 18m and Open. The max distance for Open is over 800 km! This would break Tom Knauff's record of 766 km if it happens. I'm taking the day off – after two weeks I'm starting to get "helmet fires" – making stupid errors. One day to recharge, and I'm at it tomorrow. I'm very impressed by the capacity of the pilots and primary crews; they did get a day or two off during practice but Nick, for example, was in the cockpit for about 7-1/2 hours yesterday. The physical side of flying in Uvalde is one big takeaway for me. There is a scheduled rest day on the 13th – and the weather looks like we'll be flying every day until then. Our team captain Ed Hollestelle hasn't had a day off, and remains steadfastly positive, guiding us through the competition rules and unwritten etiquette while calming everyone.*

*The US party was last night – wow. Lots of free beer, pinatas, a riding bull you could get your picture taken on... and two P-51 rides were raffled off; it was held in the Big White Tent, and was very well received. Thanks, Team US! Dan*

**Nick** Very similar weather to yesterday, with a 4 hour area task today. There were areas again today with no or few cu that you had to navigate around or through. This can cause significant detours and wasted distance, such as 12 km wasted on the fourth leg, skirting the edge of a blue hole. No difficulties overall, except on the final leg. Tried to bump lift to get onto final glide but didn't get quite enough as I encountered strong sink. Had to detour for a small climb. 543 km at 126 km/h was much better than yesterday, but only 85% of the winner's speed.

**Dave** Today was the first area task for the contest after three days of racing task. The weather again was very good and only a few small blue areas to deal with. The task took us north into the hills, then southwest to Carrizo Springs, southeast to Callaghan, northeast and then east towards home. Jerzy and I were at the front of the grid with a slowly developing sky, but fortunately, the CD held the launch until 1 pm and we were able to climb immediately to 6000 to get into the cool air. Our start gate was in a blue area at the start time, and most people hung back around the airport where there were cu and only ventured into the gate area to test the lift.

We had a good start with lots of gliders out in front of us (I was surprised looking at the start times that we were amongst the later starts today). The run to the first turnpoint was only 20 km and then we turned the corner into the hills. I had some trouble connecting and ran along low until I finally connected with a good 6.5 kt climb to get up into the good air. The clouds didn't really align with the leg and once into the second area there was a blue hole, so I turned a little early and headed south. On this leg I was able to line up a few runs down streets. The next leg southwest had some great streets that I was able to follow almost to the back of the southernmost cylinder. I tried to line up some streets going northeast,



but it required a few jumps. The last turn area was going blue, so I worked a few clouds in the west side and ran as far as I could along that line. I maxed out the line that I was flying and then headed home, arriving only 21 seconds early.

Best climb of the day was 6.9 kts and overall average for the task was 5.2 kts. My longest run was 116 km and I was able to keep the thermalling down to 13% of the flight for a speed just short of 144 km/h over 647 km, good for 13th for the day and leaving me in 13th place overall.

## Day 5

**Nick** Due to the potential for severe thunderstorms to the north, we had a short 3-hour AAT with a 15 km finish radius in case Uvalde was under a thunderstorm by the time we got back. I started early because of the threat. The lift on the first leg was a little weak at first but improved as I got closer to the first turn area. The next leg was quite good. I got a radio call from Dave saying that the thunderstorm threat was lower than expected, so the way home was going to be okay. The third leg was aligned with a cloudstreet for much of the leg, and there were eight of us on this leg, running at 100 knots. At the end of the cloudstreet I had lost a 1000 feet on them. I stayed behind to climb after they left, then turned right for better cu, wasting some precious distance. The last leg was fast, stopping a couple of times to top up, and pulling up under cu along the way. Some stats for today: better than yesterday but only a marginal increase in overall speed.

Circling number: 92	Glide number: 24
Circling time: 00:41:44	Glide time: 02:37:02
Circling speed: 69 kts	Glide speed: 94 kts
Circling radius: 570 ft	Glide distance: 455 km
Circling rate: 27 sec	Glide avg: 19 km
Circling percent: 21%	Glide longest: 73 km
Circling gain: 18,048 ft	Glide L/D: 64:1
Circling avg: 4.3 kts	Glide loss: 23,448 ft
Circling best: 7.0 kts	Glide avg sink: -1.5 kts

**Dave** Another jewel of a day in Uvalde. There was a possibility of thunderstorms hitting the airport around 5 pm, so

the tasks were set shorter today to give us a chance to make it home before they hit. As it turned out, the storms were not a factor as they stayed north until about 7 pm, and then skirted just west of Uvalde.

Today's area task had most of the legs aligning well with the winds and Jerzy and I were able to run some streets to help boost the speed. Looking at my route, it appears that I made too big of a deviation on the eastbound leg. I had originally planned to hit the north end of the final area, but it started to look better in the southern part of the area, so I turned right and pushed into the southern part. This caused me to fly at least an extra 10 km and, on a 2:45 task, it was a costly 4 km/h deviation. The lift was better today, my best climb 7.5 kts and overall average of 6.2 kts for 12% of the task time. I didn't have any long runs like yesterday, but I did have six runs over 50 km. Today's speed was 148.3 km/h over 444.6 km for eighth place. Jerzy was a hair faster for seventh place, for what I think is the first ever Canadian 2-in-the-top-10 on a day.

**Jerzy Szemplinski (XG)** From the beginning of the contest I have had problems with instruments. I had to go to the airport before 7 am; it was the only time to do any work on them. After a flight it was too hot and a lot of dust is blowing in the evening, so any work is just a waste of time. One day it was so hot before takeoff my Cambridge vario/FR was cooked and refused to start. After 20 minutes in flight cooling under cloud, I was able to start the Cambridge. I had an electrical vario but as a secondary logger it was useless due to in-flight activation, any breakdown of the primary FR would invalidate the flight. For four days I had very limited use of my computer display as the FLARM blocked my controller. After four days of trial and error I was able to fix my problem.

Every day speeds are higher and higher and every minute is very expensive, one extra turn costs a fortune; one mistake and a large number of pilots are way ahead. We will fly two more days before the rest day and the second half of the contest begins. We are getting used to the heat, but dust is a big problem. Before takeoff all gliders are treated continuously with blasts of dust lifted by driving cars, towplanes and dust devils.

## Day 6

*Two of three home – one landout. F1 and XG make it home; a lot of 15m gliders, including Nick, land out. Looks like a three hour each way retrieve. Nick flew about 460 km and landed at an airport near the southern turnpoint. Time for a shower and bed for me. Tomorrow is the last day before the mandatory rest day. It seemed very cool as I left the airport – down to 33.5C. Dan*

**Nick** Dr. Jack gave heavy cloud cover to the north by 2 pm, although the weatherman predicted a few cu with chance of thunderstorms later in the afternoon. The task went north first then south. As it turned out, the heavy weather developed to the north quite early. I was with a group of gliders on the first leg.

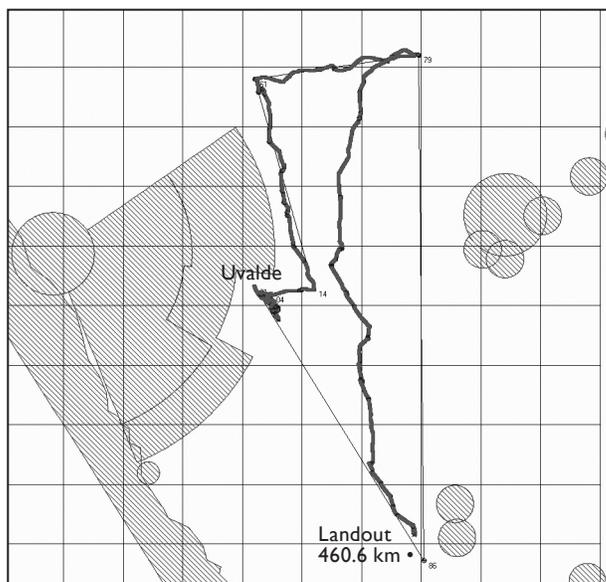
They got higher and pushed ahead after the first turn, while I topped up and lost them. The sky was black and

there was rain around and the lift was difficult to find. Two gliders that were lower found better lift and caught up, and we flew together for a while. The second turn was in dead air and the next turn, Fredericksburg, was under a thunderstorm. We skirted the edge of the storm near lightning and heavy rain and made the turn. We backtracked along the front edge of the storm and looked for lift in different directions. I found 4 kts to 9600 as I crossed the storm boundary. Ed called on the radio and said there were two storms ahead of me. I was able to go between them but finding lift was a problem. Beyond the storms to the south, there were a few cu and the blow-off from the storms behind me.

With a low speed so far and weak lift ahead, I dumped ballast and thought about landing back at the airport. I saw the other two gliders heading that way and it turns out that's what they did. I decided to keep going for a while anyway. A few wisps provided lift to 6500 but it was slow going. 50 km from the last turn, I was under a gaggle that was returning from the turnpoint – a discouraging sight. I hoped to make the turn and get back to at least Cotulla, but at 7:30 pm it wasn't to be. There were three airports nearby, and I picked El Caballero to land. The airstrip had a twelve foot high fence around it that would probably be locked. There was a plowed field just across the road from the airport to the north, so I landed there instead. When I checked the airstrip gate, it was chained but not locked, so I could have landed there after all.

My crew, Christine and Sonia, enlisted help from a local volunteer, Conrad, and got underway by 8 pm for a 2:30 hour drive. Somehow the car's GPS took them the wrong way, and when they got to the Mexican border they figured out something was wrong. They had overshot my position and had to backtrack two hours. We stayed in contact by texting and phoning. When I got the text about the detour and long delay, my anxiety level went up a notch. Would they find me?

My Dell flight computer became a music player and e-reader and I kept busy reading Jules Verne's *Around the World in 80 Days* to the music of Chuck Mangione. An orange crescent moon started to rise and Perseid shooting stars streaked across the sky. I tried to keep the canopy closed to keep the bugs out but the temperature got way too high. I used my



knee to keep it partially open. I had an emergency bottle of water in the glider but it ran out at midnight.

When the crew got close they were blocked by fences everywhere, after unsuccessfully flashing headlights and honking the horn to see if I could see or hear them. At 1 am it was time to call the contest and request assistance. The office contact (it turned out to be Brian Milner) called the local sheriff, who called the ranch owner who drove to the ranch gate to let my crew onto the ranch. In the meantime, I was sitting in the cockpit in complete darkness, stars overhead, with coyotes howling nearby.

The crew got to me at 3:30 – I was so glad to see them arrive. We derigged by the headlights of the rancher's truck. When I backed up the trailer to leave, Christine saw a coiled rattlesnake nearby, head up and looking. The car was low on gas so we headed for Cotulla – the pumps were open but no one was at the booth. A US credit card was needed, so Conrad had to use his. If he hadn't been there we would have had to wait till opening time. After a 2:30 hour drive, we were back at the hotel at 6:30, normally our wake-up time. I e-mailed the flight log and went to bed.

## Day 7

*Hats off to Nick. After that retrieve he had a brief nap, rigged, watered-up, and was staged just after noon, launched at 1:30 pm, started at 2:24, and flew 446 km at 130 km/h! Man of Steel! Christine and Sonia – Women of Steel. Dan*

**Dave** Before the start, as I had climbed up to cloudbase at 8300 feet, I saw a couple of gliders that were above cloudbase out in the blue. The FLARM showed they were 1500 feet above me, so I went over and joined them and found about a knot of lift that eventually turned to 3, and I was able to climb. At first there were only a few of us, but soon a large group had joined. The lift was quite smooth, I think it was a thermal wave generated on the upwind side of the cloud. It occurred to me that instead of just just killing time, starting from here would be a good tactical move. I got up to 11,000 feet about four minutes after the gate opened and then crossed the start line at 10,500.

I turned at about the middle of the first turn area and it looked like I had a nice alignment of clouds along the second leg. After the start, my first run was 106 km and on my first thermal I saw 14 kts and had a thermal average of 8.2 kts. I was able to run another 82 km before I got my next 8.2 kt climb. Half way down the second leg things were going great and I was averaging 164 km/h on the task. I needed to go deep into the second area at Laredo, but part of the turn area overlapped Mexico and the centre was the Laredo airport control zone that we could not overfly – so I went east into the turn area and things got soft. I was getting low and none of the last clouds had decent lift, so I turned and headed north. By now, my task speed had dropped to 153. I took a couple of less-than-optimal climbs and spent too much time searching and my speed was now down to 144.

I finished the task at 148 km/h, but that was not nearly fast enough for the day. Once again I had 12% thermal-

**Team Captain's note:** *During all seven practice days and the first six days of the contest we had good to excellent flying conditions. The Open class broke the 100 mi/h barrier. Only in Uvalde can we expect this kind of strong and consistent soaring weather, but the heat and the intensity of modern day contest flying takes its toll.*

*The practice week was valuable for pilots, crews, and contest personnel. There was always flying during the practice days resulting in no rest days for the crews, tiring them out even before the contest started. I came up with a routine for all the crews that worked quite well and was maintained until all suffered from the heat at the field and it was decided that the crews spend the waiting time at our air conditioned motel room. One of the local politicians said that if he owned both Texas and hell, he would rent out Texas and live in hell ... but the flying is the best in the world!*

*After flying four Worlds and three pre-Worlds, this is my first try as a team captain and it was totally different from my expectations. Things have changed a lot from the last World contest I flew at in 2003. A captain was a requirement then, but only necessary in case of problems. The CD made all the decisions on procedures, tasks, and other issues in accordance with the competition rules of the day. It's far more democratic now. Most days there is a captain's meeting preceding the pilot meeting at 10:15. Any team pilot's concerns, current procedures, and suggested changes are discussed and pilot feedback taken into consideration. In my opinion, this is the best way to help make these WGC fair to all concerned, while still complying with the rules. The contest was well prepared and plenty of US volunteer staff were at hand to get the job done in an orderly fashion.*

*Pilot responsibilities have shifted. More attention is required during flying, but technicalities such as reporting start times and turning in flight logs is the team captain's responsibility. Issues with procedures, changes and concerns are dealt with at the team captain meetings, which simplifies and shortens the morning general pilot meetings. All our pilots were flying their own gliders with familiar equipment, flight computers and back-up flight recorders. They still experienced glitches with flight files and outright recorder failures – all due to extreme heat, and it added a lot of stress and distraction.*

*With all the up-to date available weather info it is also very important to have this passed on to the team pilots. A good ground station with a tuned antenna was erected at the motel and I was able to talk to most pilots up to about 120 km out. On the first contest day heavy thunderstorms developed on course and I was able to advise the pilots of their locations, helping them to avoid slowdowns and I could advise on cloud conditions that the pilots could not observe from their own locations.*

*We have proven that the Canadians can and will be at the top and it was disappointing that during the closing ceremony no mention was made of the last day results when Jerzy and Dave finished 1, 2 in the 18m, the best Canada has had at any previous WGC. Nick finished a respectable tenth for the day in 15m. I am sure that with some more practice in team flying our pilots will be at the podium in 2014.*

*In closing, I would also like to recognize the volunteer crews. They looked after the pilots and relieved the pressure on the pilots' spouses. Dan Daly, looking after Jerzy, also skilfully updated the team blog and took care of team captain matters in my absence. Sonia Hildesheim helped Nick and Joe Laposnyik supported Dave. I am glad that Annemarie was able to join us during the contest and share some of the load. Lastly, thanks to every SAC member who supported us financially and to all who contributed to our fund-raising activities.*

**Ed Hollestelle**

ling during the flight with 5.7 knot average climb rate. The lost time in the Laredo area certainly hurt!

**Nick** After the all-night retrieve, I woke at 9:30 with a slight headache, most likely due to dehydration. I definitely need some rest but unfortunately tomorrow is the rest day. To fly or not to fly today? I decided to delay the decision and to get ready. First priority, get rehydrated. I skipped the meeting, and headed to the glider to rig and water and get to the weigh scales by 11:00. Next a quick breakfast and drinking more water. At grid time the launch is delayed. Headache a little worse but overall feel okay. Drink water and Gatorade. I decide to give the task a try and cut it short if necessary.

Weather looks good, and there's even gliders climbing higher than cloudbase. I give it a try, but there's little lift under the gaggle. My goal for the day is to take it easy and complete the task and get some points as opposed to none if I take a rest day.

I decide to start early and the first leg is so-so, but is looking great on the second leg. The third leg looks promising, but I can't find consistent lift. It gets better on the fourth leg, but there are fewer and fewer cu. My headache is worse and it's definitely time to get home. I turn early in the area and need a few hundred feet for final. Finding only 2.5 knots under small wispy cu I move on, then I hit heavy sink and have to detour right to a cu. Only 1.6 kts, move on, 2.4 kts, climb a little, and go. I just lost four minutes! The speed for the leg drops from 147 to 127 km/h, and overall from 132 to 130 km/h, but it's much better than getting zero points.

## Day 8

**Jerzy** Today we had a possibility of thunderstorms arriving in Uvalde after 4:30. One strategy was to start early and finish safely before thunderstorm arrival, the other option was to gamble and start late gambling that thunderstorms will arrive late or not at all. I decided to start late which paid off in the end. I met Poles and Germans on the second leg but decided to fly on my own. I hit a couple of 10 kt thermals and connected with short cloudstreets. When I got back to Uvalde, a thunderstorm was just approaching. Its gust front arrived just after my landing. Dust was everywhere. In ten minutes it was calm, the thunderstorm died and we never got a drop of rain. Sometimes gambling works, and I finished in fourth place.

**Dave** As Jerzy said, the question today was whether or not to gamble on the approaching thunderstorms. I decided not to gamble and left early. In hindsight, it was not the fastest option for the day. Our class winner took the gamble to the extreme, starting 90 minutes after me!

## Day 9

**Dave** Today we had a 581 km racing task. This task was changed on the grid because the initial task ran too far south and would have been under the influence of a deck of high cloud, and then ran too far north where we would have been in an area that received about 1.5 inches of rain yesterday.

## Day 11

We had a short leg east, then went south and then up north a little ways into the hill country. There was about 25% sky cover with cu and some nice streeting. Going into the second turnpoint I caught up with a group who had started a few minutes earlier and then stayed with them for the rest of the flight. At times we went our own way, but would eventually meet up again further along the course.

One mistake I made that cost me about two minutes, and ten places on the day, was on the westbound leg to the north. [See stats on page 12 on the price of minutes.] I was out ahead of the gaggle a little way and elected to go right of course over the town of Kerrville where I expected a good climb. It wasn't there, but the group that went left found a good climb and then made it to the last turnpoint 1500 feet higher and 30 seconds earlier.

The barograph trace shows the streeting action during the flight with lots of little bumps and only a few climbs. It took thirteen climbs to cover the 581 km distance and averaged 5.4 kt for 12% of the flight. I had three nice long runs 134 km, 100 km and 91 km. The final glide was spectacular, as a cloudstreet ran from just south of the last turn all the way back to Uvalde. I climbed with the gaggle in a great thermal (7.2 kt) to 8600 and then ran home at 110-140 kts all the way, covering the final 83 km in only 25 minutes! My speed today was 148.3 km/h – good for thirteenth on the day and only two minutes behind third!

**Jerzy – wins the day!** Today we had a fast task and any waste of time was very expensive. I was able to start late and pass early starters and win a day, finishing first with the highest speed of 153.5 km/h.

## Day 10

*Congratulations to Jerzy on his win yesterday, at a smokin' speed of 153.5 km/h over 581.7 km (he said he was redline limited on final glide!). A speed of 148.0 km/h only got you 16th in 18 metre! The 15m winning speed was 143.2 km/h over 598 km. Open: 157.0 km/h over 663 km – one Open ship landed out a little under 10 km from the finish ring. Dan*

**Dave** The weather today was a mix of cu and blue conditions on different parts of the course. The first three and a half legs were in the cu, then we transitioned into the blue, and into the cu again on the final glide back.

Jerzy and I flew together the entire task and it worked really well with each of us taking the lead at various times throughout the flight. We had a great final glide, with our last thermal 118 km from the finish line and then a scorching run home with a 20 knot tailwind to give a speed of 199.9 km/h on my final leg.

We tried to maximize the second and third turn areas as we expected the conditions to be worse going into the east and south turnpoints, and they were – mainly because of the blue. We ran cloudstreets on the second and third legs and caught up with and then pass the group that left before us. For our efforts today, we netted third place – I'm not counting the one point difference! This moved both Jerzy and me up a couple of places in the overall standings.

**Dave** Today, it was expected that convection would start late and finish somewhat early so we had a relatively short 3:30 area task. The 18m Class was second on the grid, and our gate opened around 3 pm. With an expected end of convection before 7 pm, there wasn't much time to waste before the start.

Unfortunately, we had a bad day today. Around 1720, we got into a hole that took a long time to get out of. We were running what looked like a good line of clouds, but nothing was working. We wasted many turns trying to find something and took a weak climb so we could move on. Fortunately we were not alone as there was a mixed group of 15m and 18m gliders as we had a common leg at this point. Finally, 20 minutes and 40 km later we connected with a 6 knot climb that got us up and running again. We also wasted time on final glide trying to centre a last thermal, but eventually gave up and headed for home on a slim final glide. Fortunately, there were still a few clouds we could bump on the way back and we were able to stay on glide slope. Fast guys don't find the holes and that was no exception today as they smoked us.

**Nick** A late starting day with slowly rising cloudbase is the prediction. It's 2:45, with a 3:45 hour task; I find 2-3 kts to 5500 in the blue after release. I sample the lift in a few gaggles, but don't find much, and gliders are milling around waiting for the gate to open. I eventually climb to 6500 and decide not to delay and start alone.

The first two legs are in the blue, but with the promise of clouds on the fourth and fifth leg that I can see far in the haze, I cut the second area short. F1 relays from the team captain that there'll be some cu along highway I-35. We get to them near the third area. The gliders are continuing further into the area, but I decide to turn north and extend into the last area where cloudbase should be higher, and lift stronger in the hills. The wind doesn't line up with the track, so it's a zigzag to follow short stretches of cloudstreet. Halfway up the leg, I see four gliders converging on the same cu I'm going for, and they're a little higher. We continue north, but there are fewer and fewer clouds. At the centre of the area, we get a bit of a climb and it's decision time. Keep going in the blue and hope to find some lift, or head for home and probably come in early? I decide not to take a chance and conserve the speed I've achieved and head for home. I need to find an extra 3000 feet or so along the way. A couple of climbs with a group of gliders, then it's a straightforward final glide, and two minutes over minimum time, 462 km at 122 km/h.

## Day 12

**15m Class mid-air** *All okay. Some of the other 15m pilots were involved in rescue/communications overwatch/escort for the damaged glider and in the interests of fairness the task for 15m was cancelled for the day. We recalled Nick through a relay by the Belgian team. Dan*

**Nick** It was shaping up to be a good day, but a radio call from the team captain put an end to it, "The 15m task is cancelled; there's been a mid-air. Return to base". It puts

## How competitive was the World contest?

Let's look at the 18m results

	dist. km	pts	winner speed km/h	10th speed km/h
Day 1	553.1	1000	136.9	132.8
Day 2	579.2	1000	147.5	143.0
Day 3	612.5	1000	151.8	145.1
Day 4	684.4*	1000	149.9	145.0
Day 5	507.8*	972	154.8	147.7
Day 6	692.1	1000	140.2	132.7
Day 7	519.1*	1000	154.6	149.5
Day 8	408.3*	849	151.3	143.1
Day 9	581.7	1000	153.5	148.7
Day 10	509.1*	1000	141.2	136.5
Day 11	523.0*	1000	145.3	142.1
Day 12	652.9	1000	157.8	151.1
Day 13	417.8	757	150.2	146.8

- \* AAT tasks – variable, max distance given
- winning score – 96.8% of max (12,578) pts
- the costliest 5 minutes of the contest in 18m – Day 9 which dropped one pilot 17 places to 20th from a potential 3rd!

finding good climbs and I was down to 3300 feet before the first turn and then ran the second leg between 4-5000 as we headed north into the hill country. Just before the second turn I finally had a climb that took me to 6000. As we ran along into the hills, Jerzy was 800 feet above me and he connected with a thermal that I didn't get at my altitude and he was able to run ahead of me. We found the thermals very disorganized down low, but once above 6000 they improved.

I rounded the northernmost turnpoint and then the legs started to align with the wind and I was able to bump and run along streets. Going south, I was able to get ahead of the group who had caught me and by the time I reached the fifth turnpoint to the east, I had caught up with Jerzy again, but was still 1000 feet lower. The leg to the southern turnpoint was across wind, so I jumped from street to street and on occasion found myself lower than I would have liked. Now that we were out of the hills and the day more developed, the thermals down low were better and I was able to consistently climb away. After rounding the last turnpoint the streets aligned well with the leg home. I stopped once for two turns, gained 650 feet and then bumped the rest of the way to the finish. The final leg was 148 km in 44 minutes at 201.9 km/h. But, the amazing stat for today is 3.5 minutes cost ten places on the day, ouch!

## Day 13

**Nick** I started with a small group of gliders and headed out on the first leg, not finding much lift but progressing slowly. After the first area I was flying with the Belgians and we could see sunshine to the east and slowly headed that way. We eventually got to the sun and conditions improved greatly. Cruise speed increased to 90-100 kts, and lift under cloudstreets was reliable. I turned in the second area earlier than the Belgians, who decided to continue another 15 km to try to improve their overall speed. I didn't want to chance not

things in perspective as I had a glider overtake me twice only a 100 feet to the side at the same altitude, with the FLARM beeping away and pointing back. You can't move until the glider overtakes and you finally have a visual on it or the FLARM stops beeping. With no radio contact it's not a good situation. It was good to hear both pilots are okay.

**Dave** A long 653 km racing task today that the winners completed in 4:08 at 157.8 km/h. We started too early today at 14:11 while the others started around 14:21 and caught us about an hour later. It is amazing what difference ten minutes can make in a start time. We had trouble

getting back to Uvalde with the cirrus moving in and cutting off the lift. As it turned out, the way home was paved with a long cloudstreet, slightly off course but worth the detour since the direct way home had few cu with cirrus overcast. I thermalled only once in 150 km to gain 1500 feet in a 5 kt thermal. The Belgians had made good speed and caught up to me 50 km from home but were 1000 lower, and we ended up with the same speed overall for the day. It was good to finish the contest with a good flight worth a tenth place finish, my best of the competition.

**Jerzy** The weather on the last day of flying wasn't very promising as high clouds were moving in just as short-lived cu were popping around. Before the start we had a hard time to climb. I met up with Dave and we started together after most of the competitors were already on course.

The first leg with low cloudbase and fake clouds wasn't a good sign, but deviating to the north paid off and we thermalled just to improve our altitude. At the end of the first leg, very dark cumulus clouds under full cirrus still worked and the next leg looked better and better with a beautiful cloudstreet leading to the next turn area. Then it merged with a new cloudstreet leading back to Uvalde, flying an extra 20 km put us in to perfect position to make the last turn.

Around 67 km from home I was able to centre a 10 knot thermal which Dave arrived at a minute later. A couple turns and I was on final glide, finishing the task with an average task speed of 150 km/h which gave me the win for the day. It was my second win in this contest, but mistakes on other days cost a lot and I finished eighth overall after thirteen days. It was the best day ever for Canadians flying in a World Championships, two Canadian pilots taking first and second place for the day.

It was a most demanding contest for the pilots and crews. Pilots had the chance to cool down under cloudbase, but crews on the ground were in full heat until their pilots were on the course and then got a couple hours of rest in a cool hotel room before working in heat and dust again to help the returning pilots. Maria, my wife/crew helped me with glider preparation and all daily tasks. I also had the comfort of a second crew, Dan, who helped me with glider preparation before and after flight. Ed took care of all the administration and team problems, in addition he was working hard to give the pilots current information about weather and the position of other competitors. Thank you all.

**It's all over** 19 August, the closing ceremony was this morning and new World Champions were crowned. We sat outside in the rain for the ceremony. The weather cooperated for the duration of the contest and held off the rain until all the flying was done. This contest had more flying days than any previous World competition and also logged more points. According to the CD we flew over 800,000 km combined this contest – enough to get us to the moon and back! We are packing up and headed for home. Dan ❖

See page 25 for a competition analysis by Nick and Dave.

# What's in a name?

Bob Lepp, Great Lakes Soaring

**W**E KNOW SO MUCH ABOUT THE SAILPLANES WE FLY – dimensions, weights, capabilities – dozens of numbers and ratios. Do we know what their names mean in our own language? Yes? Sometimes ...

In my early days of gliding enthusiasm, I became a partner with Geoff LeBreton in Willi Deleurant's Scheibe SF27. In my eagerness to learn to soar, of course, I landed out many, many times. The word "Scheibe" (*shy-buh*), I assumed, was the name of the person who designed it, or manufactured it, or who did both. That was all I needed to know.

One day I found myself over Flesherton, just south of Georgian Bay. At that time I did not understand how the cooler air from a lake will undercut the active cumulus. Soon I found myself unable to climb even though I was under good looking cloud, so I found a nice, low bean crop in a very flat field just west of the town – the landing was uneventful. Not until I deplaned did I notice rows of brightly coloured outhouses in the adjoining fields. The owner invited me into his air-conditioned office to await the retrieval crew. We had a nice chat and then he asked me where the glider was made. I told him "in Germany" and he seemed to instantly become more interested. He asked me the name of the glider and I told him. He asked me to spell "Scheibe" and he wrote it down excitedly on his desk blotter. I could not help but ask him why.

He told me that just that day he had picked up a brand new male German Shepherd puppy, as protection for his wife when he travelled, and that he had been trying all day to think of a proper German name for the dog. He said "Scheibe" sounded like a wonderful name and that he would name his dog after our humble glider. Over the years my son Matt and I often joked about the day I landed in the farm where they raised outhouses, and how one proud German Shepherd was now named after a little blue and white glider.

... fast forward to this August. Matt and I are on a mission to surprise his mother with a new pup for her upcoming birthday. Her last faithful dog, Hope, had been gone for exactly a year, so the mourning period was over and it was time for her to begin the process of softening me up for a new one. Peg had rescued Hope from an abusive home, and brought her to our home the same day Matt and I and two friends went to Harris Hill in Elmira to pick up a used SZD-55. That was the trade-off – she got a used dog if I got a used glider. Well, the dog bonded to Peggy alone during that day of our absence even though we had met it the week before. We males in the house were simple reprobates to Hope, to be guarded against at all times. Matt was more "in" but I was certainly "out". It took two years for me to get into my own bedroom without being growled at. A nice dog, but Peggy's dog for sure. And, she was missing two basic dog requirements in my book, she did not fetch and she did not play.

Peg admired the German Shorthaired Pointer breed and had stated that she would love one as the replacement. So, I did the research and found two local breeders. Any birthday "surprise" had been set aside since Peg spent hours the day before telling me that adoption was again her preference. But she was on board immediately when I told her our plans. One breeder showed three female pups on her web page and one caught my eye because of a large dark brown circle on each of her sides. I told Peg that would be a nice one to call "Target" – "Tar-jay" when in upscale company. A nice strong, sport-oriented word, manly almost. That pup was the one we did select; she was as sweet as sugar, and we went home that evening to get prepared for having a dog in the house again. Enroute, we texted Matthew to tell him that we had found a pup, and suggested that he start thinking about names. Peg and I were celebrating our good fortune at dinner in a nice restaurant an hour later when Matthew texted me a single word ... "Scheibe". I laughed to myself, because I thought back to all the times we had joked about the outhouse-growing farm, and the once-proud dog now named after an old glider.

Flush with success, and with the bottled courage of the lovely red wine, I decided on the spot that I should be involved in naming her new puppy. Peg wanted something German, something female, something with two syllables. I believe she was settling on Gabby (for Gabriella). I blabbered out, "what about Scheibe?" and told her the story. She was open to the idea because it was, a) German, b) two syllables, and c) certainly would be unique. And most importantly it had been suggested by her son, who has more stroke in family matters than I do most days.

Due to Peg's interest, I recall that I decided that I had better make sure that "Scheibe" wasn't some German swear word. I looked it up on Google. What appeared on the page made me laugh out loud. I said nothing – rather just turned the computer towards Peggy, adopted a look of resignation, and waited for her response.

All those years and many hours of flying, and I had no idea what "Scheibe" meant, and here it was at <http://dictionary.reverso.net/german-english/Scheibe>.

Scheibe – in combination with other words could mean: target, (hockey) puck, washer, wheel, (window) pane, disc, (auto) windshield, glass, and Sugar! (*euph inf*).

There it was – the first defined term was the name I had imagined for her, "Target". In addition, I thought "Puck" and "Disc" were quite manly as well. And the last one, "Sugar!", even summed up the personality of our new family member. Regrettably, I learned later that *euph inf* meant "informal euphemism", and that "Sugar!" was used so the gentle reader would not be alarmed. An irate German might spit out "Scheibe!" instead of "Scheisse!" just as we might say "Shoot!" instead of "S\*\*t!".

So, what's in a name? You have to look it up.



# Behind the scene at the Nats

from  
**Doug  
Scott,**  
SOSA

**J**IM FRYETT AT YORK asked if I would be the CD for them at our National Soaring Competition. At that time, I didn't know that the farmer to windward of YSA would be spreading manure every day. My eyes still water at the memory. Fortunately, my neighbour and Official Scorer, David Mackenzie, had an endless supply of single malt scotch and its peaty aroma overcame the smells. As always, the Nats are a great opportunity to see old friends, meet new people, and watch expert flyers at work. I cherish the learning experience, and I encourage all of you to take the opportunity to help out at contests of all descriptions – you pick up all kinds of useful stuff just by hanging around the pros.

York Soaring had not hosted a national contest since the 80s, and has undergone major changes in the last few years, all for the better. The folks at YSA are my friends, and I want to put a positive spin on this, but though they tried, they were not prepared for the drain on club resources that a Nationals create. The reality of the demands was not fully understood, I think because they do very little cross-country flying at YSA. This left me in a very difficult position, negotiating moment to moment for things that should have been prearranged.

I note this, not to blame YSA, but to advise other clubs who wish to host the Nats. It is difficult to integrate contest operations into a culture having NORDO gliders, runways unusable with uncut grass, no functioning base station radio, and no provision for aero retrieves. Many club members did not understand a contest grid and they assumed it would be like a busy Saturday: launch a 2-33, a contestant, a 2-33, another contestant, and so on. We were shorthanded as well, which meant that sometimes a designated person was not available for a job, and we scrambled to fill the gap. I hope the folks at YSA will continue to move forward in hosting contests and fostering cross-country soaring. They have an ideal location with respect to airspace and soaring weather.

I was greatly helped by Jim Fryett, Contest Manager, Stan Martin, the club president, and Ivor David and Al Baldwin, who dealt with all the financial and logistical issues. As noted, David was our scorer. Roger Hildesheim and Derek Mackie were with me on the task committee, aided by Tony Firmin who supplied his take on the weather, and managed the SPOT tracking, which was displayed in the clubhouse.

The SAC Flight Training & Safety committee suggested that we emphasize a safe contest culture, and that we remind the contestants that the conditions and environment are more demanding than those they would normally encounter on a club weekend: things like the pressure of a contest, flying consecutively on difficult days while camping out and perhaps not getting sufficient rest, and so on. John Craig, our Safety Officer, was diligent in observing and commenting on situations that we could see, and we put John first on the

agenda at each meeting to establish our seriousness about safety. We urge all of you to learn all that you can about safe landouts, and to be as cautious as you can when it happens to you as it surely will sometime. (As you know, Derek Mackie died in a landout accident. It deeply moved all of us. Derek, we miss you.) US contests offer a 25 point bonus for a landout at an airport, and I believe that we should look into that for ours.

High winds were a factor, and they were so strong on the last contest day that not enough gliders in the Club Class met minimum distance, so we did not have an official contest in Club Class. On one of the high wind rest days, we had a great visit from Captain Chris Herten, of 424 Search & Rescue Squadron in Trenton, and his crew. They arrived in a helicopter and put on a parachuting display from high altitude. Given the wind, one of the guys landed a couple of fields away, confirming our decision to scrub the day. Over lunch, one of the crew gave a briefing on how to land safely with a parachute on land, in trees, and into water. Nice to know the theory, but we all hope that we will never need that knowledge.

In an effort to increase safety with respect to other aircraft in our vicinity, we tried to negotiate with COPA, who were holding their annual fly-in AGM at Hanover, about 25 nm to the northwest. We kept tasks away from Hanover, but there were still incoming and outbound aircraft nearby. Negotiations were difficult because they expect others to fly level, on a heading, at a set altitude, not circling and moving from cloud to cloud, constantly climbing or descending. In addition, I tried to initiate NOTAMS for the general task areas each day, and only succeeded in confusing some control towers and being asked to report to the office at Pearson (flashback to high school).

My efforts to advise other power pilots of our increased glider activity in a certain area at a certain time did not work, so, I remind all of you to be very watchful at all times, and to use the appropriate radio frequency and to consider getting collision warning devices for your glider.

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from **Tony Firmin,** York

**T**HE FOLLOWING describes how the central computer display at York was used at the Nationals and how various software packages assisted in the process.

In today's competitions it's almost essential to have reliable access to the internet. In anticipation of this, York Soaring upgraded its service prior to the Nationals. However, knowing that we would need last minute weather

data on a daily basis and not knowing how reliable this service would prove to be, I set up my own wireless internet plug for my laptop and then never needed to use it.

I had two computer-related tasks to fill at the competition: come up with the best guess on each day's weather and have it available each morning, and set up local tracking of the SPOT devices that twelve of the competitors were using.

The hardware set-up at York consists of a five-year old computer with a wireless keyboard, running Windows 7. The computer is permanently connected to a projector mounted on the ceiling with a pull down screen. During the competition the computer was left running so that all we had to do was roll down the screen and press the button on the projector and we were in business. The set-up proved reliable and flexible.

Today every pilot who has access to Dr. Jack's website or XCSkies can become an instant expert in predicting the soaring conditions for the day. The role of the weather forecaster is therefore reduced to providing peripheral evidence to support or deny what these sites are showing. This is best done by looking at other websites with

satellite shots, teph plots, and cloud cover estimates (a list of aviation weather links is on p 29).

At the start of the day it was my job to put all this data together and make the 'official best guess' from which the task setters then proceeded to do their job. During the morning pilot meeting this needs to be presented quickly and succinctly. The best way to do this is through a series of pictures. Given the time available it is not possible to visit each website in real time and so it seemed to me that compiling a short PowerPoint presentation of graphics from these sites served the purpose best.

The most flexible way I found to quickly get the graphics I needed is to run Snagit. This software allowed me to clip an area of the screen and paste it into my presentation. This process has got to be pretty mindless, as at 7 am my mind does not want to cope with anything more difficult.

A week before the start I found that I would be needed at home for a few days during the competition. This meant that though I could prepare the forecast I couldn't be present to give it. This was a good opportunity to use TeamViewer which is a free application that allows me to control another computer through the internet. ⇨ p29

2012 CANADIAN NATIONAL SOARING CHAMPIONSHIPS	20 June				22 June				23 June				26 June				total score										
	DAY 1				DAY 2				DAY 3				DAY 4														
	pos	kph	km	pts	pos	kph	km	pts	pos	kph	km	pts	pos	kph	km	pts											
<b>CLUB CLASS</b>	3 hour AAT				3 hour AAT				3 hour AAT				1.5 hour MAT														
1 Gabriel Duford ASW-20 W6	1	59.1	177.1	a999	1	70.9	212.0	a983	3	74.4	231.4	964	No contest	2946													
2 Anthony Kawzowicz SZD-55-1 Z	4	50.0	158.4	846	5	63.6	205.4	882	1	77.2	247.1	1000			2728												
3 Stan Martin Mini-Nimbus Z1	8	45.4	142.3	768	3	68.2	211.5	944	2	76.5	237.6	991				2703											
4 Krzysztof Wiercioch Jantar MF	6	49.5	162.1	837	2	68.9	206.7	a955	4	70.1	242.7	908					2700										
5 Emmanuel Cadieux ASW-20B PE	2	53.5	159.7	a905	6	62.9	187.5	a871	6	64.8	218.7	840						Only 2 pilots exceeded the min. distance of 80 km	2616								
6 Pierre Cypiot ASW-20 S1	3	53.1	160.6	898	4	65.3	195.8	a905	11	-	213.6	534								2337							
7 Herrie ten Cate Jantar HK	5	49.5	149.1	838	10	-	192.1	564	5	64.9	214.6	841									2243						
8 Stanislaw Maj SZD-55-1 KO	7	46.3	138.2	a783	11	-	146.9	432	10	54.4	194.0	705										1920					
9 Brad Wood Jantar L8	9	0.0	68.3	b240	8	58.7	202.2	813	7	62.2	196.2	805											1858				
10 Roger Hildesheim SZD-55-1 AT	10		dnc	c0	7	60.0	179.3	a831	8	61.6	200.3	798												1629			
11 Rafael Nunes SZD-55-1 RN	10		dnc	c0	9	53.9	161.0	a747	9	58.3	207.3	755													1502		
<b>FAI CLASS</b>	3 hour AAT				3 hour AAT				3 hour AAT				2 hour MAT														
1 Dave Springford ASG-29 F1	1	89.0	273.8	1000	1	79.6	265.4	1000	1	85.8	270.8	1000	1	71.8	147.0											682	3682
2 Jerzy Szemplinski ASG-29 XG	2	84.5	262.1	950	3	79.0	253.2	992	7	75.9	254.5	885	3	71.6	146.8	680										3507	
3 Sergei Morozov ASG-29 MS	3	80.7	241.9	a907	5	74.0	290.0	930	5	79.2	252.8	923	1	71.8	147.0	682	3442										
4 Ed Hollestelle LS-10 A1	7	68.4	204.4	a769	4	75.4	270.5	947	4	79.8	238.2	a930	5	66.4	132.1	a631	3277										
5 Andrzej Kobus ASG-29 AK	10	63.1	190.6	710	7	70.1	249.2	880	2	82.5	257.4	962	7	62.8	144.0	596	3148										
6 Willem Langelaan Antares OX	5	70.1	213.6	788	6	75.2	253.5	e896	9	70.8	212.1	a826	6	64.7	129.2	a614	3124										
7 Nick Bonnière LAK-17a ST	6	69.0	206.9	a776	10	61.8	237.9	776	6	76.8	264.9	895	4	68.9	137.4	a654	3101										
8 Luke Szczepaniak ASW-27 2W	4	72.9	217.3	a820	8	68.4	300.9	859	12	67.8	226.6	790	9	55.9	152.7	531	3000										
9 Jörg Stieber LS-8 JS	13	-	104.4	241	2	79.4	285.8	998	3	81.4	275.8	949	8	60.3	136.1	572	2760										
10 Jim Fryett LAK-17a JF	9	63.5	202.5	714	9	66.9	269.4	840	11	68.8	207.8	802	11	36.9	90.4	350	2706										
11 Bill Cole Mosquito BC	11	61.9	187.7	696	13	-	267.4	547	13	67.3	231.1	784	10	53.0	106.4	503	2530										
12 Roy Bourgeois ASG-29 ROY	8	64.4	198.2	724	12	54.1	260.4	680	10	69.4	216.0	808	12	0.0	65.8	b156	2368										
13 Derek Mackie LAK-17a TT	12	-	198.3	d426	11	61.7	284.0	775	8	71.8	231.2	837	13		dnc	c0	2038										
Scoring codes	a flight time less than minimum d turn point penalty				b distance less than minimum e finish penalty				c no flight log - landout				dnc did not compete														



# my 2012 Nationals

**Brad Wood**, Great Lakes

## a beginner's experience

**I**T WAS A WINDY CONTEST, and the first and fourth days were more than anything I had ever flown in previously. I did not go in expecting to win, or even to do well, but I arrived with an attitude to learn as much as possible, and in this I think I accomplished my goal.

I started flying at thirteen when my uncle, Bruce Wood, took me for a week of lessons at Gatineau Gliding, and I have been hooked ever since. The next summer I continued learning at Great Lakes Gliding and have enjoyed the friendly atmosphere at Ronan Field for seven seasons.

In 2011 I started flying cross-country seriously in the club Jantar, L8. Due to a lack of XC trainers and instructors, I mostly taught myself, and by the end of last year accumulated several medium length flights and one landout in L8. Over the winter I got the idea of entering the Nationals and I subsequently persuaded my club, my father, and myself that I could do it despite my limited experience. I reasoned that flying on consecutive days and with challenging tasks would be an excellent structure to improve my cross-country experience.

The Club Class at this year's Canadian National Soaring Championships featured a wide range of experience. At one end was myself, flying my first major contest, while several of the other pilots had many times more hours and kilometres flown. Although we didn't have an official contest with only three scoring days, it still remained a good opportunity to compare our flying side by side.

### The beginning

My dad and I trailered the Jantar to York on the morning of the first practice day. I found a few pilots I knew from Toronto Soaring and despite the expected weak conditions, we decided to rig and fly. My first act of the contest was to nearly roll L8 out of her cradle without wings due to the uneven ground, but Pierre and Gabriel from Champlain graciously rushed to my assistance.

The conditions on both practice days were marginal so no tasks were set, and I only flew short local flights. At the pilot meeting on Tuesday night, I was interested to see how many people in the room I knew, not from actu-

ally meeting them, but from following their flights on the OLC over the past several years.

**Day 1** I was nervous before takeoff, seeing all of the fine fibreglass and corresponding experience lined up on the grid. I thought that I had all of the theory of how a race works: the start cylinder, speed-to-fly theory, course deviation theory, but it is one thing to read or hear about it and another to apply those theories in practice against some of the best pilots in the country. The task was set as an Assigned Area Task to Elmira, Lubitz Field, St. Mary's, Palmerston and a return to York.

Club Class was first on the grid and I was in seventh position. Once airborne, I sampled several thermals before climbing in strong lift to cloudbase with S1 and KO. While waiting for the start gate to open I headed over the town of Arthur and doing so dropped below 2500 feet, then spent nearly 45 minutes climbing back up to position for a start. From this struggle I deduced that the working band was very high and resolved to hug the clouds.

I started and headed south toward the first turnpoints of Elmira and Lubitz Field. Flying over Kitchener, just west of their control zone, I was intrigued to see how built up the area beneath me was. This portion of the task was slow going, and although I was crawling along, I was relieved to see a couple of other Club Class gliders not too far ahead of me.

Now the flight started getting more difficult: I had started late and the climbs were now dropping off noticeably from the afternoon's best. The wind picked up (it was already strong to begin with); at one point, I saw 40 km/h winds on my flight computer. This gave a long leg straight into the wind to get to St. Mary's. It got to a point where I was making little headway into the wind and losing altitude. I was down to 3000 agl over New Hamburg and nervous about dropping any lower given my pre-start struggles. Also, I was mentally exhausted, not practised in flying long flights like most other pilots in the contest. I decided to abandon the task just short of the St. Mary's ring and return to York. Looking now at my file as an arm-chair pilot, it appears certain that I could have made it if I

had pushed just a little harder and nicked the circle; however, it was the right decision for me to make at the time.

Immediately after I turned around things got easier and, with the wind in my tail feathers, I made the trip home with a speed of close to 100 km/h and height to spare. As I returned, the FAI gliders were finishing underneath me from the west, so I stayed high, wandered north of the airfield, and made a careful circuit. Dad was relieved I hadn't landed out on the first day, and while I was disappointed in not finishing the task, I was exhilarated after a challenging flight and left with a new appreciation of just how much hard work competition flying is. Although I did not actually end up at the bottom of the score sheet, I would estimate that my conservatism on Day One cost me 400+ points.

**Day 2** Weatherman Tony Firmin predicted a stellar day of soaring, and the task committee called a 3-hour AAT. The task would send me through the Guelph corridor, a narrow strip of airspace between the Kitchener and Toronto control zones. I was trying to work out ways to nick the St. George ring and make it back on the west side of Kitchener, but Krzysztof Wiercioch (MF) gave me some sound advice, and I decided to try the corridor.

The first leg of the flight went well as I flew with Rafael Nunes (RN) to Stratford. After hitting the centre of the ring, I turned and headed east. I was trying to maximize my climb rates, and kept passing up thermals looking for something better. I started to get low until I hit the strongest thermal of the day, with a 5 knot average climb that took me from 1800 feet all the way to 5100.

I was navigating mostly from the circles on my PDA, and at one point without actually looking at either map I figured that Cambridge and the highway 401 was beneath me. Wrong! It was actually Brantford and the 403. East of Rockton, I met up with a number of other gliders from both classes all heading through the corridor at the same time. I remember vividly struggling to climb, when OX (Willem Langelaan) came in below me, did a couple of S-turns and continued on course at a higher altitude. In addition to shaking my fist at this, it made me realize just how much experience pays in finding the highest energy route through the sky. I made it through the corridor with no issue, and in no time I was back over York to finish a contest task for the first time!

**Day 3** The task was another AAT with a start at York and turnpoints at Woodstock, Palmerston, and St. Mary's. The first two legs were quick, and I was starting to get a feel for the rhythm of cross country soaring. I flew with Emmanuel Cadieux (PE) the short distance between the Palmerston and St. Mary's rings. I was already overtime and headed home. Reviewing my flight log from the day, I had made large course deviations, especially after the St. Mary's turnpoint. I suspect that the lift advantage from these deviations was too little to profit from and resolved to be more disciplined and not simply chase clouds.

The next day, the contest organizers had arranged for a Canadian Forces Search & Rescue Team to come and visit from Trenton. (No task was called for the next two days because of weather.) Despite the fantastic looking sky, winds in excess of 20 knots on the ground kept us from flying. This did not prevent the SAR Techs from parachuting, although only one of them made it to the runways, while the other was dragged in a nearby field and was retrieved by the golf cart. The Cormorant helicopter did a couple of dramatic flybys before landing. The crew talked briefly about parachute safety during their visit.

**Day 4** Today also featured a very brisk wind and questionable thermals. This resulted in a second pilot meeting on the grid where the Club Class task was devalued to a two hour MAT with Elmira as the only required turnpoint. I spent some time before takeoff looking at turnpoint combinations which would meet the minimum distance, stay inside the area of cumulus which ended just to the NE of the airfield, and not venture too far downwind.

The FAI Class was first on the grid and we watched them quickly blown south as they climbed away to their first turnpoint at New Hamburg. I was the third Club ship airborne and quickly took to cutting diagonals through the start cylinder, climbing and simultaneously blown to the edge and then running back towards York, losing most of the energy I gained. After four more of these repetitions, I hit a booming thermal which carried me through the start and to cloudbase at 5000 feet agl. I made the mistake of getting blown downwind off my course line towards Elmira and as a result quickly found myself down to 1500 with a field picked on the outskirts of Elora. I managed to climb out and headed northeast in the direction of Belwood Lake. Again, I found myself low and only survived with a thermal centred on the windward side of the lake, in which I drifted clear across the water.

So far the flight had been so difficult that I considered landing back at York; however, I decided to press on to the next logical turnpoint of Grand Valley, keeping York within gliding distance. Once on this stretch, progress seemed to become somewhat easier, probably because I modified my strategy to stay higher and stop more frequently for lift.

Over Grand Valley, I shared a thermal with Z1 (Stan Martin) and pondered the next step. There were two logical turnpoints to go for, Toronto Soaring or Burbank Field. Burbank had a better alignment of clouds and Toronto Soaring was at least 5 km in the blue, but I decided to go for Toronto Soaring because the final glide back to York would be with a tailwind. I saw Stan roll toward Burbank, but I stuck to my decision and bumped along under some clouds north of Grand Valley maintaining altitude. Finally, a strong thermal at the edge of the clouds granted sufficient height to venture into the blue, do a steep turn over Toronto Soaring, and fly the final leg low over Luther Marsh at 170 km/h to finish the task. I was thrilled with my flight and ended up in second behind ⇨ p28

# What is judgement?

Dr. Daniel Johnson, from *SOARING*

**I**N THE SIMPLEST SENSE, it's what keeps us out of trouble. As we become impaired, whether through fatigue, or any other cause, loss of ability is not nearly as important as loss of judgement. We can compensate for loss of ability, but we are blind to our own lost judgement.

We all feel as though we know what judgement is. But, although we recognize it when we see it, can we explain it? For example, Tony Kern's great book, *Redefining Airmanship*, has a wonderful chapter, Judgement and Decision-making, well worth reading. Yet Tony assumes his readers know what judgement is. My own experience is that, when I've heard judgements debated among professionals, sometimes comments have revealed unwitting differences on what judgement is.

Let me offer a definition: Judgement is the ability to anticipate the consequences of our words and actions and to assess risk. Thus,

- poor judgement is inaccurately or incompetently estimating the consequences of what we do or say.
- poor judgement is discounting or failing to prepare for risk.
- Absent judgement is failing to try, blundering optimistically forward, presuming that things will turn out okay (think six-year-old boy).
- if there is no risk, judgement isn't in play.
- there is risk only when some factor is unpredictable or unknowable. Thus analysis and knowledge reduce risk.
- poor judgement is falsely justified when things turn out well. This can lead us to admire ourselves or others when the risks we took did no harm.

## **Judgement is the thought, not the action**

It's easy to analyze piloting mistakes, easy to speculate on what things must have gone wrong. But these errors are not themselves judgements; they are the outcome of judgements. Have we mistaken our speed, misperceived our attitude, forgotten how to slip? None of these is a judgement. We are reviewing judgement when we see the action a pilot makes and ask, What was he thinking?!

We could make a list of piloting mistakes, but mistakes don't always imply poor judgement, for they may be related to knowledge, skill, prediction, analysis, or chance. On the other hand, a successful action, such as landing in front of another airplane, or going for a ripe cloud downwind over a forest, may reveal a lack of judgement. Getting away with risk-taking does not justify the presumptuousness that caused it.

Often, in retrospect, someone will say, "it was worth the risk." Seldom do we hear this after things have gone badly. More often risk is accepted without truly understanding it. Minimizing risk is an age-old sales technique: we soaring pilots have faith that, even though sink is invisible, it will not overwhelm us.

That a pilot can kill himself by getting needlessly into a bad situation only proves once again that intelligent, well-trained, skilled, knowledgeable, and resourceful pilots become fatalities as thoroughly as any of us fools and incompetents. Risk can bite anyone, even if it's anticipated, because that's what risk is!

First, flying skills. The only negative about a high level of skill and knowledge is that delight in what we know and can do well can blind us to what we don't know, what we can't know, and to our natural susceptibility to illusions of perception.

Our delight in great skill may distract us from awareness of impairment, and from consciousness that adverse circumstance may exceed the capacity of us or our craft to respond. For example, if the rotation rate of turbulence exceeds the maximum roll rate of our glider, we will go inverted no matter how good we are. If this happens a hundred feet off a mountainside, we and our ship will be in pieces in a trice.

Poor judgement may be inherent in sport. At work, the chief goal is vigilant caution; at play, the chief goal is relaxation or excitement. Our proclivities may change with the situation. And accepting risk is – we must be honest – exciting and even thrilling.

Our risk-taking pilot has often pushed final glide to its limit, arriving at the runway's end with neither altitude nor speed to spare. One day he landed out downwind, and damaged his ship when he "ran out of rudder" – which of course happens when the rolling glider reaches the tailwind velocity.

Physiological risk-taking is perhaps less obvious to us than stick-and-rudder risks, for their effects are insidious; we are used to pushing ourselves during all aspects of life, into and through fatigue, hunger, dehydration; we work through illness, we climb to the edge of hypoxia, and we even drink alcohol. But, of course, the folks who told him to do differently, that he was taking too much

risk, were not doctors; they were just overly fussy amateurs like all givers of free advice.

This is a problem with advice: we tend to discount it if there's not the right label on the bottle. But even if the advice is technically wrong, the fact that our friend is risking friendship to point us in another direction should be a clear signal to us that something is wrong, and that he or she cares enough about us to lay aside normal reticence and bring it up. Beyond that, as every mother of young children knows, worry saves lives. When your friends annoy you with worry, go ahead and believe their advice is a bit off-kilter – but ask yourself seriously, *What am I doing that worries my friend?*

### **Judgement is not important unless there is risk**

Okay, back to judgement. If nothing bad can occur from a decision, there may be a dilemma, but judgement is not an issue: do I order pepperoni or sausage pizza? strawberry or pistachio ice cream? buy a grey or a brown suit? “tank up” under this great cloud or that one nearby?

If there is no uncertainty, there is no risk. Arithmetic is not a matter of opinion; physics works reliably. Yet though the glide ratio of the glider can be calculated precisely, the air is invisible and its direction and velocity fluctuate around their mean with apparent randomness. From 50 kilometres out, the number on the final glide calculator may be reassuring or scary; yet we really don't know just where there's lift and where sink.

Even at 45:1, eight knots down is eight knots down: judgement is taking reasonable account of the day's uncertainties and making allowance. The price of running into sink should not be death, it should be a landout in a safe field. There should always be an escape.

Thus judgement is adding to our calculations – or our expectations – the uncertainty of error and unpredictability, the possible magnitude of the unknowable and the invisible, and the failure of telepathy regarding the intents and actions of others.

### **Judgement is realistically assessing risk**

What are the bad things that can happen, what is their likelihood, how can we accommodate to them, who bears the consequences when a bad thing happens? Often, throughout life, it is others who bear the consequences of our decisions. Did the contest director call an impossible task? Well, it's my responsibility to have exits along the way.

As a doctor, I must remember that it is always the patient who bears the consequences of the treatment I recommend. As pilots, our families bear heavy consequences from our injury or death. Flying is a wonderful adventure; risk is thrilling. How much risk should we, in all fairness, put on them?

There are consequences, too, for our sport. Every tragedy evokes in someone the “it ought to be illegal!” reflex. Each fatal act of foolishness galvanizes those who would “foolproof” everything. As I explain to my budding teenagers, others grant us liberty by our showing wisdom and safe judgement. Are we trusted with the keys to a friend's aircraft? Are we trusted to share a thermal? All these things rest on our reputation, earned by repeatedly showing sound judgement.

Obversely, someone who repeatedly fails to anticipate the consequences of their actions or commitments does not deserve our trust, no matter how friendly, no matter how eager, no matter how flattering they are. Trust is a tapestry woven from a myriad of good judgements; it's easily torn and hard to repair.

### **Judgement is recursive**

That is, decisions that result in impaired ability further decrease one's ability to form good judgements. The snake eats its own tail. It's my decision not to put on oxygen until it's mandated, my decision to fly the day after the retrieve from hell and getting home at 5 am, my taking only one bottle of water on a long flight, my taking medication that causes mental dulling, or getting drunk the evening before flying a task. These and many other things impair our ability to think clearly – and cloud awareness that we *aren't* thinking clearly. After the third beer, judgement is not as fine, is it?

What clues do we have that our judgement is impaired? Unfortunately, perhaps the best clue is confidence. If we have no doubts, we aren't taking risk into account. Other clues are similarly subtle: fatigue, drowsiness, laziness, shivering, thirst, hunger.

### **Testing judgement**

How can we assess others' judgement? We are always having to decide whether others' judgement is trustworthy. Instructors and pilot examiners know that it's easy to test skill and knowledge, difficult to test judgement. Psychologists have devised many good tests of mental capacity, knowledge, and skills, but there is no IQ test for common sense. It is hard, in a flight test, to create a novel situation in which there's both real risk and temptation to accept it – in a way that doesn't put the examiner at risk.

Perhaps one aspect of a flight review should be to ask the pilot to tell some stories about memorable flights, for it's the risk involved that makes them memorable, and the way the story is told reveals a lot about the pilot's judgement. This can't be “standardized” but could help the examiner decide when it's unclear whether to sign John or Jane off. There are other techniques too, but that's a topic for another time.

# Why you should fly with an energy-absorbing safety cushion

from a British Gliding Association safety publication

## The forces involved in a hard landing or crash

It is self-evident that every hard landing and crash inflicts very different forces and decelerations on a pilot. When you make a hard landing, you will typically be exposed to a series of short-duration pulses in the range of 5 to 15g. By comparison, a crash that results in severe structural damage to the glider is likely to produce a small number of relatively sustained decelerations that could well be in the range of 20 to 100g.

There is no absolute certainty about what decelerations will inflict injury or be fatal. Depending on your posture, 40g lasting for about 5 milliseconds is likely to result in injury – 100g for the same amount of time is likely to be fatal.

Simple physics dictates that if you free fall for a distance  $H$  and are then uniformly decelerated to rest in a distance  $h$ , you must experience a constant deceleration of  $H/h$  measured in  $g$  (eg. if you fall 1 metre and are decelerated in 2 cm (0.02 m) you will experience a constant 50g).

In practice, decelerations produced in real-life are not perfectly uniform. Over the decelerating period, any deceleration less than this perfect result *must* be compensated by higher decelerations to bring you to rest in the available distance. These higher decelerations produce peaks that might even be three or four times that of a uniform deceleration.

There is a further complication – bouncing. Unless you remain firmly locked in step with whatever is decelerating you, you may bounce away from it. Some materials like rubber or furniture foam are renowned for such behaviour. As you then descend in free fall from your bounce, you may well then meet, travelling in the opposite direction, the rebounding glider structure as it jumps back up as the result of its first impact with the ground. When you and the rebounding structure meet, you may well experience an even more rapid deceleration than would have been the case if you had stayed in step with the decelerating glider.

Energy-absorbing cushions are made out of “visco-elastic” foam. This has the property that if it is compressed slowly, it will yield. However, if compressed rapidly it acts almost as if it is rigid and will strongly resist giving way. Two commercially available materials known to be effective in glider cockpits are *Confor* (CF45/CF47) and *Dynafoam*.

In the light of all this, what does an energy-absorbing safety cushion do and what can't it do?

- It tries to conform as much as possible to the shape of your buttocks. This means that the decelerating forces

are spread over a large area meaning that the pressures experienced are minimized.

- Energy absorbing cushions become virtually rigid on impact and couple you to the decelerating glider.
- Given the limited energy that they do absorb, they give very little back – some foams absorb 97% or more. This means that almost no energy is returned to you in the form of a bounce.
- As they transition into this rigid state and absorb limited energy, they remove some of the transient high  $g$  spikes and reduce the jolts (rates of rise of  $g$ ) that the breaking glider structure may inflict on you as it too absorbs energy in a crash.
- Lastly, what it cannot do. From the first section it's clear that around 1" (about 2.5 cm) *cannot possibly* provide a sufficient decelerating distance to guarantee a low deceleration in a crash – think  $H/h!$  – it is physically impossible for it to absorb all the energy in a major crash. Luckily, the undercarriage, cockpit, nose section, and wings can absorb energy, if they have been designed to do so safely.

## The safety cushion in context with other structure

During a crash deceleration, the forces can be so large that your body, in particular your lower spine, will be overwhelmingly unable to resist. This means that your lower spine may be forced into bending angles that may damage vertebrae and even the nerves carried within them. It is thus very important that the seat back cannot collapse under the shock loads experienced. This is down to glider designers.

However, you may well have a space between your lower back and the seat back. In a severe crash load, your spine may be forced into this area. To prevent this, any large void can be filled with a safety lumbar support made out of the same energy-absorbing foam. Being viscoelastic, it will become rigid on impact and minimize the distance that your lower spine displaces and so reduce the potentially catastrophic bending that might otherwise occur. For identical reasons, if there is a void behind the seat back, there is a safety benefit from filling the void with energy absorbing foam (provided that this space can be filled without compromising the controls for example).

Other precautions are a lumbar support made out of a recognized energy-absorbing foam and a removable insert made out of the same material to place in any large void behind the seat back. Under the overwhelming forces that can be involved in a crash, these measures should help stop the lower spine being bent and forced into the space that would otherwise exist.

### The comfort / safety problem

Some safety cushions can be hard to sit on. You only realize this about forty minutes into a flight. This is because a hard seat cuts off the blood flow in the capillaries in the buttock tissue and it takes about this long for the resulting pain to become noticeable. As a result, some pilots do not fit safety cushions, preferring to remain comfortable during a long flight and assuming that they will never crash.

However, some modern energy-absorbing foams provide a very high degree of comfort and allow buttock region capillary blood flow to continue during a glider flight. A combination of Confor foams (CF45 or CF47) has been shown to be comfortable for 85% of pilots while also providing superior energy-absorbing properties. Thus a safety cushion with such materials can make you very comfortable in normal flight and also minimize distractions due to discomfort at the end of a long flight. This can lead to greater safety in this phase of flight.

### How to fit a safety cushion

In some gliders it can be straightforward to install a safety cushion. Sometimes, however, placing a slab of energy-absorbing foam into a cockpit may not be compatible with the required whole body posture. There can be many reasons for this: the extra thickness can push up a pilot's head too near to the canopy, the legs can be canted up to an uncomfortable angle with respect to the cockpit floor, the repositioned feet can become set at an uncomfortable angle on the rudder pedals, the raised seating can generate an uncomfortable back position, etc.

As a result, fitting a safety cushion may, for example, involve removing part of or all existing standard seat cushions, adjusting the seat back at the base and perhaps its angle of inclination, or adjusting the rudder pedals. In some cases it may be better to remove the filling of standard cushions and replace it with energy-absorbing foam.

Avoid installing an energy-absorbing cushion on top of existing material that is not visco-elastic or that does not remain fully compressed in flight. In a crash loading, the original material will not go rigid immediately and may produce an effect similar to a bounce. This is because you

and your energy-absorbing cushion may initially move on without decelerating as you compress the material while the underlying glider structure starts to decelerate immediately in the crash – maybe bouncing back up.

Many of these potential problems can be overcome by viewing existing installations or seeking advice from pilots with experience of installing safety cushions.

Safety cushions need to be secured so that they remain located in a safe position and cannot accidentally slide into obstructing positions before or during flight. Where manufacturers' standard shaped cockpit cushions are replaced by safety cushions of an identical shape and secured by the manufacturers' location methods there will be no problems. Where a separate cushion is inserted into the cockpit, it should be secured by either Velcro or other loops of material to preclude such slipping movements.

Where safety cushions are close to the base of the stick and their attachments are sufficiently slack to permit the cushions to move and interfere with it, a "U-shaped" portion of the forward part of the cushion should be cut out to remove such a possibility.

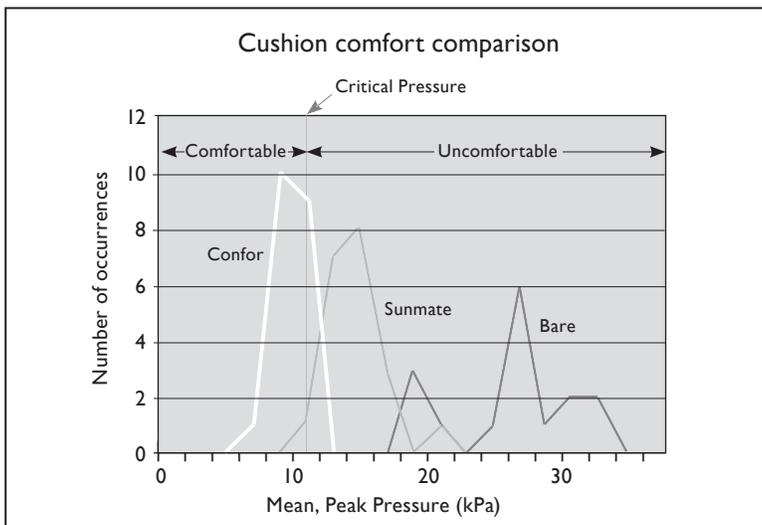
### references

1. Hooper SJ, Lim T, Rahematpura M, Goedken B, Dakwar E. *Crashworthiness considerations in aircraft seat cushion design*, Proceedings of the 3rd AIAA/FAA/MSU Joint Symposium on General Aviation Systems, Mississippi State Univ., Starkville, Mississippi, May 1994; 520-534.
2. Segal AM, McKenzie I, Neil L, Reece M. *Dynamic testing of highly damped seating foam*. Technical Soaring 1995; 19(4): 116-21.
3. Jackson C, Emck AJ, Hunston MJ, Firmin A. *A simple comparison of the characteristics of energy-absorbing foams for use in safety cushions in glider cockpit environments*. Technical Soaring 2009; 33 (2): 47-53.
4. Jackson C, et al. *Pressure measurements and comfort of foam safety cushions for confined seating*. Aviation, Space, and Environmental Medicine 2009; 80: 565-9.

*Note: It is important to remind today's "average-age" glider pilot, which is say middle-aged or older, that most of the tests that have been performed on the spine's ability to withstand loads were done on young and fit military pilots. Ejection gives a 15-20g force in a very short time, and it results in a 10-40% fracture rate. "Normal" glider pilots can expect to have vertebrae that will fail at half the loads experienced by those test subjects – an even further inducement to use every precaution available.*

*I found a 100+ page report that was published by the US Army in 1986 at <[www.dtic.mil/tr/fulltext/u2/a164828.pdf](http://www.dtic.mil/tr/fulltext/u2/a164828.pdf)>. It tested Blackhawk helicopter seats in controlled crashes using cadavers. Vertebrae fractures were found to usually be a combination of compression and bending.*

*Therefore, as this article states, it is important to minimize spinal bending by having very good lumbar support, and to minimize compression loads by using energy-absorbing foam of adequate thickness in the cockpit.* editor



## A new OLC deal for old Cambridge FRs

Good news for the many pilots still using legacy Cambridge flight recorders – the original Model 10, and the 20 and 25 versions. After months of often frustrating effort, a group of SSA members have created a deal which satisfies the exacting requirements of the German administrators of the popular OLC. Starting immediately, owners of these legacy Cambridge FRs will be able to use a new program to convert their Cambridge flight files into a fully – and automatically – acceptable format for the OLC. No more red V!

The problem with the legacy Cambridge reached a head this January when the OLC finally decided no longer to accept flight logs from them. The issue has a convoluted history. The International Gliding Commission decided late in 2011 to downgrade legacy Cambridge flight recorders as acceptable only for badges up to and including Diamond, not records. This decision takes effect this October and was probably the final impetus for the OLC organizers to act.

The underlying reasons for the OLC problem, however, date back to a decision by the original Cambridge company not to update

one piece of software to IGC standards. (Note that this entity is completely separate from the current *R-Track Technologies*, maker of the 302 series of instruments.) Back in 1994-95, the original Cambridge invented the GPS FR for gliding. Its first notable use was at the World gliding contest held in 1995 in New Zealand, when the company made 200 Model 10 FRs, rented them to contestants, and later sold them. A further 1600 of the succeeding Model 20/25 versions were also sold over the ensuing years. Cambridge files were the *de facto* standard.

As other instrument makers entered the field, the IGC laid down additional standards, which in practical terms means that these newer FRs produced to a world standard format with files ending in .igc. While Cambridge produced files which generally met the format, they failed to update their conversion routines to assign a required security element (the G record).

As a result, the legacy Cambridge FRs produce .igc files without the G-records, which would prove their authenticity when converted from the .cai original. This required the OLC to create a separate processing stream from all other flight logs and would often have to intervene on a file-by-file basis to get them to acceptable standard.

The owners of the up to 2000 legacy Cambridge FRs have been the victims of these two conflicting forces, with neither side willing to change. However, now a handful of SSA glider pilots has solved the problem. The first to start experimenting with a work-around solution early this year was David Hoppe of Michigan. His work ignited the interest of other SSA members, including Paul Seifried and Erik Mann of New Jersey, who heads up the SSA FAI Badge & Record committee. Paul became the energizer of the effort while Erik coordinated, especially with the OLC. It helped that Erik has a German background and spent time with Reiner Rose, the head of OLC, at a Hilton Cup meet a few years ago.

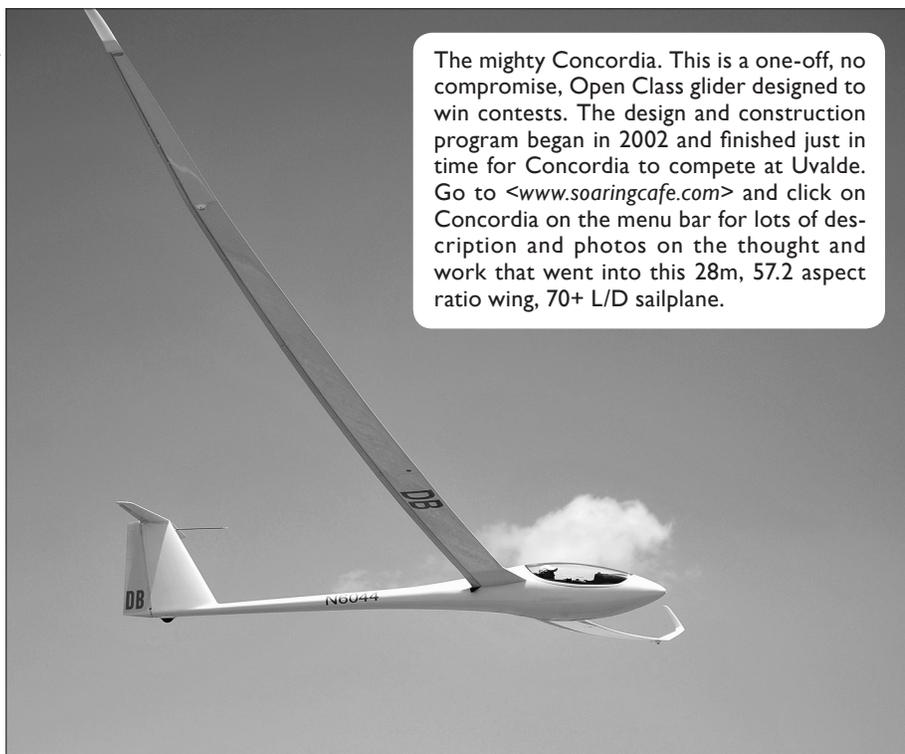
A crucial contribution came from Guy Byars of *Winscore* fame. Because of his work on the ubiquitous contest scoring program, Guy is intimately familiar with the inner workings of the Cambridge programs and IGC requirements. He used this knowledge to create the necessary security algorithm and shell program which takes in a .cai format file and outputs an .igc file complete with the needed G record. This set up was satisfactorily tested with OLC on 3 September, producing the all-important full validation of green V's. (It also makes it possible to use modern Windows programs without any use of the antique DOS.)

In the background was the encouragement and more of the *ClearNav* team and German *ClearNav* representative Klaus Keim. Many of these soaring enthusiasts were involved one way or another with the now-defunct Cambridge company and its products. And it was three years back that *ClearNav* did USA gliding a service when it agreed to provide product support and repairs for the legacy Cambridge loggers and variometers. Richard Kellerman, a *ClearNav* founder, says that the fees charged for servicing legacy Cambridge products make this a pretty marginal operation. Nevertheless, Kellerman and Keim have agreed to underwrite (meaning pay) the roughly \$500 fee that OLC is charging to include the new shell program in its list of approved logger types – a growing list it must be said, including all kinds of PDAs, Androids and the like, as well as pure FRs.

*ClearNav* will also host on its website the custom conversion program that all users of legacy Cambridge FRs will need to convert their flights to a standard acceptable to OLC. Look to <http://www.clearnav.net> under the downloads section for software and instructions.

from the SSA **E-news**

Maria Szemplinska



The mighty Concordia. This is a one-off, no compromise, Open Class glider designed to win contests. The design and construction program began in 2002 and finished just in time for Concordia to compete at Uvalde. Go to [www.soaringcafe.com](http://www.soaringcafe.com) and click on Concordia on the menu bar for lots of description and photos on the thought and work that went into this 28m, 57.2 aspect ratio wing, 70+ L/D sailplane.

## Energy drinks: do they really “Give You Wings”?

In Canada most energy drinks are legislated as a natural health product. Health Canada has taken steps to ensure that the labelling requirements contain a warning section telling us not to consume energy drinks if we're pregnant, sensitive to caffeine, or if we are children. Let's look further at the contents of these drinks to see why such warnings are required. I have chosen to look at some numbers on the *Red Bull* energy line – I got all this information from the Health Canada Natural Health Products database. For their 355 mL can of *Red Bull Energy Drink*, they recommend not more than two cans per day; data shows that you will ingest 113 mg of caffeine per can. Now look at their 473 mL can of *Red Bull Energy Drink* and they only recommend one can which gives you 151 mg of caffeine.

The energy drink manufacturers often argue that the amount of caffeine is equal to a cup of coffee. They additionally argue that a 16 oz Starbucks coffee contains around 330 mg of caffeine and therefore their products are much safer. This is a sleight-of-hand argument because there is more caffeine in the energy drink that the label doesn't identify. Health Canada tells us that, “Currently, caffeine is only required to be added to labels when added as a pure substance.” That implies that there is much more caffeine in these drinks than the label shows; many studies have highlighted this fact as well.

An excerpt from a Health Canada article states that “Energy drinks often contain additional amounts of caffeine through additives, including guarana, kola nut, yerba mate, and cocoa. “Each gram of guarana can contain 40 to 80 mg of caffeine, and it can have a longer half-life because of interactions with other plant compounds. The adult limit (referenced by Health Canada) is 400 mg of caffeine per day. It goes on to say that: “Adolescents, 13 and older, should follow the precautionary recommendations of 2.5 mg/kg body weight.” For a 130 pound adolescent, this works out to about 147.5 mg of caffeine. Keep in mind that the caffeine number on the label isn't the total quantity of caffeine you're ingesting. Yes they are infused with vitamins that make the label look impressive and healthy but they have not proven to be of any nutritional value.

Keep in mind that these energy drinks have not been subjected to good research recently. When we are taking other people for flights in gliders we need to make sure we are beyond reproach when it comes to our abilities, specifically that we are not under the influence of any substance. Caffeine intoxication can occur and symptoms include: restlessness, fidgeting, anxiety, excitement, insomnia, flushing of the face, increased urination, gastrointestinal disturbance, muscle twitching, a rambling flow of thought and speech, irritability, irregular or rapid heartbeat, and psychomotor agitation.

**Mike Leslie**

from the Pacific Region Air Cadet newsletter

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## Regenerative battery-augmented soaring

Many powered sailplanes now take off with a propeller turned by a battery-powered motor. But during flight, using technologies developed for regenerative braking of battery-powered cars, a propeller can also be operated as a windmill and the motor employed as a generator to recharge the battery. Some altitude is sacrificed during the charging, which is usually done in upcurrents, and a portion (probably less than half) of this “altitude energy” can then be utilized as desired later in the flight.

Several factors in combination support the concept that Regenerative Battery Augmented Soaring (RBAS) may be an attractive aspect of future soaring:

- Battery power is clean and quiet. Batteries are limited in the energy per kilogram they can store, but are adequate as an energy source to power the sailplane to heights where atmospheric energy sources can be utilized safely.
- Strong upcurrents provide a high power resource. During thermal soaring, and to some extent in waves and slope currents, energy is conventionally stored as the potential energy of weight times height, for later conversion to speed and distance. In moderate and strong conditions the rate of energy supply, the power, is large. Consider

an ultralight sailplane with a gross weight of 400 lbs, having a minimum sinking speed of 1.5 ft/sec and thus capable of flying on a minimum of 600 ft-lbs/sec or 1.09 HP (814 watts) of thrust power. In a strong upcurrent netting a climb of 1000 ft/min, or 16.7 ft/sec, it stores potential energy at a rate of 12.1 HP (9042 watts) – a huge power compared to that used in still air at minimum sink or best L/D speeds. A two-place sailplane grossing 1200 lbs including ballast, and climbing at the same rate, accumulates energy at triple the rate of the ultralight. Incidentally, all sailplanes will typically cruise at high speed to the next thermal while consuming energy at rates 30–100% of the rate of power gain in the thermal.

- Solar cells will provide only low power. Direct solar power, in bright sunlight, on an area of 2/3 of a 120 ft<sup>2</sup> wing, will provide about 1000 watts from high grade photovoltaic cells. The sunshine on the cells and the rising thermal both represent a use of solar energy. In strong convective conditions, the thermal is a much stronger power source, and some of its power can be used for battery charging. Supplementary charging from solar cells is still an attractive option at all times during the flight.
- A role model for battery replenishment is the regenerative braking of cars. With recent attention put on battery-powered cars, there has been considerable development on regenerative braking: putting the kinetic

energy of braking into recharging the battery rather than heating the brake linings. Thus technologies have become well advanced for charging batteries with rapidly-changing inputs, and the technologies are improving rapidly.

- Recharge when the altitude penalty is small. While you are being given large amounts of power in thermals, and also in many wave and slope current situations, you can conveniently take some of that power and recharge the battery you used for take-off. Use the propeller in a windmill mode, extracting power as you sink relative to the surrounding ascending air, turning your electric motor into a generator. Charging is especially attractive when the sailplane is in a strong upcurrent but precluded from climbing (limited by cloudbase, an inversion, ATC, or oxygen requirements, or by the small vertical extent of a slope current).
- Spend the energy when it buys you a lot. You can do such recharging on occasions throughout the flight, and use the energy to speed to the next thermal, or hunt for lift, or propel you to a safe landing spot – and perhaps still have enough energy in the battery for a takeoff the next day.

With RBAS, sailplanes now are one up on birds. Natural creatures cannot internally store kinetic or potential energy; the RBAS vehicle can. And a plane that incorporates solar cells has another energy source un-

available to natural fliers. Perhaps our envy of the magnificent soaring techniques of birds will change to them envying us because we have several energy sources unavailable to them.

A propeller optimized for thrust is not optimized for serving the windmill function, and a propeller of any sort idling in the airstream will create drag. There are several approaches to handling these issues. One is for the propeller design to be a compromise yielding good, but not ideal, effectiveness in both charging and power delivery modes. A "true pitch" twist with a symmetrical airfoil might be a good starting point, providing minimum drag when free to rotate. When neither charging nor powering is taking place, this propeller, even with no drag from the motor/generator, is still a source of drag. However, the magnitude is only a few percent at the best L/D flight mode.

A more desirable approach is to fold the propeller when neither propulsion nor windmill generation is needed.

For a representative system, for a foot of altitude sacrificed to charge the battery, 0.48 foot of altitude is available later in the flight. This calculation ignores the normal sink of

the plane in a thermal or slope current; we are interested in the additional descent rate caused by charging. It also ignores the 1.5 ft/sec normal sink rate of the plane during the propeller powered climb. If the battery charge is used so slowly that it just covers the normal sink rate, there is no climb added although there is a duration and distance increase. If the battery, motor, and propeller systems are reasonably efficient and can provide high power and high climb rate, the effect of normal sink during the brief climb period will be relatively small.

Putting all these factors together, one can generalize that the RBAS system will return to you in altitude equivalent when you want it about 1/3-1/2 of the altitude you "deposited" earlier in the flight.

The energy storage capacity per pound of battery is critical. New nickel metal hydride batteries can double the stored height potential, and lithium polymer batteries increase the height over three-fold over the earlier NiCads.

For a sailplane, the potential energy of its weight times height is analogous to money in the bank. RBAS gives the pilot an additional "altitude bank account", money that can

be withdrawn whenever the pilot wants – as long as enough deposits were made previously to keep the account from being overdrawn. The pilot has to deal with an unfriendly, greedy bank. The bank has a policy never to extend credit. It also charges a 50% (or more) service fee – consider it a tax – on every deposit. The pilot makes deposits when times are so good that the tax is deemed acceptable. Prudence dictates that the account never be completely depleted. The joy of flying will be increased if the pilot knows there is some "altitude" available in the account.

*Highly edited from a paper by Paul B. MacCready for presentation at the Self-launching Sailplane Symposium at Elmira, New York, on 16 July, 1998.*

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Simon Youens

Over the Hopkins Valley at 12,500 feet, northwest of Omarama looking towards Mt. Cook to the west. "It's hard to believe that those are wave clouds", says Simon Youens, a past member of Cu Nim, who was taking the highly-rated mountain soaring course in New Zealand.

**Nick** After an important contest, it is important to do a critical review of performance to determine what went right and what went wrong with the goal of improving for the next time, and passing useful information to other pilots considering contest flying.

There are two aspects to a review: glider performance and pilot performance.

Prior to the World contest, preparation was very important, and preparation of the glider included proper polishing, a review of all control surface seals, and installation of proper instrumentation, software and flight recorders. I normally fly my LAK-17a in its 18m configuration, but for pilot preparation, I flew all year in its shorter 15m configuration to be “at one” with the glider. I flew in three contests and also did some record flying.

I knew that I would be at a slight disadvantage in the contest with the glider, now an older design, as it is limited to a 500 kg all-up weight. The newer gliders are limited to 550 kg in 15m and 600 kg in 18m and, with the typically strong conditions in Uvalde, a high wing loading was crucial. In 15m Class, the contest rules limit the maximum weight to 525 kg, so I was only down 25 kg and with a high aspect ratio, the wing loading deficit was not very large, but was a deficit nonetheless.

I had an overheating problem with my main flight recorder early on during the practice days. Although it was not in direct sunlight, the ambient 42C temperature caused it to fail. Every day, I put an icepack on it an hour before flying and removed it before take-off and had no further failures. Dan Daly had brought his Volkslogger as a spare which I installed as a third unit, just in case. My mechanical vario's needle would get stuck on the stop when the thermal strength peaked above 10 knots. I often had to vigorously tap on it to free the needle, a real annoyance. Other than that there were no other issues with instruments, radio, or flight software.

At the beginning of the contest it became obvious that I was constantly getting out-climbed. On successive days, I changed the cg position between 85% and 65% to see if I was better able to climb, but there was no change. By the middle of the contest, I noticed that in some cases, I could climb just better than the Dianas, at par with the ASW-

27s and slightly worse than the Ventus-2s, but in most cases, I was out-climbed by all. I finally figured out that the difference was related to the smoothness of the thermal; I was falling behind badly when the thermals were broken and turbulent. First, I tried flying faster in turbulent lift and at higher bank angles. Then I tried with a flap setting of +1 instead of +2. I also tried increasing the vario damping from 2 seconds to 3 seconds to reduce the amount of correcting I was making to centre thermals. All attempts had limited success, and I was frustrated by the issue.

By the end of the contest, whenever I encountered a turbulent thermal, I would skip it if I had reasonable height to proceed, and take only the relatively non-turbulent ones, and this resulted in much better average speeds, and a tenth place finish on the last day. Now, is the problem glider or pilot related? The only way to find out is to swap gliders with another pilot and fly in close proximity in turbulent conditions and see what happens.

On glides between lift I also noticed that when the airspeed was 90 knots or less I would end up at the same relative height to other gliders at the next thermal, but at 100+ knots, I would lose a few hundred feet. The 25 kg deficit was probably the cause, although on the last day I flew against a Ventus-2bx at 120 knots on final glide and lost virtually nothing. But then again, polars for gliders at 120 knots are very close.

There is no question that your choice of path between thermals is crucial as I've lost hundreds of feet to gliders 1000 feet away to the side and have gained the same at other times. Consistently choosing the best path results in significant height recovery and higher average speeds. I prefer to fly by myself but in a contest with lots of pilots, you can get to fly with other pilots in close proximity for long periods and learn from the experience.

**Dave** I would like to thank Virginia and Joe Laposnyik who suffered through the heat on the grid each day making sure my glider was as clean and ready as it could be before the flight. Having two dedicated crew was a real asset and saved me from having to over-exert myself and tire before the flights. I often sat in the car while they were toiling away on the runway and thought – wow – how lucky am I! Ed, our team captain, and wife Annemarie were also of tremendous

help. Each day he would look after all the little details and be on the grid to help us prepare for the flight and offer words of advice and encouragement. While it was Ed's job to look after us, it was Annemarie's job to look after Ed, and both did a super job.

Before the contest, I set a goal for myself to earn at least 90% (usually 900 points) on each flying day. Doing this would guarantee a good placing. I missed this goal on five of the thirteen days, but achieved 92% of the winner's score in the final standings.

The 18 metre Class was an extremely competitive class as 90% of the winner's score would have landed you in 21st place! In comparison, 90% in 15m was ninth. Jerzy finished at 94% and that 2% made a difference of eight places!

The biggest take-away for me is to fix what went wrong on the five bad days. On most of these days I started too early because I didn't have the patience to play start gate games. On some of the days there was a threat of storms coming in, and then they didn't, so those who gambled and started late were able to take advantage of the better conditions.

On my worst day (Day 6, 692 km at 117.9 km/h) I became much too conservative at the end. I think I climbed almost 1000 feet too high in a 1 kt thermal and that ten minutes cost eight places and 50 points on the day. And, that 50 points would have moved me up three more places in the end. Overall, I am happy with my result, but of course would be even happier to have done better.

Administratively we have learned a lot over the last few years. We had a large contingent of people on the team that allowed for a good distribution of work, in particular, away from the pilots so we could concentrate on task preparations and flying. We had a good ground radio and antenna allowing Ed to relay weather and tactical information to us while on course. Jerzy and I were able to effectively team fly several days and push each other around the course.

Finally, I need to thank Virginia again. She is an unwavering supporter and worked extremely hard in the hot, humid and dusty conditions to keep both the glider and me in a top performance state. It really is a huge sacrifice for our spouses to follow us around to these lunatic events. ❖

When I think of *Chics Take Flight*, I think of swimming swans – their beauty and grace above the surface makes their motion seem effortless. What you don't see is how hard their feet are paddling. That describes the very impressive effort that it took to make *Chics Take Flight* a reality. The idea was conceived in the fall of 2011 by Cu Nim president, Pablo Wainstein. The vision was to hold an event that would promote soaring to women and increase the public profile of Alberta soaring clubs. Planning began in January.

The task of organizing the event was taken up by a handful of dedicated women pilots, "Chics", from a variety of clubs and organizations across Alberta. The team was led by the determined Judy Soroka from Cu Nim. Committee members included Erin Doerffer from Cu Nim, Valerie Deschamps the Central Alberta Gliding Club president, Selena Boyle from the Edmonton Soaring Club, Ashley Gaudet from 187 Foot-hills Air Cadet Squadron, and Cherie Andrews, a former towpilot and glider pilot with Cu Nim.

The concept took shape as a one day event on Saturday 21 July that would be hosted by Cu Nim. CAGC would bring one two-seat glider and the Alberta Soaring Council towplane. The event would feature prominent female aviators as guest speakers, a static display, mini-ground school sessions, and discounted intro flights. The SAC flight simulator would be available to give guests a feel for using stick and rudder before their flight. A lunch would be available. It was an ambitious project.

Throughout the spring, a passionate promotion campaign was undertaken. The poster was designed, with a smaller version being reduced to postcard size. The posters were printed along with 1000 postcards then distributed throughout central and southern Alberta. Erin, with the assistance of her brother, created the website <[www.chicstakeflight.ca](http://www.chicstakeflight.ca)>.

A couple Chics dedicated their weekends to attend public aviation events across the province to get the word out. Valerie launched these efforts by promoting the event at the Red Deer Sportsman Show. Selena followed with a presentation at the annual COPA meeting. Judy and Valerie attended multiple fly-in breakfasts throughout central and southern Alberta and at COPA's *Fly-in for Kids* at Airdrie, and gave presentations at regular meetings of the local flying clubs. Networking opportunities were established with Women in Aviation International – Alberta Rocky Mountain High Chapter (which previously existed with the Women Soaring Pilots Association). Newspaper articles about the event were featured in four area newspapers, and Valerie was interviewed live on-air by CBC Radio 1010.

The job of overseeing the actual event was coordinated by Erin – who would be "Chief Chic" for the day. In the weeks leading up to July 21, a frenzy of activity took place looking after last-minute details, ensuring all the "i's" were dotted and "t's" were crossed.

After all the planning, agonizing and scrutinizing, after the grass was cut, the hangar and clubhouse were cleaned, presentations developed and rehearsed, the makeshift ground school classroom and static displays set up, lunch menu planned and prepared, tasks delegated and assigned – we all waited and held our breaths as the morning of 21 July dawned. As the sun rose over the Cu Nim airfield that day, it all came together...



Gary Van Overloop

Rebecca Rider gave an inspirational and often humorous account of her life in aviation from her early interest in flying, to her progress in training, to now flying for Porter Airlines.

How do you measure the success of an event like this? For me, it was about looking around me and seeing everyone being professional, engaged at their various jobs, talking to guests and spreading our enthusiasm for this sport that we love. Midway through the



Gary Van Overloop

A "Chics" participant is ready for her flight with Cu Nim CFI, Al Wood.

afternoon, I overheard Chief Chic Erin state with satisfaction that the day seemed to be running itself. Gliders were launching, presentations were being given, and women, men, and children of all ages and walks of life were arriving to see what this soaring thing was about.

Its success was about the twenty-seven happy individuals who returned from the flightline with a look on their faces that they'd just done something amazing. Success was the enthusiastic response from the woman who had just come for the day to "just look" then ended up going up for a flight. Success was in the words of a young lady who sat in the Jantar static display and exclaimed "WOW! This is so COOL!". Success was about a job well done by all those volunteers who supported the vision, then made the necessary effort to bring this event to life. They all deserve our thanks for raising the profile of this wonderful sport called soaring.

All this work demands a repeat – a similar Women's Flying Day is being planned for the summer of 2013. CGAC will be hosting it then.

**Shulamit Kuttner**, Cu Nim

## Winnipeg Gliding Club

It's been a while since our club provided a news update for *free flight*. In order not to keep you waiting any longer here is a summary of where we are, where we have been, and what we anticipate for the future!

The winter of 2011/12 was one of the driest and warmest in decades. A lack of moisture in the fall left farm fields dry, and without any considerable snowfall in southern Manitoba over the winter, the stage was set for a very early start for the season. We were in the air at Starbuck on 31 March, a record for us. We did miss a few weekends due to rain and wind, but by mid-May we were experiencing some awesome soaring conditions. Altitudes over 10,000 feet were seen and most of our private gliders and their pilots were being tasked with long cross-country flights.

We have also seen continued student involvement, with our winter ground school attracting several new members, most of whom will have had their first introductory flights by now. There are also several carry-over students from previous years who should likely receive their glider pilot licence by year end. There has also been a record of

another sort. This season saw the arrival of three new private gliders at the club. A DG-300, ASW-19 and Discus CS have been flying regularly. This level of growth speaks volumes to the activity within our ranks. The Discus was purchased by a previous Cirrus owner, who in turn has sold that sailplane to two club members. This activity will, of course, off-load the demand on our club glider fleet, and allow other, non-private owners more access to those gliders. A win-win for all.

On the promotional front, we have gone to "social media" outlets to promote our club, and through Facebook we have developed a presence and a dedicated Winnipeg Gliding Club page complete with videos, regular updates, and stories on our flying exploits. It might be too early to tell how effective this approach will be, but it is another tool in our promotion arsenal. In addition to this we have also taken gliders, by aerotow, to a couple of powered aircraft fly-ins at nearby airports. Reaction has been positive by the power pilots who invariably did not know of our sport or field location.

Over the winter our Safety Officer, in conjunction with Tom Knauff's "Safety Webinair" lecture series, held a live projection of this safety review. Topics were varied and, for the several club members attending, it was a unique mode of teaching and a pleasant way to spend a -30C Saturday morning.

The OLC continues to make honest pilots out of all of us! Prior to this digital capture of our flights it was common for a pilot to report that he was over a certain turnpoint or town, when in fact it might have been that they were only within viewing distance. Certainly a level of one-upsmanship has become prevalent on the weekends during good soaring weather. Our two Krosno trainers have been outfitted with the Colibri so that prospective cross-country pilots might also get in on the action with flights flown close to homebase.

Another popular feature at our club is an 0800 Saturday and Sunday "Soarcast" and general overview provided by one of our members sent live via e-mail from our Training Centre. The format generally follows the same routine: a review of the anticipated weather and soaring outlook via Soarcast data, a commentary on club activities for the day, a "job jar" list for those not flying. Following the weekend's flying there are generally one or two members who will e-mail to everyone how the weekend went. Makes for entertaining reading.

PS The Webinair was a 3-part lecture series orchestrated by Tom Knauff to be broadcast as a live presentation, via the internet, on three consecutive Saturday mornings in January and February. The technology, by Tom's own admission, was a bit difficult to master but after a practice run on the day before the first event, he seemed confident that everything was set.

Our Safety Officer, Larry Morrow, arranged to hold the presentation in a boardroom of one of our club member's office space. After some minor glitches, we were listening live. The initial promotion was that it would be visual and audio, but in the end we only had audio. There was a fee of \$10 per person/group based, as I recall, on the honour system of payment. You had to be registered first in order to receive a log-in password from Tom. I don't think the live question/answer thing worked out too well, but Tom did have a number of previously sent questions which he dealt with.

It was a good way to get together as a group in the depth of winter, and have a serious presentation on safety-related items, some theory of flight, a discussion on goal setting, air exercises etc. It was not the most dynamic presentation but still worth attending.

**Mike Maskell**

Stan (he took first place and the entire contest) – it's too bad the day didn't count as only he and I exceeded the minimum distance. This high was extinguished when I heard

about Derek. It's not my place to speculate about the accident, but will say that he was always kind to me, and during the contest and before when I knew him at Toronto Soaring, he took an interest in my flying and was always quick to provide helpful advice.

**Final thoughts**

One of the greatest things about flying in the Nationals was that I met other young people with an interest in competitive soaring. Emmanuel and I flew in the regular competition, while George Holt from SOSA and Tim Belchior from York flew short tasks for two days in their own mini-competition. Also around was Shane Underwood who I had met at SOSA's Junior Soaring Camp two years ago prior. And of course Sonia Hildesheim (crewing for her father) was, as GOD (the Grid Operations Director), keeping all the pilots in line. I had many enjoyable moments with all of them, as we talked long into the night about anything from the day's flying to life back home in Ottawa, Chicoutimi, or Fort McMurray.

From the dinners, including the charity steak BBQ to benefit *Freedom's Wings*, to the morning briefings, the Nationals was also a great social experience, and I made several friendships which are sure to last. Although the event ended tragically, I still did learn a lot about contest flying. For anyone looking to take their soaring to the next level, even if you don't think you have enough experience I would say go for it and fly a contest – you get to apply the lessons you learned from the previous day's flying without having to wait for your next opportunity to fly, you can compare conditions and strategy for the day with other pilots who flew the same course, and the environment is so friendly and supportive you will feel right at home. ❖



Maria Szemplinska

If you have been in the sport for even a short time, you have heard about "the Ridge", the Allegheny Mountains network of winding parallel ridges that are the magnet for "on the deck", fast, rough, day-long cross-country flights. A typical ridge there often looks like this.

*Come and soar with the bald eagles!*

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**magazines**

**GLIDING AUSTRALIA – NEW!** Bi-monthly journal of the Gliding Federation of Australia. <[www.soaring.org.au](http://www.soaring.org.au)>. International rates for on-line access.

**GLIDING INTERNATIONAL** – the monthly world gliding publication by John Roake. Read worldwide, with a great reputation for being the first with the latest news. US\$64/120, 1/2 yrs airmail. Personal cheque or credit cards accepted. <[office@glidinginternational.com](http://office@glidinginternational.com)>. Register on line: <[www.glidinginternational.com](http://www.glidinginternational.com)>.

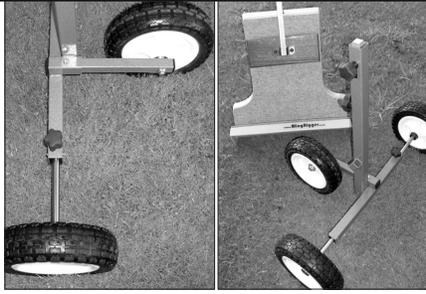
**SAILPLANE & GLIDING** – the bimonthly journal of the BGA. £39/yr airmail, £22.75 surface. <[www.gliding.co.uk/sailplaneandgliding/subscriptions.htm](http://www.gliding.co.uk/sailplaneandgliding/subscriptions.htm)>.

**SOARING** – the monthly journal of the Soaring Society of America. Subscriptions, US\$46. Credit cards accepted. Box 2100, Hobbs, NM 88241-2100. <[feedback@ssa.org](mailto:feedback@ssa.org)>. (505) 392-1177.

**SOARING NZ** – Editor, Jill McCaw. Personal cheque or credit cards accepted, NZ\$122. McCaw Media Ltd., 430 Halswell Rd, Christchurch, NZ <[j.mccaw@xtra.co.nz](mailto:j.mccaw@xtra.co.nz)>.

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By running the program on both my computer at home and the one at the club, I was able to set up the graphics for my last minute stand-in, Jörg Stieber, to present it in the pilot meeting. One more step was to e-mail the forecast to the task setters, which I did after exporting the PowerPoint presentation as a .pdf file. This provided a file that was smaller than the original and could be run using an application that I knew they would have.

As is now customary at North American competitions, we decided to set up the SPOT tracking facility that would show us the position of those pilots who carried these devices. The facility we used, called

Hawke tracking, can be found at <<http://www.hawketracking.com/about.html>>. This system is aimed at gliding competitions so it has a number of features that fit our needs. Access can be set up for a monthly or annual fee.

Management of the software is carried out through one web page and the tracking map is displayed on another. The map can be set up to show the local turnpoints and the tasks being flown. When a SPOT device that is included in the list of participants is turned on, then anyone who can bring up the web page can see its location. On one day Jörg landed out in the afternoon and I was at home and checking the tracking

when I saw what had happened. I called the club to see if they had noticed and as I did I received a message from Walter Weir in Whitby asking if I had seen that he had landed – from which I conclude it does work and people do watch.

A useful feature of the software is that one can click on the landout point and in a pop-up window select to find directions. A version of Google Maps then pops up and the route from your chosen position to the landout point is given.

The processes ran smoothly partly because all the hardware and software we needed was in place and tested before the event started. As a result there were no last minute surprises. ❖

description	web link	comment
<b>Aviation Weather</b> local area data	<a href="http://www.flightplanning.navcanada.ca/cgi-bin/CreePage.pl?Langue=anglais&amp;NoSession=NS_Inconnu&amp;Page=lab&amp;TypeDoc=html">http://www.flightplanning.navcanada.ca/cgi-bin/CreePage.pl?Langue=anglais&amp;NoSession=NS_Inconnu&amp;Page=lab&amp;TypeDoc=html</a>	Nav Canada website with NOTAMS
<b>Aviation Weather</b> webcams	<a href="http://www.metcam.navcanada.ca/hb/index.jsp?lang=e">http://www.metcam.navcanada.ca/hb/index.jsp?lang=e</a>	Excellent webcams
<b>Best Weather Charts</b> NCAR	<a href="http://weather.rap.ucar.edu">http://weather.rap.ucar.edu</a>	Easy to read synoptic charts
<b>BLIP forecasts</b>	<a href="http://www.drjack.info/BLIP/index.html">http://www.drjack.info/BLIP/index.html</a>	Dr. Jack gliding forecast data
<b>College of Dupage</b> satellite and radar data	<a href="http://weather.cod.edu/satrad/index.php">http://weather.cod.edu/satrad/index.php</a>	A very good site for looking at the satellite and radar data all over NA
<b>CWSU National TAF</b> Metar maps	<a href="http://www.wrh.noaa.gov/zoa/mwmap3.php?map=usa">http://www.wrh.noaa.gov/zoa/mwmap3.php?map=usa</a>	Easy to find actual readings
<b>Idonthaveawebpage</b> general US model maps	<a href="http://www.idonthaveawebpage.com">http://www.idonthaveawebpage.com</a>	A good site for looking ahead at the model data from the GFS and NAM data (amateur site)
<b>NAM Convective Forecasting</b> cloud layer predictions	<a href="http://www.emc.ncep.noaa.gov/mmb/namsvrfcst">http://www.emc.ncep.noaa.gov/mmb/namsvrfcst</a>	Almost at the end of the list on the left side is 'cloud cover'
<b>SpotWX</b> – Canadian model weather data graphs	<a href="http://spotwx.com">http://spotwx.com</a>	Data from the GEM model (amateur site)
<b>Weather Spark</b> weather data graphs	<a href="http://weatherspark.com">http://weatherspark.com</a>	data from a Norwegian model among others
<b>Wind Map</b>	<a href="http://hint.fm/wind">http://hint.fm/wind</a>	clever graphic showing wind patterns in the US
<b>Weather Forecaster</b> US and other model maps	<a href="http://www.wxforecaster.com">http://www.wxforecaster.com</a>	Showing the various weather model data (amateur site)
<b>XCSkies</b>	<a href="http://www.xcskies.com">http://www.xcskies.com</a>	Gliding forecast from GFS, NAM and RAP models

## soaring services

**Fox One** Ed Hollestelle of Solaire Canada has retired from distributing glider instrumentation to enjoy the perks of semi-retirement. Dave Springford of Fox One Corp has taken on the Canadian distribution for instruments and software for LX Nav, LX Navigation, SeeYou, Becker and Dittel radios, and will continue to support Ed's

former customers. For more product details go to the Fox One Corp web site at <[www.foxonecorp.com](http://www.foxonecorp.com)>.

**MZ Supplies** Canadian dealer for Schleicher sailplanes, and Cambridge and Borgelt instruments. Ulli Werneburg <[www.mzsupplies.com](http://www.mzsupplies.com)>, <[wernebmz@magma.ca](mailto:wernebmz@magma.ca)>, (613) 826-6606.

**Sportine Aviacija** Canadian dealer for LAK sailplanes. LAK-17a – 15/18m flapped; LAK-19 –

15/18m Standard; LAK 20 2-seat 23/26m Open. <[www.lak.lt](http://www.lak.lt)>. <[nick.bonniere@withonestone.com](mailto:nick.bonniere@withonestone.com)>

**Windpath** SZD, a long tradition, built to last and outperform. Authorized North American dealer for SZD-54-2 Perkoz, SZD 51-1 Junior, SZD-59 Acro, and SZD55-1. Also MDM-1 Fox, PW-6, PW-5, and Avionic trailers. Jerzy Szemplinski, <[www.windpath.ca](http://www.windpath.ca)>, info@windpath.ca, (905) 848-1250.

# FAI badges

Walter Weir

3 Sumac Court, Burketon, RR2, Blackstock, ON L0B 1B0  
(905) 263-4374, <2waltweir"at"gmail.com>

These badges & badge legs were recorded in the Canadian Soaring Register during the period 17 June to 14 September 2012.

## GOLD BADGE

333 Randy Neilson Great Lakes  
334 Guy Blood Edmonton

## SILVER BADGE

1064 Justin Gillespie Winnipeg  
1065 Martin Sanderse York  
1066 David Gossen Toronto  
1067 Gibson Kostiuik Winnipeg  
1068 Trevor Finney Edmonton  
1069 Matthew Watson York

## DIAMOND GOAL (300 km goal flight)

David Gossen	Toronto	326.7	ASW-20	Conn, ON
David Cole	Toronto	316.0	SZD-55	Conn, ON
Malcolm McLaren	London	301.8	Kestrel 19	Embro, ON
Guy Blood	Edmonton	315.7	Kestrel 19	Chipman, AB

## GOLD DISTANCE (300 km flight)

David Gossen	Toronto	326.7	ASW-20	Conn, ON
David Cole	Toronto	316.0	SZD-55	Conn, ON
Malcolm McLaren	London	301.8	Kestrel 19	Embro, ON
Trevor Finney	Edmonton	340.8	ASW-20	Chipman, AB
Guy Blood	Edmonton	315.7	Kestrel 19	Chipman, AB

## GOLD ALTITUDE (3000 m height gain)

Randy Neilson	Great Lakes	3076	LS-6b	Parowan, UT
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## SILVER DISTANCE (50 km flight)

Justin Gillespie	Winnipeg	61.3	Astir CS	Starbuck, MB
Martin Sanderse	York	53.0	1-35	Arthur, ON
David Gossen	Toronto	103.5	ASW-20	Conn, ON
Gibson Kostiuik	Winnipeg	70.3	Std. Cirrus	Starbuck, MB
Trevor Finney	Edmonton	150.0	ASW-20	Chipman, AB
Matthew Watson	York	71.0	Grob 102	Arthur, ON

## SILVER/GOLD DURATION (5 hour flight)

Justin Gillespie	Winnipeg	5:54	Astir CS	Starbuck, MB
David Gossen	Toronto	5:44	ASW-20	Conn, ON
Claudine Dorval	Quebec	5:59	LS-4a	St-Raymond, QC
Trevor Finney	Edmonton	7:08	ASW-20	Chipman, AB
Matthew Watson	York	5:24	Grob 102	Arthur, ON
Karl Boutin	Gatineau	6:34	ASW-20	Pendleton, ON
Adam Ostanski	Winnipeg	5:18	PW-5	Starbuck, MB

## SILVER ALTITUDE (1000 m height gain)

David Ellis	Toronto	1174	HP-18H	Conn, ON
Justin Gillespie	Winnipeg	2500	Astir CS	Starbuck, MB
David Gossen	Toronto	1420	ASW-20	Conn, ON
Trevor Finney	Edmonton	1779	ASW-20	Chipman, AB
Matthew Watson	York	1296	Grob 102	Arthur, ON
M.Villeneuve-Normand	Quebec	1039	Grob 102	St-Raymond, QC
Julian Audette	Winnipeg	1555	KR-03A	Starbuck, MB
Kenneth Froese	Winnipeg	1153	KR-03A	Starbuck, MB
Rebecca Howard	Winnipeg	1609	KR-03A	Starbuck, MB
Josh Hubbs	Winnipeg	1628	KR-03A	Starbuck, MB
Adam Ostanski	Winnipeg	1460	PW-5	Starbuck, MB
Arnold Young	Winnipeg	1110	KR-03A	Starbuck, MB

## C BADGE (1 hour flight)

2975 David Ghyselincsk	Montreal	1:12	Grob 103	Hawkesbury, ON
2976 Justin Gillespie	Winnipeg	5:54	Astir CS	Starbuck, MB
2977 David Gossen	Toronto	5:44	ASW-20	Conn, ON
2978 Matthew Jovanovic	Air Cadet	1:10	2-33	Welland, ON
2979 Mathieu Beland	Quebec	1:01	Blanik L-23	St-Raymond, QC
2980 Natalia Gadomska	Winnipeg	1:04	KR-03A	Starbuck, MB
2981 Trevor Finney	Edmonton	7:08	ASW-20	Chipman, AB
2982 Jason Acker	Edmonton	1:04	SZD-50-3	Chipman, AB
2983 Matthew Watson	York	5:24	Grob 102	Arthur, ON
2984 Karl Boutin	Gatineau	6:34	ASW-20	Pendleton, ON
2985 M.Villeneuve-Normand	Quebec	1:43	Grob 102	St-Raymond, QC
2986 Julian Audette	Winnipeg	2:01	KR-03A	Starbuck, MB

# FAI records

Roger Hildesheim

49 Maitland Street, Box 1351, Richmond, ON K0A 2Z0  
(613) 838-4470, <rogerh@ca.inter.net>

The following record claims have been approved:

<b>Pilot</b>	<b>Tim Wood</b>
<b>Date/place</b>	3 September 2012, Pincher Creek, AB
<b>Record type</b>	100 km speed-to-goal: Terr. Open, 15m, Club
<b>FAI category</b>	SAC
<b>Sailplane</b>	DG-400 C-GETW
<b>Speed</b>	180.3 km/h (Open & 15m), 169.5 km/h (Club)
<b>Task</b>	start TP near Chain lakes, finish TP near Shell gas plant south of Pincher Creek
<b>Previous record</b>	David Mercer 167.0 km/h (2004) Open & 15m 156.9 km/h (2004) Club

The following records have been claimed:

<b>Pilot</b>	<b>Tim Wood</b>
<b>Date/place</b>	14 September 2012, Pincher Creek, AB
<b>Record type</b>	100 km triangle speed: Terr. Open, 15m, Club
<b>FAI category</b>	3.1.4j
<b>Sailplane</b>	DG-400 C-GETW
<b>Speed</b>	182.1 km/h (Open & 15m), 171.2 km/h (Club)
<b>Task</b>	start/finish at Bellevue, AB with TPs 20 km NE of Cowley and 10 km N of Old Man River Gap
<b>Previous record</b>	David Mercer 141.5 km/h (2004) Open & 15m 133.0 km/h (2004) Club

## FAI BADGE SUPPLIES

Order through FAI badges chairman – Walter Weir

Note: item 5 not stocked – external purchase approval is given

1	FAI 'C' badge, silver plate pin	\$ 6.00
2	FAI 'C' badge, cloth	\$ 6.00
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4	FAI GOLD badge, gold plate pin	\$60.00
5	FAI badge Diamonds	
6	FAI Gliding Certificate	<b>10 for \$39.00 to clubs</b> \$10.00
	<b>Processing fee</b> for each FAI application form submitted	<b>\$15.00</b>
36	FAI SILVER badge, cloth 3" dia.	\$12.00
37	FAI GOLD badge, cloth 3" dia.	\$12.00

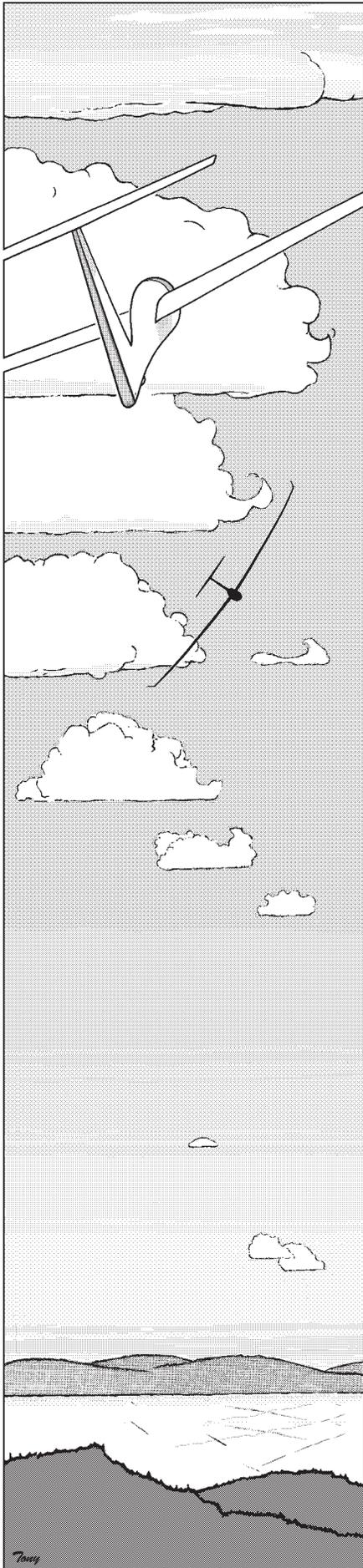
Order through the SAC office (and should be available from your club)

33	FAI 'A' badge, silver plate pin	\$ 3.00
34	FAI 'B' badge, silver plate pin	\$ 3.00
35	SAC BRONZE badge pin	\$ 3.00

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2987	Kenneth Froese	Winnipeg	1:21	KR-03A	Starbuck, MB
2988	Rebecca Howard	Winnipeg	2:07	KR-03A	Starbuck, MB
2989	Josh Hubbs	Winnipeg	1:20	KR-03A	Starbuck, MB
2990	Adam Ostanski	Winnipeg	5:18	PW-5	Starbuck, MB
2991	Arnold Young	Winnipeg	1:21	KR-03A	Starbuck, MB
2992	Brittany Childs	York	2:02	1-34	Arthur, ON
2993	David Elviss	York	2:08	1-34	Arthur, ON
2994	Kristian Dumouchel	York	2:33	2-33	Arthur, ON
2995	Jamie McEwen	York	2:03	1-34	Arthur, ON
2996	Sarah Smith	York	1:31	2-33	Arthur, ON
2997	Christopher Smuck	York	2:02	Grob CS-77	Arthur, ON
2998	Alexandra Therrien	York	1:05	1-34	Arthur, ON
2999	Jesse Van Parys	York	2:09	1-34	Arthur, ON
3000	Alicia Yu	York	1:11	2-33	Arthur, ON

# SAC Clubs SAC Clubs



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robfrancis@tru.eastlink.ca

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marcarseneault@sympatico.ca

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www.avvc.qc.ca

CVV QUEBEC  
St. Raymond A/P, QC  
www.cvvq.net  
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www.flymsc.org

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beechingd@sympatico.ca

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info@erinsoaring.com

GATINEAU GLIDING CLUB  
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www.gatineauglidingclub.ca

GREAT LAKES GLIDING  
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www.greatlakesgliding.com

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www.londonsoaringclub.ca

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www.rvss.ca/

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www.sosaglidingclub.com

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airfield: 24 km W of Shelburne, ON  
www.torontosozaring.ca

YORK SOARING ASSOCIATION  
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www.YorkSoaring.com

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Starbuck, MB  
www.wgcb.ca

## Alberta Zone

ALBERTA SOARING COUNCIL  
asc@stade.ca  
Clubs/Cowley info: www.soaring.ab.ca

CENTRAL ALBERTA GLIDING CLUB  
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www.cagcsoaring.ca

CU NIM GLIDING CLUB  
Black Diamond, AB  
club phone (403) 938-2796  
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http://avsca.ca

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PEMBERTON SOARING  
Pemberton A/P, BC  
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