

free flight libre



2013
Spring



Priorities

Sylvain Bourque, President

WE ARE FORTUNATE to be surrounded by a wonderful team of volunteer directors, committee chairmen and committee members with different professional skills, backgrounds, and aeronautical experience who complement each other in the tasks that need to be done in our association. I thank them for their hard work. The members of the Board of Directors are:



- *Sylvain Bourque*, the East Zone Director and SAC President, started gliding in 1994. Since then he has been an active member of AVV Champlain involved in training, towing, and in accounting as treasurer. He is a SAC Class 1 glider instructor and owns his CPL. He has organized the winter French ground school in the Montreal area since 1995. He is an aeronautical radio licence examiner, aviation language proficiency test examiner, and an authorized person for gliding licensing. Sylvain owns a Pegase with two other partners. Sylvain is a field production cameraman instructor and supervising technician for CBC Radio-Canada in Montreal. I'm proud to be part of this Board that has such a good variety of backgrounds and a huge involvement in the soaring community.

- *Stephen Szikora*, our new Ontario Zone Director this year, was first exposed to gliding as an Air Cadet in 1978 and earned his PPL in 1988 and his GPL in 1989. Stephen is currently a member at York Soaring and was previously a member at Toronto Soaring and Air Sailing, where he was club President for eight years. His motivation for joining the Board include improving the governance process and communication within the organization. When not flying gliders, towing gliders, pushing gliders, or fixing gliders, he likes to cut the York grass. Welcome to the Board, Stephen.



- *Jay Allardyce* is the Prairie Zone Director and represents the clubs in Saskatchewan and Manitoba. 2013 will be Jay's second year on the Board. Jay has a strong interest in the marketing and publicity of gliding in Canada and has taken the lead on this front. Jay flies out of the Winnipeg Gliding Club, owns an ASW-19 with two other partners and is an avid cross-country pilot. He is also an active instructor and towpilot.

- *John Mulder*, Alberta Zone Director and SAC VP, started gliding with the Air Cadets in 1983. A few of his achievements are Diamond Badge #103 completed in 2010, glider instructor, Canadian ATPL, FAA ATPL, AME, MDM for homebuilt aircraft, and has held management positions with commercial and business aviation companies in Alberta. He is a Standards Captain with WestJet. John shares a Genesis 2 with a clubmate, a Jantar with wife Carol (she's a clubmate too!), an ALPIN TST-8 (two-seat motorglider) with his father, a Duster with four clubmates, and a Citabria towplane.



- *David Collard*, Pacific Zone Director and SAC Treasurer, was first exposed to gliding by his sister and brother-in-law, Lois and Leo Smith (SAC president in 1958) in the 50s at the Gatineau Gliding Club. He joined the RCMP in 1957 and, after eight years doing police work in Manitoba, entered its Air Division with whom he flew for seventeen years. While in Regina, David became active with the Regina Gliding and Soaring Club as a glider pilot and chief towpilot. At the National level he was the SAC Prairie Zone Director (and VP in 1981 and '82). He also has his CPL. He has earned a Gold Badge with 2 Diamonds. A memorable experience for him was crewing for Ulli Werneburg at the World Championships in Paderborn, Germany in 1981. David now flies with Pemberton Soaring Centre and shares a Genesis 2 with a partner.

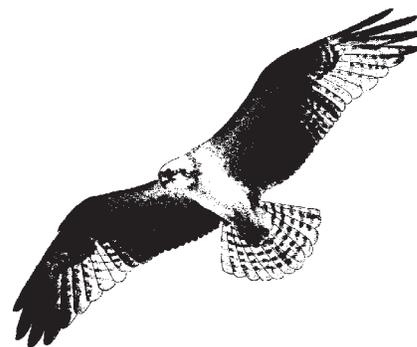
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free flight

2013/2 – Spring

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

ISSN 0827 – 2557



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Here is Räyskälä, Finland while I was towing there in 2009. Gliders were finishing low over the lake at the end of the runway. About 40 were in their Nationals, and it was good to see them all return. It made me proud to be a part of a unique system that put a lot of dedicated, extremely serious individuals into such a confined space, then to pass so gracefully over the water as you see here. What a relaxing, beautiful way to end a contest day.

photo: Zach Marton

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Social media, etc.

better ways for clubs to sell themselves

Jay Allardyce, Marketing chairman

Back in January, I asked clubs to send me a summary of the things they are doing in their community to promote their club with a view of sharing the more innovative and unique ideas for other clubs to learn from and build on. Social media has become very popular over the years and many clubs in Canada are starting to embrace Facebook, Twitter and YouTube as inexpensive promotional platforms for their clubs.

Facebook Facebook is essentially the 21st century version of “word of mouth”. Two clubs have done a great job using Facebook as a promotional tool for their clubs. Both Winnipeg and York have excellent Facebook pages that are updated regularly and have a lot of very interesting content. Facebook is a great way to keep people who are interested in the club up to date on the club’s activities. Interested people can “like” the club’s page, and posts from the club show up on that person’s news feed; this keeps them engaged in the goings on at the club and keeps the bug in their ear. People who visit the club can also share their experience with their Facebook friends and link directly with the club’s Facebook page. The key ingredient to a successful club Facebook page is to have one person take the lead and commit to keeping the page up to date and the content fresh.

Twitter Twitter is a social networking and “microblogging” service where users share short 140 character messages (tweets) with their followers. Tweets can also include links to websites and pictures. Again, it’s another 21st century form of “word of mouth” advertising and it’s very easy to do. Much like Facebook, in order to do it well, you really need one person to champion the cause and commit to keeping it up to date.

Two clubs in Canada have really embraced Twitter: Rideau Valley (Twitter tag @rvssca) and York (Twitter tag @YorkSoaring). Twitter is similar to Facebook where interested individuals can “follow” the club and receive updates on the club’s activities through the club’s tweets. Twitter also allows people to tag other Twitter users in their posts. For example, let’s say I visited York Soaring for my first ever flight in a glider and wanted to share my experience with my Twitter followers. I could tweet: “Had a great time @YorkSoaring today! – First time in a glider. Awesome!” to let my followers know about my first flight in a glider. I could even include a photo of myself in the glider along with my tweet. If one of my followers was curious about my experience and wanted to learn more about gliding, they could click on @YorkSoaring in my tweet, which would take them to York Soaring’s twitter feed which also links to their website.

Another way Twitter users could spread the word is by “re-tweeting” other users’ tweets. Let’s say the weather was perfect for gliding and my local TV station weather man was on Twitter (Twitter tag @LocalWeatherGuy). I could tweet, “@LocalWeatherGuy, Really loved those cumulus clouds today. Flew in a glider for 6 hours and covered 500 km!” and include a picture of my glider. If @LocalWeatherGuy thought it was cool, he could re-tweet my tweet and share it with his followers, which could number in the thousands.

YouTube Gliding really lends itself well to video, and YouTube is a great way to share our sport and tell its story. Inexpensive, compact, high quality cameras such as the GoPro series allow footage to be shot in full HD and when you purchase one, it comes with a whole host of mounts that allow you to capture unique perspectives.



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. Individuals and clubs are invited to contribute articles, reports, club activities, and photos of soaring interest.

E-mail contributions as an attachment in Word or a text file. Text is subject to editing to fit the space available and the quality standards of the magazine. Send photos as unmodified hi-resolution .jpg or .tif files.

free flight also serves as a forum for opinion on soaring matters and will publish letters to the editor as space permits. Publication of ideas and opinion in *free flight* does not imply endorsement by SAC. Correspondents who wish formal action on their concerns should communicate with their Zone Director.

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10 March, June
September, December

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.

free flight est le journal officiel de l'ACVV publié trimestriellement.

Les articles publiés dans *free flight* proviennent d'individus ou de groupes de vélivoles bienveillants. Tous sont invités à participer à la réalisation du magazine, soit par des reportages, des échanges d'idées, des nouvelles des clubs, des photos pertinentes, etc.

L'idéal est de soumettre ces articles par courrier électronique, bien que d'autres moyens soient acceptés. Ils seront publiés selon l'espace disponible, leur intérêt et leur respect des normes de qualité du magazine. Des photos, des fichiers .jpg ou .tif haute définition et niveaux de gris peuvent servir d'illustrations.

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

Les articles de *free flight* peuvent être reproduits librement, mais le nom du magazine et celui de l'auteur doivent être mentionnés.

Pour un changement d'adresse ou pour l'abonnement des non-membres de l'ACVV-SAC, communiquez avec le bureau national à sac@sac.ca. Des copies en format .pdf sont disponibles sur le site Web de l'ACVV-SAC au www.sac.ca.

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Date limite:

10 mars, juin
septembre, décembre

One member at my club, Pat Pelletier, is a GoPro fanatic and has created many interesting videos with his GoPro camera. One of his photos using GoPro was featured on the Fall 2012 *free flight* cover. You can visit his YouTube channel by searching *peanut-425etac*. Pat's videos are unique and exciting, and my club has utilized several of them for promotional purposes. A link to a few YouTube videos on gliding on your club website can give prospective new members a taste of what gliding is all about and could be the "hook" that gets them out to your club and in the cockpit.

Kijiji Kijiji is an inexpensive way to get the word out about your club to the general public. A posting under the "classes/lessons" or "events" category regarding an upcoming ground school or gliding lessons is an easy way to generate interest in your club for little cost. All it takes is a bit of time and energy to maintain the posting and respond to any inquiries received.

Ground school promotion There are a couple clubs in Canada that have utilized their ground school to attract new members and generate interest. One approach has been to get ground schools listed in community leisure guides and or as a continuing education course with local school districts. The benefit of this approach is the wide distribution of these leisure guides and continuing education catalogs – they give a lot of exposure for very little (if any) cost.

A more effective way, however, are strategically placed commercial ads in major newspapers (print and online). It is more expensive, but SAC is now supporting promotional initiatives like this. Immediately following the end of this article is a recent example of how this has worked for the ground school that is run by Gatineau Gliding and Rideau Valley Soaring.

Community message boards in public places are also a great way to spread the word about club events such as open houses or ground schools. When publicizing a recent open house for the Winnipeg Gliding Club, I found Starbucks Coffee outlets were great as most locations have community announcement boards that are often in a prominent, highly visible location in their stores. The only catch is you can't be "selling" something. Therefore, if you were trying to publicize your ground school with an associated cost, they probably wouldn't be open to that, but you could instead advertise an info session or an open house in advance of the ground school. The poster we produced had a QR code that linked directly to the club's Facebook page and also tabs with the club's URL which interested people could tear off and take with them. The tabs were great as they allowed us to gather feedback on how many people that had actually seen the poster were interested enough to tear off a tab.

Events and special courses Several clubs held special events or courses this past season to spur interest in gliding. The clubs of Alberta along with some enthusiastic female members teamed up and put on an event specifically focused at promoting the sport among women. *Chics Take Flight* was held at Cu Nim and by all accounts was a huge success. A full account of that event is in the 2012 Alberta Soaring Council magazine, *ASCent*, which is on the SAC website. The proportion of our membership who are women is very small and I believe events such as this one will help this part of our membership to grow.

Montreal Soaring Council hosted a very successful conversion camp for commercial pilots. Camps such as this one are a great way to attract new members and get them hooked with condensed training in a very short period of time. A similar camp could easily be held for private pilots looking to convert to gliding.

In the Fall 2012 issue of *free flight*, I wrote an article on a recent event that I had held for current and former Air Cadets at the WGC. The goal was to give them an ⇒ p31

Gawk at this!

Dave Bax, York Soaring

MY VINTAGE BRITISH GLIDER, C-GAWK, flew in Canada for the first time 24 September 2011 at York Soaring. Its route from Slingsby UK manufacture in 1954 to Canada has been long and occasionally tortuous. However, the end result is an airworthy iconic glider, unique in Canada, in which I hope many get the chance to experience at least once the pleasures of side-by-side seating within an open cockpit.

In 1950, the Kite Club at Squires Gate airport, UK, formed. The club had been considering a dual training aircraft for some time before deciding on a Slingsby T21b direct from the manufacturer for £750. The glider arrived and passed its flight tests on 3 October 1954. The CofA (#711) was issued two days later and the glider was assigned the BGA registration letters AWD. In its first ten years the glider was launched 6413 times for 515 flight hours. The average of less than five minutes per flight reflected the comparatively low winch launch and circuit training of the time.

In the following years, the gliding club moved sites and changed names a handful of times, to become Bowland Forest Gliding Club. AWD suffered two incidents, May 1975

ownership. The first syndicate logged a fair number of soaring hours and applied the multi-coloured paint job that still stands out today. In 2003 the old syndicate dissolved and a new one was formed.

Like many other ancient glider pilots in the UK, I learned to glide at 16 through the Air Training Corps on the side-by-side T21 and the tandem T31. I continued with 617 Gliding School for a few years as a junior instructor and returned to the T21 many years later when I joined the large Long Mynd T21 syndicate. As a member of Bowland Forest Gliding Club, I was quick to jump at the chance to join the T21 syndicate when they looked for new members in 2003. Unfortunately however, there was little interest amongst the syndicate members to undertake, as a group, servicing, rigging, or flying AWD. Apart from intermittent activity regarding purchase of an ex-motor glider trailer and attempts to make it fit for purpose, poor AWD remained derigged.

In 2011, having discovered that York Soaring was a particularly friendly and agreeable club (they even tolerate me), I decided to move house from Grimsby, Ontario to Fergus, purchase the stored AWD from the syndicate, and bring the glider to Canada.



The effort required ranged from the practicalities of getting the trailer clean and roadworthy and the glider secure inside it (it was not fit for its purpose then and perhaps only marginally so now), organizing a shipping container, several telephone calls and e-mails with Transport Canada to make sure I was doing things correctly, getting an export CofA, buying out the syndicate in my wife's name (Transport Canada only allow residents and citizens to import permanently), organizing Canadian registration, and preparing for the Canadian CofA, and getting a Canadian licence plate for the trailer.

("damaged on hillside"?) and August 2000 ("short landing into boundary fence, barbed wire"!)). After the last of these events, the glider was not flown for the following ten years save for a brief two months in 2003 for fourteen flights. During the 1980s the glider moved from club to syndicate

Every step had its own problems, the basic steps with the trailer were fine but when, at the Liverpool docks, we tried to load it into the container, the width of the door was just a little too narrow and we needed to take the protruding wheels off and slide the trailer in. Later, in Canada, after putting the wheels on again, one tire started burning because it was



rubbing on the trailer. This was a puzzle then and still is today; however, after changing the wheels around, the rubbing was minimal and we only endured one puncture.

Once the container was at sea, I received an e-mail from Canada advising me that the container would be checked for soil and if found, the shipment liable to be denied entry. This scared me somewhat – while I knew we had cleaned the glider well, including the wheel box, and washed down the trailer externals including roof and underneath, I could not remember having swept the trailer floor. Luckily, on arrival at Toronto via Montreal, the container had only been pulled aside for X-ray and not inspected.

Canada Border Services Agency interviewed my wife at the port. They would not allow me to answer questions since I was not the owner of the shipment. The Customs officers seemed fixated on the number of engines the glider had and did not seem happy with the answer, “none”. The root cause of the interest turned out to be that they had just imported another glider that did have an engine. After a while they billed us \$401 import tax, did not inspect the glider, and let us on our way.

The next stop was XU Aviation in London where Chris Eaves organized the inspection and the Canadian CofA and also repaired that old barbed wire damage. For new registration letters on the aircraft, I had not managed to get GAWD (already in use) but the nearest available seemed perfect –

C-GAWK is a T21b. There was one T21p (prototype), one T21a (improved), and one T21c built (canopy, lowered wings, more streamlined). The T21c is still flying in the Netherlands. The T21b represents the RAF-specified T21a improvements leading to mass production for both the RAF/ATC and civilian use.

Of the 226 T21b that were built, around fifty have been written off, five are in museums, and fifteen more are not airworthy or in storage. The 150 or so airworthy are located all over the world, primarily in England, several in each of Germany, Netherlands, India and Pakistan, and are also to be found flying in Egypt, France, Cyprus, Ireland, Kenya, Jamaica, Jordan, Malaya, Norway, Namibia, Poland, Portugal, Scotland, Singapore, South Africa, Spain, Sweden, Switzerland, Thailand, USA, Wales, Zimbabwe and now, Canada.

GAWK. Apart from changing the registration letters, Transport Canada regulations required a compass fitted and a manufacturer’s data plate made and fitted. And Transport Canada, disregarding the 28 countries on six continents flying the type (see list below), determined that a Slingsby T21 was not “a recognized international type” and insisted upon a passenger warning placard installed before grant of a special certificate of airworthiness on 19 September 2011.

With possibly only one weekend of flying left in the season (the last weekend of September 2011) I was keen to get up and even more keen to fly my 87-year-old mother who, despite ferrying me to various clubs in my younger days, had never flown in a glider. Initial attempts to get insurance from any broker in North America or Europe for just two days was proving impossible. However, at the last moment the SAC underwriters were very cooperative and insured me for the weekend with a deal whereby a payment of an annual fee in advance of the weekend was made, nearly completely refundable the following week if no incidents occurred.

That weekend, AWK was launched 12 times, my mother had a flight, as did several members of York Soaring. To date the glider has flown 35 hours in 70 flights in Canada. Total logged flights since 1954 are 2220 hours from nearly 18,000 launches. Many thanks to all those who helped make this possible:

- The UK syndicate for turning out to see the glider off,
- My brother-in-law, Norman, for taking charge of trailer logistics,
- The insurance company for its compromise in 2011,
- Transport Canada staff who were cooperative and friendly throughout,
- York Soaring for being generous with hangar space and second seat ballast,
- My wife for realizing that a T21 in Canada was better than a new kitchen!

Traditionally a T21 is given a girl’s name. This particular glider was never, to my knowledge, given a name. My private name for it, *Lenny*, breaks with tradition. ❖

The multi-coloured paint job is beautiful and is shown in the SAC online pdf copy of this issue. The internet will give access to further history of the type, this particular glider (www.bfgc.co.uk), and many pictures and a few videos of other T21s. Of course the best information is obtained by visiting York Soaring (www.yorksoaring.com) and seeking a flight for a first-hand experience.



Fooling ourselves

Dr. Daniel Johnson, from SOARING

The air, our own ignorance, and the future are cloaked with invisibility.

We fly under the constrain of various rules, some of them are “you must not” rules and others are “you should not” rules. The difference is between “disqualifying” and “disabling.” These are often conflated in discussions on pilot medical privileges.

Before I get launched on details, I should explain my worldview on rules. *Every rule reflects underlying values and principles.* The principles and values are more important than the rule itself. There are three sorts of rule-breaking:

- There is the rogue, who breaks rules for selfish, whimsical, vindictive, or damaging motives.
- There is the principled rule-breaker who violates a rule in order to observe an underlying principle or to maintain more important priorities.
- There is ignorant rule-breaking, due to not knowing the rule or, more importantly, not understanding the current situation fully, to realize that the rule applies.

Personally, I am in favour of wise rule-breaking, yet we all know that even justifiable transgression may entail rule-specified punishment. I am *not* in favour of rogue rule-breaking. I know you know this, and you know I know this – I’m being explicit just to make sure we’re standing together in our annoyance of the crevasse between regulation and reality. Let me explain.

Disqualifying refers to the *rules of participation*. This is relevant to all regulated activities, from school sports to the practice of medicine. [Transport Canada] specifies who is and who is not qualified to fly. The rules address training, experience, competence, and medical condition.

We all realize, if we stop to think about it, that there’s a diverse class of pilots who are competent but not qualified. That is, they aren’t permitted to fly by one rule or another. Sometimes qualification is easily regained, sometimes it is not. The *rationale* for medical disqualification is the presence or *risk* of psychological or physical incapacitation. The fact that actual risk is different from hypothetical risk is the basis for appeals to TC, which requires that a pilot present facts proving acceptably low risk.

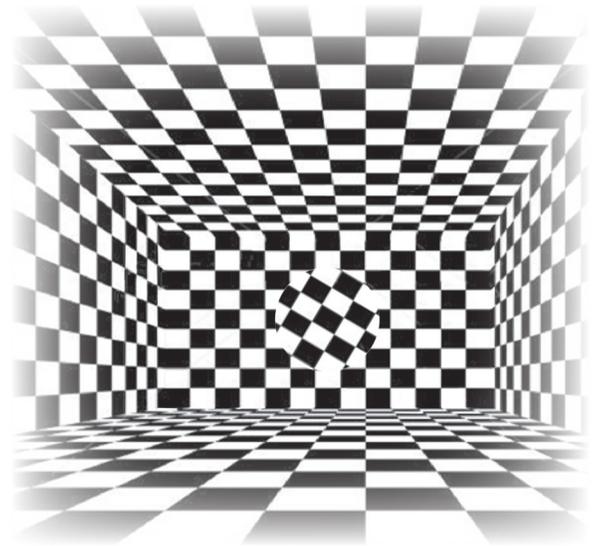
Disabling refers to a condition, usually physical (which includes the psychological), that actually makes a pilot *unable to perform* pilot duties, in any anticipated circumstance, with necessary skill, or that carries a genuine *risk* of unpredictable sudden incapacitation.

A good example is a friend who flies an aerobatic airplane. Some time ago, he had hip replacement surgery; a couple of weeks afterward, feeling pretty comfortable

(but before being cleared by his surgeon), he became unable to resist the need to be upside down pulling G.

First, he was not *qualified* because he hadn’t been cleared by his surgeon. Second, he was *disabled*, as he discovered during the flight, when he experienced massive cramping in his leg muscles – the severe pain was distracting, he could not move in the narrow cockpit to relieve the cramp, and he could not operate the rudder pedals. My friend is a tough guy, and he was able to put up with the agony, land his airplane safely, and extricate himself from the cockpit. And he understood very clearly that he’d put himself in danger.

I hope the point is clear; he was disabled and *could not know this*. If his surgeon (or physical therapist) had known the physical tasks required to get up and back safely, they might have been able to warn him of this possibility. But there is no reason to think he knew.



There are many *disqualifying* medical conditions that are only *potentially* disabling. (Are you having a dizzy spell now?) The [TC] medical certificate per 404.06(1) is a *legal* document which verifies that the pilot has been professionally questioned and examined, and no medical condition was found by the examiner that might incapacitate the pilot for the duration of the certificate.

A pilot who is holding a Class 4 medical certificate is not to act as PIC of an aircraft when he/she suffers from an illness, injury, disability, is taking a drug, or is receiving medical treatment.

In this paragraph, we see the crevasse between disqualification and disability narrowed marvelously. We

are grateful to have in soaring the liberty to have this institutional trust placed in our wisdom and prudence. We will preserve this by acting with good judgement.

However, we will fail sometimes, despite our wisdom, for we cannot see the future; and like my friend who cramped, we can only guess at the risk of sudden incapacitation when we have a "condition". His inability to know that this would happen brings to mind the other things that are invisible to us as we fly, and the limits of our ability to perceive correctly. The air is, with rare exceptions, either invisible or opaque, and it has hidden wrinkles and gulfs that may embarrass us.

We can be confused or fooled in other ways as well. As I have said before, many accidents are due to human limits and the operating characteristics of our perception. No one *plans* to have an accident – that's why we call them "accidents!"

The main concern of accident analysis is to ask whether there is something we can learn; was there a deficiency of training, skill, knowledge, awareness, or analysis of the situation? Can this teach the rest of us to fly more safely? Okay, there's a side effect of legal liability costs and regulatory punishment which we don't like to talk about, eh?, the fear of which is the main hindrance to pilot willingness to participate in the "learning" process.

Failure of perception Way back in the days when pilots actually looked out the canopy at ground features while soaring, a pilot at the end of a nice cross-country flight was heading toward an airport away from home. He knew that the destination airport was less than two miles west of a N-S freeway, toward which he was flying. He was hindered slightly by being too high to read the road signs, but then, aren't we always? He came to a four-lane road in the proper place, turned left, and flew along the road for about the right distance. But he couldn't locate the airport.

We all know how very hard it actually can be to see a runway even when we know exactly where it should be, often when it's a grass field. So, when he was clearly past where it should be, he made a 180 and went back along the highway. He still couldn't find it. He did another 180. Back and forth he went, not contacting lift, feeling very stupid and rather blind, and finally landed out.

Another example, in another place and at another time, a man was taking his son back to college in an airplane, using a VFR chart and pilotage. It was fun, and portable aviation GPS hadn't been invented. He crossed the Mississippi River westbound and flew up a tributary.

He looked down and to his right to check his position on the chart every so often. After 15 minutes, he felt confused. There was the river, down and to the left, just where it had been. However, its bends no longer conformed to the cartoon on the map, and no other ground features matched either. He located a nearby VOR on the chart, turned on the radio, and tracked toward it until he began seeing things on the map that matched features on the ground.

What happened to these two guys?

The glider pilot didn't know there were two four-lane roads, running at about 15 degrees to each other. He took the first he came to, believing it was the only one. Then, being humble about his feature-identification skills, he felt stupid and frustrated. A skilled pilot, he made a safe outlanding and endured the humiliation with good grace.

Sitting comfortably in our armchairs, we can fault him for not studying the sectional more observantly, for not pulling it out when he felt confused, for not buying and using a GPS-nav. But anyone who's flown by pilotage has been more or less in his position at some time. My point is that we cannot know everything; we can't know what the next surprise will be, so we can't prepare for it.

It makes no difference whether the next surprise is a failure of our own perception or something from outside ourselves. Its nature is unknown at first; it does not announce itself. When it intrudes, there is at first only confusion. All we can do is to explore the confusion systematically, as quickly as we are able, until we discover the cause – meanwhile flying the aircraft safely and competently which is our first priority.

We do not always get it figured out. The situation may unfold explosively. We may be distracted from key information, or it may be beyond our perception. Sometimes there are no adverse consequences, sometimes we embarrass ourselves, sometimes there's an incident. When there is, we take the blame because, like the ship's captain, we are accountable for whatever we do, whether by will or by ignorance.

The airplane pilot got lost because he happened, by pure chance, to look down and to the right at his sectional to confirm his position just as he got to the joining of two tributaries. This turning of the head activated his semi-circular canals, causing a sensation of movement. He automatically moved the controls somewhat to maintain the sensation of straight and level. He looked up, saw the airplane banked slightly and quickly corrected the bank.

He did know that two rivers had merged beneath him; he did not know he'd turned the airplane. He kept the river on his left as planned. After about 15 minutes, the river no longer resembled the cartoonish squiggle on the map, and the other terrain features that should have been along it were absent. He felt humiliated, and very much wanted to reorient himself without exposing his shame to either his son or to ATC. It all worked out, and after a while it became a funny story.

Reprise The underlying motif of this column is that good pilots have accidents; we are prone to misperceiving our position and location, we are prone to misunderstanding what we perceive. This is due to the invisibility of both the air and the future, to the limits and nature of our perception, to the vastness of our ignorance, and to the unknowableness of the future.

In consequence, we need to be continually alert for hints that we might be wrong. Being ready to be wrong is the secret to safety and skill (... and to social grace.) ❖

Get 747 flying

Murray Balzer



THE 747 “UNICORN” Royal Canadian Air Cadet Squadron was formed in 1963 and was one of two unique squadrons in Pacific Region that had their own self-sustained Air Cadet glider operation. In 1975, the squadron purchased a share in an Air Cadet League of Canada Schweizer 2-33A, C-GCLB, and leased a Maule M-5 Lunar Rocket for aerotowing. The squadron flew from the Terrace/Kitimat airport as well as a smaller airport located in Woodcock, BC where familiarization flying would take place at a summer camp sponsored by the squadron.

In 1977, the squadron purchased a 1956 Piper Super Cub, C-GIUT, with funds from an interest-free loan given by their local sponsoring committee (Branch 13 of the Royal Canadian Legion). The Super Cub would be used as a towplane for the gliding operation and for powered familiarization flying. In 1984, the squadron purchased C-GCLB outright and was then self-sufficient for gliding operations.

In 1986 their gliding operation in Woodcock was shut down by the Pacific Region HQ due to a lack of access for emergency services at the Woodcock airport. Soon after the flying ceased in Woodcock, the squadron’s glider was sent to Comox for a lengthy “Structural Inspection and Repair Program” inspection for gliders. With their glider gone, the squadron’s gliding activities were terminated, but powered fam flights continued using the Super Cub.

In 1989, the 2-33 was returned in excellent condition, but by then the squadron lacked the qualified staff to operate and manage their own gliding operation. That’s where my role as a Glider Standards Pilot came in. I was working part time as a Civilian Instructor for Lt Col Tom Byrne, the Regional Cadet Air Operations Officer for Pacific Region’s gliding program.

My full-time job was with a regional airline so I had access to their airline employee passes. I would use these on weekends to visit the various glider wings around the Region. Tom called my travels, “Tac Evals” but in reality it was more like doing site inspections, which I called Operation Evaluations, or “Op Evals.”

This was the fun part of my service with the Regional Gliding School. It let me meet (and fly with) many of my fellow Air Cadet glider pilots that I would not have normally had the opportunity to serve with. Over time, I developed many close bonds with these pilots that we still share today.

In May of 1991, Tom approached me with the intent to getting 747 Squadron back into the air. He briefed me that the squadron had their own glider along with their own towplane but they didn’t have any staff qualified under our current Regional Flying Orders. In the interest of flight safety, the Air Cadet Gliding Program was becoming more standardized and no glider flying could take place unless all staff became qualified to the Regional standards, which included training, exams and annual flight checks.

So, here was an Air Cadet squadron located in a remote part of British Columbia with its own glider and towplane that required training so it could operate on its own; it sounded like an interesting (read – fun) project to be a part of so I agreed to help.

The gliding operation in Terrace was unique for Pacific Region. Being located in northern BC, the logistics of getting qualified gliding staff from the closest Northern



Above, Maj. Don Crocker (rear) and Murray Balzer. Below, Don in back seat with 747 Sqn CO Ron Gowe at the nose of GCLB. Left, the 747 cadets and officers flying in Terrace. Photos taken in 1992.



Wing unit located in Prince George to help with checkouts was complex. Normally, Northern Wing's towplane would have had to make the long trek from Prince George to Terrace. The weather in northern BC can change rapidly, become quite treacherous, and possibly trap the aircraft and staff in an isolated location for an extended period of time.

My first trip to 747 Squadron was in mid-June of 1991. The initial plan was for Maj Don Crocker (the Gliding Coordinator from Northern Wing) and one of his pilots to join up with me in Terrace using a Cessna L-19 "Bird Dog" towplane for transport. Unfortunately, the weather didn't cooperate and Don's team couldn't make the trip with the Bird Dog.

Regardless, I went to Terrace (via the airline) and met the squadron staff for the first time. Ron Gowe was the Commanding Officer (a glider pilot) and Murray Hamer was a Civilian Instructor (a towpilot). I can still remember they weren't too

happy with me on my first visit as they were ready to start gliding *now*! I explained to them that we required additional qualified staff to safely start the checkout process and that it was my intention to do everything in my power to get them flying as soon as possible.

The weekend wasn't a total loss (for me) because Murray took me flying to Woodcock in the squadron's Super Cub. My impressions from that flight were twofold: one was that C-GIUT was a great little aircraft and she would do just fine as the squadron's tug, and two was that Murray Hamer was going to be an outstanding member of the gliding program.

With the intention of keeping my promise, my next trip to Terrace was in early September of 1991. This time, the plan was a better one. We would not rely on using Northern Region's towplane for transporting staff to Terrace. Captain Al Walsh (the Regional Maintenance Officer) and Captain Bob Lewis (a Towplane Standards Pilot) would meet together in Prince George and drive a big black Department of National Defence Ford station wagon to Terrace and I would fly on the airline to Terrace.

Things worked out perfectly. Al and Bob met me in Terrace and the weekend weather was perfect to commence gliding operations. While Bob and I conducted ground training and exams for the squadron's pilots, Al spent the morning inspecting the glider and towplane. With exams passed and the aircraft cleared for operations we would start flying early the next day.

After work, the DND station wagon got the three of us to a local establishment located in Lakelse, BC, which served refreshments (and other services that we were unaware of). Unfortunately, the owner of the establishment mistook us for police officers. For fear of something bad happening to our mode of return transport, we stayed for one beer and promptly left the establishment at Lakelse never to return again.

My logbook shows that on 8 September I completed Ron Gowe's checkout along with another squadron pilot. While I was doing checkouts in the glider, Bob was busy checking out Murray in the towplane. Al was also kept occupied teaching the squadron's ground crew/cadets on how to keep the gliding operation safe and efficient on the flightline.

There is nothing better than accomplishing the task you were sent out to do. Seeing Murray towing in the Super Cub and Ron flying the glider on the squadron's first glider fam flights in years caused a lot of smiles that day. By the end of the weekend, Bob, Al and I were pleased with the progress squadron had made and we cleared them for operations. They were back in the air, once more keeping the "Air" in Air Cadets.

My last trip to visit 747 Squadron was in May 1992. The towplane that was normally assigned to the Northern Wing was down for a major inspection and arrangements had been made for Northern Wing to borrow 747 Squadron's equipment until the start of the fall gliding ⇒ p32

Sporting Committee

2012 annual report

Jörg Stieber, chairman

IGC Plenary Meeting The 2012 IGC Plenary Meeting was held in Potchefstroom, South Africa, on 2-3 March. I did not attend the meeting due to the travel cost. Rick Sheppe, the US alternate delegate, voted for Canada via proxy and based on detailed voting instructions. I officially thank Rick Sheppe, on behalf of SAC, for taking on this responsibility and completing the task with such diligence along with the extra work it involved. The full minutes of this meeting are available for download at <www.fai.org/component/phocadownload/category/?download=5447:minutes>. The report to SAC on this meeting by Rick Sheppe is posted in the SAC Documents Vault under "Competitions & X-C".

I attended the IGC Plenary Meeting in Arnhem, Netherlands on 1-2 March 2013. The agenda and all supporting material for this meeting is available for download at <www.fai.org/downloads/igc/IGC_2013_Plenary_Agenda>.

Canadian Nationals 20-29 June 2012 The Nationals were hosted by York Soaring near Arthur, ON and directed by CD Doug Scott. Thanks to both from the committee. The 24 contestants were split into FAI Class (handicaps 0.95 or less), and the Club Class (handicaps 0.90 or greater). The weather proved to be difficult with strong winds breaking up thermals on a number of days. On contest day 4, another windy and difficult day, Canadian Team Pilot and Sporting committee member Derek Mackie lost his life in a tragic outlanding accident. There were a few more possible contest days with marginal conditions following the accident but neither the pilots nor the organizers were keen to continue flying in these conditions. Unfortunately, day 4 turned out to be a no-contest day for Club Class, since too few pilots achieved marking distance. Therefore, with only three contest days, Club Class did not have a valid competition. The FAI class achieved the required minimum of four contest days for a valid competition. The winners were:

FAI Class

1. Dave Springford F1, ASG-29-18 3682 pts* 100.0%
Wolf Mix Trophy (winner) & Dow Trophy (best flight FAI)
 2. Jerzy Szemplinski XG, ASG-29-18 3507 pts 95.2%
 3. Sergei Morozov MS, ASG-29-18 3442 pts 93.5%
- * A perfect score – 100% of maximum achievable points

Club Class

1. Gabriel Duford W6, ASW-20 2946 pts 100.0%
2. Anthony Kawzowicz Z, SZD-55-1 2728 pts 92.6%
Dow Trophy (best flight Club class)
3. Stan Martin Z1, Mini-Nimbus 2703 pts 91.8%

PowerFLARM The 2012 Nationals was the first competition in Canada where the PowerFLARM collision warning system was widely used. All users agreed that this was a significant step forward in reducing the risk of mid-air collisions.

Competition Seeding List [by Chris Gough]

Derek had left thorough instructions for his spreadsheet making it easy to take over the job. I ran into a few anomalies with the scoring because of the cancelled Club Class in the 2012 Nationals. Some slight changes to the seeding rules will be forthcoming. The full seeding scores and spreadsheet can be found on the SAC website in the Document Vault. Top five in Group A Seeding List for 2012 are:

1. Jerzy Szemplinski 103.30
2. Dave Springford 102.13
3. Nick Bonnière 88.28
4. Sergei Morozov 87.81
5. Ed Hollestelle Sr. 87.48

Canadian participation in US competitions

Canadian pilots competed successfully in US Competitions:

Region 5 North, Perry, SC

Sports:	Wilfried Krueger	DG-800B	2nd	90.7%
Std Class:	Andy Gough	LS-8	5th	98.7%
15m Class:	Nick Bonnière	LAK-17A	6th	93.0%
	Derek Mackie	LAK-17A	9th	85.9%
	Luke Szczepaniak	ASW-27	11th	80.5%
18m Class:	Jerzy Szemplinski	ASG-29	1st	100.0%
	Dave Springford	ASG-29	2nd	94.3%
	Ed Hollestelle	LS-10	5th	91.9%
	Sergei Morozov	ASG-29	9th	85.8%
	Brian Milner	Ventus 2cxT	17th	55.1%

Congratulations to Jerzy and Dave on an excellent race, placing first and second in 18m Class. Congratulations to Jerzy on his outstanding result of placing 1st out of 30 in the US 15m Nationals in Reedsville, PA.

32nd World Gliding Championships, Uvalde, TX

After Derek Mackie had so tragically lost his life, the Canadian Team was reduced to three pilots. All team pilots added decals with Derek's contest letters "TT" to the tails of their gliders in Derek's memory and to indicate that he was part of the Team. Our pilots were supported by Team Captain Ed Hollestelle, himself a veteran of several Worlds, and his wife Annemarie, as well as the pilots' spouses and three volunteers. With 13 contest days (12 in 15m Class) within a 14-day period, and 600+ km tasks in 40C daytime temperatures, the competition was extremely taxing on pilots and crews. Conditions were difficult at times with overdevelopment and showers on some days.

Jerzy Szemplinski and Dave Springford did very well in the 18m Class. An example of the intensity of the competition was Jerzy's day 12 result: his achieved speed of 152.2 km/h over 652.9 km was only good for 10th place. Jerzy placed within the top 10 on nine days, Dave on three. Jerzy was 1st on day 9, with a speed of 153.5 km/h

over 581.7 km. Dave placed 3rd on day 10. Both finished the competition with a bang: 1st for Jerzy and 2nd for Dave on the last day – a wonderful achievement!

18m Class results – 35 competitors longest task – 692.1 km
best speed – 157.8 km/h
Jerzy Szemplinski ASG-29 8th 94.2% of winner's score
Dave Springford ASG-29 16th 92.1%

Nick Bonnière, with no teammate and plagued by instrument trouble, found himself in a difficult situation. On day 6 he got stuck in rain showers and landed out at the end of the day after what must have been a grueling 460 km of the 618 km task. However, Nick was resilient and regained some ground with a 10th place finish for the day at the end of the contest.

15m Class results – 37 competitors longest task – 644 km
best speed – 150.9 km/h
Nick Bonnière LAK-17A 33rd 73.5% of the winner's score
Detailed scores: <<http://soaringspot.com/wgc20112/results/>>.

OLC Canada 2012 The 2012 season yielded the best OLC results of the last four years. Over half a million cross-country kilometres were flown. A possible reason for the excellent number was the early start of the gliding season in Ontario and Quebec. The 2012 OLC season ended on 8 October.

<i>Flight data</i>	2009	2010	2011	2012
Participants	264	268	250	279
Total fts in Canada	2636	2594	2513	3041
Total km in Canada	448,290	450,811	410,056	516,587
Highest pilot km	13,529	14,935	15,781	16,661
<i>Trevor Florence</i>				
Highest club km – MSC	71,959	70,033	70,092	78,187

Best OLC flight by a Canadian was *Bruce Friesen* (Std Austria, T/O Chipman, AB) with 599 km for 871 pts. The best OLC North America score by a Canadian was *Brian Milner* (Ventus 2cT; T/O Mifflin Co, PA) with 2103 km for 1857 pts. Congratulations to both pilots to these outstanding achievements! Six Canadians submitted flights of 1000+ km to OLC North America.

OLC Canada Champions (6 best flights):

1. Adam Zieba, York Soaring Club 3861 pts
2. Trevor Florence, Canadian Rockies SC 3729 pts
3. Christian Hamel, MSC 3554 pts

OLC Canada Junior Champions (6 best flights):

1. Emmanuel Cadieux, MSC 2037 pts
2. Jay Allardyce, Winnipeg Gliding Club 1919 pts
3. Justin Gillespie, Winnipeg Gliding Club 1673 pts

Top Canadians in the OLC North America (6 best flights):

1. Wilfried Krueger, York Soaring 6089 pts – 9th overall
2. Adam Zieba, York Soaring 4939 pts – 25th overall
3. Jerzy Szemplinski, SOSA 4219 pts – 38th overall

Plans for 2013

Spring Soaring Seminar A Spring Soaring Seminar with an emphasis on cross-country training and contest flying will be held on 30 March 2013 at the Warplane Heritage Mu-

seum in Hamilton, Ontario. Many of the presenters are members of the Canadian Team – learn from the best! For details, contact Dave Springford.

Canadian Nationals, 3-12 July The 2013 Canadian Nationals will be hosted by the Gatineau Gliding Club in Pendleton near Ottawa 3-12 July with training on 1-2 July. Subject to participation, the host club is planning to field two handicapped classes, FAI Class for handicaps of 0.95 or less and Club Class for handicaps of 0.90 and greater. Pilots with glider types that fall into the range for both classes can elect which class to fly. Both classes will receive seeding points. For more info contact Roger Hildesheim. Contest website, <www.gatineauglidingclub.ca/nationals/index_nationals.html>

2013 Junior World Championships [by Chris Gough] Emmanuel Cadieux will be representing Canada at the Junior World Gliding Championships in Leszno, Poland 28 July to 10 August. Emmanuel has flown in the last two Canadian Nationals and won the OLC-Junior contest in 2010 & 2012. He has secured a Cirrus to fly for the contest. WestJet tickets will once again be raffled off as a fund raiser; expect to hear of other fund raisers through the spring and summer. Emmanuel has started a blog at <<http://emmanuelcadieuxjwgc2013.wordpress.com/>>.

International competition calendar

A full list of international competitions is posted at the IGC website:

<www.fai.org/igc-events/igc-events-calendar-and-results>.

Seeding rules update The Seeding Rules need an editorial update to remove some inconsistencies between rules and examples. A full Seeding Rules review is still outstanding. The following changes are being considered:

- *Scoring Benchmark* Currently the point score of the winning pilot is used as the benchmark. A more consistent benchmark would be the maximum attainable point score in a contest. A change would require a recalculation of last two years' scores. If we decide to implement this change it should be done for the 2014 Seeding List since this is an off year for qualification.

- *Competition factor for Pre-Worlds* The current factor of 1.10 seems too high considering the factors for Worlds (1.12) and European Championships (1.10). A more appropriate factor would be in the 1.07 – 1.08 range.

- *Integration of seeding scores between Classes* There is no mechanism currently to adjust for possible differences in competitiveness between FAI Class and Club Class.

In Derek's memory We mourn the tragic loss of our friend, gliding buddy, fellow competition pilot and Sporting committee member Derek Mackie. Through his work in the Sporting committee, Derek made significant and lasting contributions to competitive soaring in Canada. Derek was the lead on drafting the rules for the OLC Canada and the Seeding Rules that are now in use. We all miss him.

2012 Committee members: Jörg Stieber, Walter Weir, Derek Mackie, Chris Gough ❖

FEAR

Dr. Jennifer Menge

is useful when used well

"I'D NEVER TRUST MYSELF TO DO THAT!" is something we glider pilots often hear from friends or colleagues. Just why do we trust ourselves to do it and where are our limits? How can we broaden these limits particularly in cases where we don't trust ourselves to do something?

We are continually confronted with fear in our routine flying. There's the club member who "never again" takes a winch tow because he "nearly bought it". Or the flying friend who "never again" flies the Ka8 because she inadvertently spun it. Or the clubmate who only flies circuits because he's "no cross-country hero" and then enviously checks out others OLC flights in the evening. Or the ones who never quite get their licence. Or those who give up flying.

In order to be able to learn and expand our horizons, gliding demands from us that we overcome our fears. Experiencing fear restricts us and hinders further development. In 2011, nineteen German glider pilots died in gliding accidents, demonstrating that fear is fundamentally appropriate. Although the laws of aerodynamics are well known to us nowadays, our subconscious has mostly successfully kept our ancestors from testing them out with their own bodies for tens of thousands of years. As a result our subconscious understandably treats this sport with skepticism.

Are there really pilots with no fear? Naïve people, primarily children, often have no fear. On the Grambecker Heide airfield, so the story goes, there was once an eight year old who, after a passenger flight, thought he too could fly. Only when the canopy was (apparently) being closed did he ask, "How do you go up again?" People who are used to the experience also have significantly less fear. The instructor on their hundredth circuit in the ASK-21 won't be particularly nervous and the emergency doctor dealing with their hundredth heart attack case will have a steadier pulse than the doctor on their third.

Someone who is neither naïve nor used to the experience and claims to have no fear are probably suppressing it. This suppression is recognizable by the many words required to make the claim, because the suppressor must constantly convince themselves and others that they are not afraid. It is also easily recognized by the boasting about heroic feats. Seen in a realistic light, these pilots should always be regarded as unsafe.

Lack of real role models

Why is fear uncool? Our modern expectations of "how a pilot should be" are created in movie studios. Can anyone imagine Tom Cruise in *Top Gun* saying before a mission: "Nah, I'd like to practise that one more time with an instructor?" Tom Cruise didn't have a pilot licence – he was sitting in a cockpit mock-up in a movie studio. Of course you can be really cool and relaxed there. Overall, our culture is defined by many fictional characters (from Pippi Longstocking to Spiderman) and even though we know these people don't exist, our subconscious doesn't and takes them on as role models. These days we lack real role models who are really strong *and* acknowledge their fears. Thanks to movie heroes, fear in real life is experienced as something embarrassing.

Someone who takes up gliding isn't a fundamentally fearful person. However, in a kind of collective failure to acknowledge our fears, most of us hide them behind the assumption that all glider pilots are cool, daring types. If everyone else has no fear, then I can't have any either. As a psychiatrist, I have spoken with quite a few glider pilots on many airfields including in the French and German Alps, in the German Uplands and in Northern Germany. In my experience, the really good pilots are exactly the ones who accept that fear is a normal feeling that gives a note of caution, nothing more – nothing less.

When psychiatrists speak of fear, they mean the whole fear 'family' including little brother Nervousness, and big brother Panic. Fear is therefore not a fixed state of mind, but is constantly changing and can slide between those extremes. Stress factors external to flying such as unemployment, debt, emotional stress, illness, medication, running a marathon or similar can reduce the fear threshold on a purely hormonal level. This can lead to panic attacks even in completely healthy people. On the other hand, moderate endurance sport, a balanced diet, adequate sleep, and stress reducing measures can raise the fear threshold – you become more able to bear stress.

New challenges are always daunting

Only recognizing and understanding our own fears can make us truly brave. Courage is not the absence of fear, but the strength to recognize and nevertheless overcome our own limits. It's not brave for an experienced instructor to fly a circuit, but accomplishing this same task demands a measure of courage from every early solo

pilot and should be honoured appropriately. Courage also means attempting something that could go wrong; it is necessary to try *anything* the first time.

New, and challenging experiences are always daunting. The more often we experience something, like driving a car, the less tension the experience entails. This can be explained purely in terms of evolutionary biology and learning theory. For this reason no conclusions about how dangerous a situation really is can be drawn from the intensity of the fear experienced.

As relieving as it may be when increasing experience reduces fear, it is correspondingly more dangerous when so called “de-sensitization” occurs. This can be seen in the accident statistics of motorcyclists and base jumpers, but also in the second frequency peak of accidents amongst seasoned glider pilots. If you are hardly tense at all anymore in the face of a potentially dangerous situation, you underestimate it and put yourself in danger.

The extreme climber Alexander Huber once said, “Fear is our life insurance!” Stuntmen and stuntwomen are also good role models. People who have to deal with fear in their occupation do so more professionally than we, who only deal with threatening situations in our hobby. These professionally-courageous people accept that certain situations in their jobs are frightening. They know themselves and their own fear levels and they master the situation. A jump from 30 metres up would cause fear even for an experienced stunt performer initially. Instead, the stunt performer practises lower heights until they trust themselves with the jump and then go into the situation keyed up, but trusting in their own abilities.

It’s important to free yourself from the conception that sometime or other you will be able to master new situations in a fully relaxed way. That would be dangerous. A rash, “it’ll work out” can cost us our lives in our sport, as it can just as easily *not* work out. Sure it’s uncool to ask if you can do it again (and again) with an instructor, but an early death is also uncool.

Mild nervous excitement for optimum performance

Nervousness and tension inspire caution. Fear urges flight. Panic flees. The object must therefore be to bring any fear down to the level of nervousness. Fundamentally, our bodies react to fear with improved performance. Our bodies use the stress hormone adrenaline to shut down less-important bodily activities (eg. digestion) and supply all available energy to the sympathetic nervous system and the muscles allowing us to become faster and more focused. This means that slightly nervous pilots are more aware and also faster to react should an incident occur.

Being slightly nervous and excited is therefore best for optimum performance. If this nervous excitement ramps up to fear, the autonomic nervous system takes over and the pilot can break out in a sweat, and have a racing pulse, and tunnel vision. This can be tolerated to some

extent in beginners who have their “backup” in the form of an instructor sitting in the back seat. The next level of fear would be panic, leading to running away or freezing. The pilot is then unsafe and should work on their fears as a matter of priority.

Fear is a good teacher. When we acknowledge that we are afraid of something, we realistically recognize our limits and can work on overcoming them. If we force ourselves to do something despite significant fear and overestimate our own abilities in the process, we are not overcoming our fears but endangering ourselves and often also increasing our fear.

Fear is an internal warning lamp

Fear is fully healthy and appropriate in the face of realistically dangerous situations, for example fear of the water in a tsunami. Fear can also be a warning lamp in situations that are still too difficult for us. If you want to overcome your fears, the most important question to ask yourself is this – is this fear appropriate? Is the situation actually dangerous or am I simply out of my depth here? If a glider pilot feels technically and practically well prepared, the non-flying stress level isn’t too high, and the task to be performed is achievable but an inappropriate level of fear still surfaces, then various strategies can help convert the fear into nervousness.

Each person can find out for themselves through observation what calms them down in stressful situations. Often some make use of ritual; for example praying, listening to a favourite song, taking a short meditative walk, etc. Others use mental training like going through the process in their head and using positive affirmations (“I am relaxed and focused”) that are best formulated when relaxed. Psychological tricks can also be employed, for example imagining a “cool twin” carrying out the task before you and then slipping into the role of the cool twin. You can talk to yourself out loud as a good instructor would (“You can do it!”). Relaxation and breathing techniques can also be useful.

If you are not making progress on your own, it doesn’t mean you have to give up gliding just yet. Usually a talk with one of the old hands will do the trick. Flying with an instructor always helps with problems involving being over-challenged. If all this is still not enough, you can get help from a sports psychologist. Professional sports people are regularly aided by sports psychologists. Worried about what your clubmates might say about it? Sometimes it takes more courage to take a launch with an instructor than to get in to your own glider in fear, but it can achieve more too.

Confronting fear is demanding; if we are always in the fear-free comfort zone we would never develop ourselves. When fear is properly utilized it can be a quite powerful teacher – ignored it can become deadly. Only when we manage to repeatedly overcome our fears can we continue to develop ourselves and achieve great things. ❖

getting ready for the Junior World Gliding Championships

Emmanuel Cadieux, MSC

JE SUIS FIER D'ANNONCER que je serai le pilote qui va représenter le Canada lors de la 8e édition des Championnats du Monde Junior de Vol à Voile (JWGC) qui auront lieu à Leszno en Pologne du 28 juillet au 10 août. Je suis le troisième pilote canadien à participer aux JWGC après Chris Gough et Selena Boyle. J'ai pris part aux Championnats canadiens en 2011 et en 2012 dans la classe club ainsi qu'à d'autres compétitions locales comme le MayFly. J'affiche aussi mes vols voyages sur le site de compétition en ligne OLC où j'ai remporté la première position de la catégorie Junior au Canada en 2010 et en 2012.

Dans ma préparation en prévision des JWGC, j'ai loué une voiture, un Cirrus Std. 75, j'ai fait les réservations d'hôtel et je suis maintenant inscrit officiellement à la compétition. Deux personnes m'accompagneront pour compléter l'équipe au sol. Cette année, je vais de nouveau participer aux Championnats canadiens qui auront lieu au Gatineau Gliding Club. C'est une excellente occasion de prendre de l'expérience et d'améliorer mes techniques de vol. J'ai donc l'intention de voler le plus possible d'ici les JWGC.

Étant en recherche active pour trouver des commanditaires, j'ai approché plusieurs compagnies en leur offrant de la visibilité sur le planeur et dans les communiqués de presse. L'aide provenant de donateurs à l'intérieur de la communauté du vol à voile serait grandement appréciée. En plus de l'appui financier que m'apporte l'Association Canadienne de Vol à Voile, j'organise un tirage dont le prix principal est une paire de billets pour n'importe quelle destination de WestJet (ils vont jusqu'à Hawaï). Les billets du tirage sont en vente au prix de 25\$ ou deux pour 40\$. Il y a quelques personnes au Canada qui m'ont offert de vendre des billets de tirage dans leur club. Si vous voulez en acheter ou si vous pouvez aider à en vendre, veuillez communiquer avec moi : <emmanuel.cadieux@videotron.ca>.

Il sera possible de suivre ma préparation et je mettrai des photos ainsi que des nouvelles concernant la compétition sur mon blog : <www.emmanuelcadieuxjgc2013.wordpress.com>.



María Szemplinska

I'M HAPPY TO ANNOUNCE that I will be representing Canada at the 8th Junior World Gliding Championships (JWGC) that will be held at Leszno, Poland from July 28 to August 10 this year. I will be the third Canadian pilot to participate after Chris Gough and Selena Boyle. I have flown in the 2011 and 2012 Nationals in Club Class and other local contests such as MayFly. I've also been posting my cross-country flights on the Online Contest (OLC) in which I've won the Juniors category in Canada in 2010 and 2012.

I'm now in preparation mode for the competition – I've rented a car, a Cirrus Std. 75, I've made hotel reservations, and I'm now registered for the contest. A two-person ground crew will complete the team. Looking forward to this soaring season, I will be participating at the 2013 Nationals at Gatineau Gliding Club. From my previous experience at the Nationals I know it's a great learning experience and I intend to keep on improving my flying skills by flying as much as possible before the JWGC.

For my fund-raising effort, I'm actively looking for some sponsors. I've been approaching several companies, offering visibility on the glider and in press releases. Any help from pilots within the soaring community would be greatly appreciated. To complete the financial support from the Soaring Association of Canada, I'm also organizing a raffle for which the first prize is a pair of tickets for any destination of WestJet (they do go to Hawaii). These raffle tickets are for sale at \$25 or two for \$40. There are already some people across Canada who offered their help to sell raffle tickets at their club. If you'd like to buy some or if you can help selling them, please contact me at <emmanuel.cadieux@videotron.ca>. I'm keeping followers informed of progress in my preparation towards the JWGC and I will be posting photos and news about the contest on my blog: <www.emmanuelcadieuxjgc2013.wordpress.com>.

The case for knowledge

Marc Arsenault, CFI Aéroclub des Cantons de l'Est

IN THE LATE SIXTIES, aviation suffered a rash of inexplicable jet crashes near airports on departure or landing. Over 600 casualties were numbered. Through research and technology, aviators were afforded a new tool to manage microbursts – and knowledge of their existence. With practice and procedure, the industry has pretty well eradicated this threat.

In the glider world not too long ago, flying with no radio was not uncommon. Initially, there was no requirement for them. Traffic around the patch was scarce and certainly no units existed which were sufficiently light or small enough to carry on board. The national regulator did not impose the equipment for the reasons of the day. Fast forward to 2012 – unbelievably, there is still no legal requirement for gliders to carry a radio as minimum equipment list.

The majority of us would never undertake a flight without a fully functioning radio today. We have grown to understand the irreplaceable safety tool that transceivers bring to our type of flying operations. The reason is simple: knowledge of aircraft position permits to build a more or less accurate model of our dynamic traffic scene. The general acceptance of radio has been made by their affordability and ease of powering.

The statistical safety aspect of flying gliders defies general aviation practice. We are flying in fully certified aircraft with no mechanical propulsion and are quite successful at landing on our home fields after hours out in the countryside. Power pilots do not understand this. Consequently we enjoy a desirable edge in this aspect. Yet our general safety record is dismal when it comes to avoiding aircraft in flight per number of hours flown compared to our motor colleagues. Rarely will you hear about a mid-air collision between two general aviation aircraft.

In the soaring world, this well-known problem has grown over the years as our birds have evolved from relatively low performance gliders to amazing glide ratios and fast birds that permit fabulous cross-country endeavours.

The nature of our sport requires close proximity to other aircraft in flight. From a power pilot's perspective this is a very risky proposition. An altitude separation of 1/4 mile or 400 metres is a major threat for most pilots, professional or otherwise. Yet we in the glider world work with much closer separation with an apparent blasé approach to it in too many instances.

To counter, we have created protocols – not laws – to allow multi-aircraft thermalling. This is all good if people mutually respect these protocols. We all know this is not always

the case. Furthermore, the human limitations of eye sight degradation, slow reflex, dehydration, fatigue and age produce unfavourable cumulative risks. All this is generally accepted by us as our assumption in thermalling is that everyone sees everyone.

Another major threat we have while flying is that we are unable to respect cruising altitudes (see CARS 602.34) – try explaining this to the aviation community. Most gliding operations in the country do not even bother with the AIM recommendation RAC 5.1 to make timely position reports on 126.7 since it is only a recommendation, “should” as opposed to “shall”.

Compounding the problem of unintended proximity is the general reticent attitude to report incidents using the SAC Safety Management System, SMS. The safety culture in aviation still prevents many pilots to share/report mishaps. If you walk away from an incident and nobody knows about it why mention it at all? Exposing a shortfall is not good for anyone's ego, regardless of how much collective learning can be served. It is very easy to observe that most “known” near misses are not reported. More troublesome are the unknown ones. How often do you hear position reports on the glider frequency between two ships within a precise area and yet they can't spot each other?

This summer in Canada we have had the good fortune, thanks to the diligent work of the PowerFLARM company and the SAC Flight Training and Safety committee, to have an astounding and most intelligent modern situational awareness tool certified ready for use. It is a definitive tool to provide knowledge of air traffic proximity, hence to airborne collision reduction. It has proven to be near flawless and certainly a giant leap in flight safety for gliding. For many decades we have accepted the use of parachutes to permit possible bail out in such tragic case. They have helped in some cases but sadly not all of them. PowerFLARM instantly improves survivability to a much larger extent than parachutes will ever supply.

Over the last summer, its operation has also demonstrated that we were not aware of existing traffic around our “bubble”, a disconcerting lack of knowledge. PowerFLARM does not replace looking out – it merely adds incredible accuracy to our traffic-acquiring efforts that we could not humanly produce in the past.

The capacity to spot stealthy gliders is made remarkably easy. Transponder traffic is an added bonus and now, because American carriers are gradually being equipped with ADS-B, we can spot them also (with all the ⇨ p32

Flight Training & Safety – 2012

Dan Cook, Chairman

Safety report See the separate safety report by SAC Safety Officer Dan Daly. We were all saddened by the fatal accident of Derek Mackie last summer at the Nationals. We extend our condolences to his family and friends. We also had a serious accident and wish a speedy recovery to the pilot. Similar concern over fatalities in the USA has their Soaring Safety Foundation planning to work more closely with OSTIV TSP for safety. Dan Daly has produced an interesting *free flight* article on a new approach to risk management.

We are hoping for better participation from clubs sending in their annual safety reports. To simplify the process a proforma has been prepared and posted in the SAC Documents section. Timely club reporting of observations and recommendations improves the overall quality and content of the national report and can benefit us all.

Contest safety The FTSC met with the contest CD last March to discuss what could be done to improve safety at contests. We recommended and discussed using a systems approach to analyze potential hazards and how to mitigate these risks. Terrain analysis is recommended as part of this process. Some issues of concern include contest rules that reward higher risk taking such as low saves or flying after collisions. We recommended to the Sporting committee that these types of risks be considered as land outs with respect to scoring. FTSC has also discussed fatigue monitoring and management as part of contest safety strategy and that priority be given to safety over pressures for contest completion.

PowerFLARM A petition was forwarded to FTSC by Marc Arsenault, ACE. The aim of the petition is to draw attention to the significant contribution to safety that PowerFLARM use can give us if we all use it. The petition is from PowerFLARM users to non-PowerFLARM users and has been posted on the Roundtable. In addition, discussions with the Insurance committee has matured into their development of a plan offering a 5% insurance rate reduction for FLARM users to help offset the cost of obtaining the devices.

Winching operations manual FTSC has been assisting Phil Stade on the production of ASC's Winch Operation Manual and training syllabus. Dave Bullock, from the BGA and a member of the OSTIV Training and Safety Panel (TSP) has provided some insights on the draft manual. In addition, Hugh Browning, also a member of the TSP, has done a detailed analysis of winching accidents in the BGA over the last decade and has made several recommendations which have been incorporated into the safety and training materials of the BGA. The TSP fully endorses these recommendations that have significantly reduced fatal accidents on winch launching over the past several years. This work will appear soon in *Technical Soaring*, the international jour-

nal of OSTIV, and is recommended reading for all pilots.

SAC simulators The SAC simulator was used for the western instructor course and for public relations and pilot trials at VSA and Cu Nim. The western simulator will be moving next to Saskatoon Soaring and the central area simulator to SOSA for pilot trials. The simulator-in-a-box concept was built and trialed. It provides a viable solution for clubs requiring some security to control use of the device. Plans were posted on the Documents section of the SAC website. I have again been amazed this season by a student pilot who had flying skills much more advanced for the few glider lessons he had. Much of his skills had been introduced on Condor simulation with a joystick and rudder pedals. Instructors can use the Instructor Ground School video demos to introduce the skills on the simulator then confirm/practise in the air in the spring.

Instructor course Allan Wood, Cu Nim CFI, conducted the most recent western area course with FTSC assistance to help with course standards. Three new Class 3 instructors, two Class 2 and two Class 1 instructors were also trained.

Personnel changes Richard Sawyer has retired from the committee to develop his growing engineering firm. We extend our gratitude to Richard for his input and hard work over the last 6 years with the committee. He was course conductor for several SAC instructor courses in Ontario. There is a vacancy now on the committee and I am looking for someone from southern Ontario to assist. Please talk to your zone director Stephen Szikora if you are interested.

Instructors manual The manual has had some proof reading by Gary Hill, ESC, and several typos have been corrected. The new 13th edition will be available electronically in the SAC website Documents section and in the next print run.

SOAR student manual SAC board has requested an electronic version be available on the SAC website and should be posted soon.

Preparatory ground instruction video Videos are still in production. Editing challenges have slowed down the process. The solution maybe hardware-related.

OSTIV Training and Safety Panel Ian Oldaker, Chairman of the TSP, has been appointed to a new FAI "Expert Working Group" on safety, tasked with recommending pilot safety improvements for sanctioned contests ➔ p33

Accident analysis

Part 1 – 2012

Dan Daly, National Safety Officer

THIS YEAR WE HAD AT LEAST EIGHT ACCIDENTS, including one fatal accident, one accident with severe injuries, one glider destroyed on outlanding, and a towplane loss. There were also 22 very serious incidents that resulted in injury or could, in some instances, proved fatal; this is above average of the last 10 years (1.5 fatality and 19 serious incidents average). Part 2, listing 2012 incidents, is in next issue.

The good news is that reporting from the clubs is up over 50% from last year, though it did take some chasing to get a number of them; they total 93 reports this year. The quality of reports varied from “one-liners” to thorough description of the incident, multiple viewpoints (pilot, witnesses), analysis, and corrective action (if required). This was greatly improved reporting compared to last year, but I got no reports from twelve clubs. How can you improve if you don’t know what your problems have been?

Fatality Analysis done independently since SAC NSO was not given access to the IGC file. There are two analyses on what may have happened by experienced cross-country pilots whose opinions I respect. The Transportation Safety Board has concluded their investigation and concluded that there are no safety recommendations (Class 5).

First analysis An experienced pilot (25+ years power, hang-glider, glider) with good currency ~100 hr/year in the last 3 years on type, 30h on type in 2012 to the date of the accident (OLC stats), pilot practised spins on type within 12 months. Pilot familiar with the area and experienced in off-field landings. Winds were from the north gusting 15-25 kts.



Accident occurred near the end of the convective day, thermals were broken up by wind, no attempt at thermaling below 1000 ft agl. Joined downwind at about 400 ft, initiated turn to final at 300 ft agl when a stall/spin developed. During the spin the glider impacted into trees, a branch entered the cockpit through the canopy.

Lessons learned In gusty, high wind conditions field options become limited by wind direction. High crops will further limit the options available. We should be prepared to make our field selection at a higher altitude than we would in more favourable weather conditions. Reviewing the flight path in *GoogleEarth*, it was apparent that there were very few options once the glider was below 1000 ft agl – this was surprising considering that the flight took place in an area which is considered very safe for outlanding. We must maintain extra airspeed in the circuit in windy/gusty conditions. It is easy to be fooled by high ground speed; the issue can be further complicated by turbulence generated by ground features.

Second analysis I concur with the first description of the conditions and flight path up until the pilot turned final at approximately 250–300 ft. Here the pilot looked at clear distance ahead to the end of the intended landing field of approximately 1500 ft. Assuming that flare and ground roll would take up 500 ft, the approach slope to the reference point would have been between 3:1 and 4:1 which corresponds to a slope angle of 14–18 degrees $(1500 - 500)/250 = 4:1$

This is quite different from a normal approach glide path of 3 degrees. I believe the pilot had doubts that he could land and bring the plane to a stop in the available space from this position and decided to turn downwind again to give himself more room for approach and landing. As he turned downwind at low airspeed, the glider entered a spin that was unrecoverable. The mechanical turbulence due to the strong NW wind was probably a factor.

Uncertainties There are not enough data points covering the last moments of the flight to determine with certainty what happened. The rapid loss of altitude in the 4-second interval between the second last and the last flight data point, as well as the position of the plane on the ground, indicate a stall/spin. However, it is not clear if the left turn after the turn to final was a controlled turn or already part of the spin. I don’t find it plausible that a glider would enter a spin after having turned to a high final into a very strong headwind. Had the pilot intended to land from this position, he would have had to point the nose down, deploy full spoiler and landing flap to execute a steep approach. The *GoogleEarth* photos on

which our assumptions about position and length of the intended landing field are based, are several years old. It's possible that the lay of the fields has since changed. To be certain one would have to walk the perimeter of the field with a GPS data logger.

Other factors There were a number of factors that added to the pressure of competition flying for this particular pilot:

- The pilot was scheduled to represent Canada in the upcoming World Gliding Championships but he had not been doing well up to this point in this competition – this must have added some pressure to perform.
- The pilot was a member of the Task committee, partially responsible for task setting and decisions whether or not to send the contestants on task. This was a difficult decision on the accident day, due to the strong winds and resulting marginal conditions.
- The pilot launched ahead of the field, acting as a “sniffer” to evaluate conditions from the air. By the time the start gate was finally declared open, the pilot had been airborne an estimated two hours before starting on a challenging task.

SAC NSO Comments

- The aircraft was a LAK-17a, flown 15 metre, and according to Dick Johnson's report in the March 2001 *SOARING* magazine, the aircraft “has benign spin behaviour”.
- Each possibility in the analyses is, in my opinion, valid. Either an aggressive turn to final, or a spin entry during a turn to position for a left-hand downwind after overflying the intended landing field to inspect it closely, is equally possible. I think a 15m flapped glider could have landed straight ahead into a 15-25 knot wind... How he got to that position is the bigger lesson, and that being in a position to make you have to maneuver aggressively in low level turbulence/high wind is the problem. Doing a circuit from the SAC recommended heights, into a good field, means that you do not have to expose yourself to risk in an outlanding, since mild maneuvering at most is required.
- The accident pilot's personal limits for outlandings were published in a briefing which is on the SAC website, as *Landouts 101*, under 2011 CAS Seminar. I attended, and spoke to him at lunch (we were both ex-CP140 Air Navs and friends) about this being too low. He shrugged and said, not for him.
- At the end of the day, each pilot has to make the decision on their limits themselves. I ask each of you to consider if your life is worth a few extra kilometres (for OLC), or a few hundred points (in a contest).

It is very difficult to get access to IGC files after crashes. Analysis of what happened is critical to understanding cause, but I have been unsuccessful in getting access to any of the fatal accident IGC files since I have been National Safety Officer. We are fortunate to have these accident analyses, but it would be better if every pilot told his friends, and club safety officer, that it's okay to give the file to the accident investigators and SAC safety officials in the event of a serious or fatal accident. I have; while I'd be dead, at least the lessons mean that others will get real information, not internet rumours.

Bail-out Serious injury – substantial damage. 29 July, from CADORS. “Presumed landing-out based on altitude cited by CADORS and distance from club”. The privately registered Elfe S4-A glider departed from Conn aerodrome (CCN4) for a soaring flight in the local area. After soaring for about 3 hours, on approach to land on runway 18, at an altitude of less than 500 feet, the glider pitched up and the pilot bailed out.

NSO comment The importance of having a parachute and plan is the highlight here. It is unclear what caused the departure from controlled flight; I *assume* that a structural failure of some sort was the cause (note, I own and fly a 1965 Austria). The pilot was very fortunate to have survived a jump from under 500 feet.

Recommendations Wear a chute and have a plan. It is important to have a thorough annual inspection and pre-flight, particularly on older gliders. (I'm not saying that it wasn't the case here, just a general observation.)

Off-field landing No injury – major damage/writeoff. Pilot cross-country experienced, mid-May. The flight distance is close to glide to an airport, but finds himself outside his local area after crossing an area of sink. The pilot tried unsuccessfully to go back to return to the airport.

Since low and with woods between him and the airport, he elects a field landing. He made a downwind from less than 500 feet vertically to the touchdown point, made a 180 and a final pear-shape approach to the field. Since hay was long and the field was bowl-shaped, the left wing of the glider touched even before the gear touched the ground. The glider made a groundloop, the fuselage broke and the tail struck the rear of the two wings causing damage to the ailerons and flaps. The pilot was unharmed.

Recommendations When in cross-country flight, we must always be ready for a landing. The last movements at low altitude must be made to get to an area favourable for landing rather than an airport out of range or a cloud in unfavourable terrain. A last minute field selection and non-standard circuit increases the workload that causes tunnel vision and reduces a pilot's ability to anticipate events and sources of danger.

Towplane Landed on wet grass strip and flipped – write-off – \$70,000

Glider wing struck trailer on landing roll – \$7,500

Gear failure Krosno had a hard landing with student and instructor – student was flying. Conditions mild. The landing was no harder than usual but resulted in an undercarriage strut failure. This aircraft has had multiple hard landings over the years and likely this contributed to metal fatigue. No additional damage resulted.

Serious Incidents

Injury Finger caught in spoilers during positive control check. During the pre-flight checks of spoilers, the first pilot shouted “wait” instead of “close” and the pilot at the controls did not understand. He closed the spoilers on the left ring finger of the first pilot, resulting in a deep cut.

Wing strike While handling a two-seat glider after a day of flying, a person pivoted the glider without verifying that the way was clear. A person who had just closed the canopy and was walking away received the leading edge of the wing in the middle of their back; they lost their balance and fell on the ground.

Altimeter mis-set/low approach During the morning inspection on the Twin Grob, the altimeter was set to 1167 feet instead of 167 feet. On the first flight of the day, the release was made at 3200 feet on the altimeter, which gave 2000 feet agl. When the glider came back to start its circuit, the pilots realized that the indication was incorrect. The instructor made a right hand modified circuit for runway 27 at low altitude.

L'Hotelier fittings loose or over-tightened on an LS-4 (could result in loss of control).

Uncontrolled spoiler open Descending at speed to runway at approx 110 kts when spoilers opened causing a change in attitude requiring abrupt reaction by the P1. Spoilers not locked? Closed spoilers, confirmed controls normal. Mild scrape to left arm of P2.

Near miss of pedestrian on hangar flight A planned landing near hangar on non-active runway. Pedestrian crossing runway seen when collision seemed inevitable but attempted to pass behind him (in the direction he came from). Radio call to operations – they shouted to him; pedestrian turned, looked at pilot, and panicked, running back the way he had come into the path of the glider. Glider was aggressively groundlooped left. Missed pedestrian by 3-4 feet, ended up pointing 180° to approach path with wingtip about 6 feet from fence.

Open spoilers on take-off Alert field manager called by radio and tow continued.

Flight with tail dolly Student pilot is distracted and then pressed by the towplane returning to the field. He gets in and performs a full flight with the tail dolly in place. A walk-around before each flight is necessary, and the wing runner should have checked as well. A similar flight in the USA last summer killed three people.

Near miss The privately-owned glider was on a local VFR flight circling at 5600 ft asl about 16:40 EST when it came into conflict with an unknown aircraft described as a business jet. Jet passed approximately 200 ft below the glider. A CADOR (#201201306) was submitted regarding this incident. *The story from the pilot's point of view is on page 22.* GGC has been attempting to reinstate the former airspace MOU; however, NavCan has been steadfast in not wishing to reactivate this MOU. Ironically, it was NavCan that came to GGC in 2003 requesting that this MOU be put in place. Pilots flying in the vicinity of the V316 airway must remain vigilant to high speed commercial traffic passing through the Pendleton area even if Ottawa Terminal has been notified of flight operations.

Near miss After hearing another glider was coming in my direction, I looked for him and tried to contact him twice, with no reply. I continued to look and saw him

about 100 feet below me. Other pilots had had no difficulty understanding my radio calls.

Near miss While flying the LS-4, I was surprised twice by another glider flying very near me (within 100m), and he did not respond to two radio calls. He later entered the same thermal and did not respond to radio calls. Inattention?

Near miss DG600/Piper Aztec “very close” – Piper was not on correct frequency for the glider aerodrome.

Near miss Glider joins two other gliders in same thermal at a similar altitude, takes a position just behind one of them, and nearly collides. Basic rule – call on the radio with intentions. A glider must always join the thermal in a visual position for other gliders (180° opposite for 2 gliders, 120° for 3, 90° for 4).

Near miss Collision avoidance, two cross-country experienced pilots. The two gliders on conflicting flight paths at similar altitudes. One pilot sees the other glider, assesses the situation safely and continuous reconciliation without radio contact. Then the second pilot saw the first glider and performs an avoidance maneuver. Gliders have a separation of about 250 ft at closest approach. *Recommendation* Use the radio – mid-air usually fatal.

Battery came loose while inverted. An interrupted DI, Dittel battery box not screwed in.

Analysis

I am greatly alarmed by the number of near-misses that could easily have added to our fatality numbers this year. We now have proven technology available to help prevent this, but there is very slow uptake of PowerFLARM at many clubs. Perhaps the insurance rebate will help spur pilots to adopt.

There were two incidents on first flights that suggest that a more thorough briefing and understanding of aircraft systems would have helped prevent. There were at least seven gear-up landings last year, some following other incidents. Proper use of checklists, in most cases (except a SZD-55 mechanical failure), would have prevented them.

There were 13 cases of canopies opening in flight, departing the aircraft, damaged on aircraft exit... This tells me that we are not completing checklists fully (testing the canopy is secure during the pre-flight, pre-aerobatic, or landing checks, or that we don't understand how the latches work). We are extraordinarily fortunate that the pilots chose to fly the aircraft through these emergencies, though there was a gear-up landing and also damage to an L-33 that followed the canopy problem. Unless we improve here, I think it's only a matter of time until a pilot panics and we have a preventable fatality.

There are a lot of runway incursions by visitors to clubs. I encourage each club to examine their procedures in this regard. Do you have signs for guests to tell them about the dangers of the airfield? To allow only authorized vehicles onto the airfield? Are they escorted?

There were 28 incidents dealing with tows or towplanes. That's a lot. Are our towpilots being worked to the point of fatigue? Are they given breaks, allowed to eat/drink during hot, busy days? Is the club pressuring them to return more quickly to the field, with approach paths not adequately separated from glider traffic? Do club ground retrieve operations give right of way to the aircraft on tow departing the airfield as required by law? There are several noseovers – are clubs pressuring towpilots to increase launch rates? Do you have a NOTAM or CFS notice about intensive glider operations?

There seems to be an increase in maintenance problems with older gliders. Daily inspections have been missing things that become dangerous later, or can cause damage. Be especially vigilant around older aircraft.

Hangar rash is easily preventable and someone in your club should always be advised. When things are unreported, your fellow pilots may die. You may die. Are you prepared to live with the knowledge that something you did cost a life if you don't report it?

I see a lot of scary 'installations' of carry-on electronics (eg, GPS, PDAs). Gatineau has installed RAM-mount balls on their club gliders, with a 12-volt power point (cigarette lighter type), so that members can get matching mounts that are less likely to cause problems in flight. Does your club fleet follow this best practice?

For the first time in recent memory, we had a life saved by a parachute. Do you wear a chute when you fly? You never need a chute until you need it very badly. IF yes, do you practise bail-out procedures? Is your chute current?

Conclusions

In summary, I see increased complacency when people are doing routine things (daily inspections, hangar stacking, towing gliders to flightline, hangar flying). Vigilance of people on the ground has saved lives in the air. Gliders are aging and need more attention as a result. We continue to see increased risk at the beginning of each flight, and at the end – usually in the circuit around the 'home drome', when people can turn their minds off ("whew, I made it home") at the most critical time.

Taken as a whole, 90 reported incidents, with 12 clubs not reporting any problems, tell me we were lucky to have only one death last year. I thank the clubs who did report, and encourage club safety officers to use this data in their spring safety meetings. After the AGM, I will post this to the FORUM and distribute a package to the club safety officers of those clubs who contributed.

A final plea. Please consider providing permission to your club (CFI, Safety Officer, or friends) for flight safety access for accident IGC files, so that the causes can be determined, and mitigating action to save your friends. I wish everyone frequent and safe soaring in the next year.

the "incident" vs Transport Canada

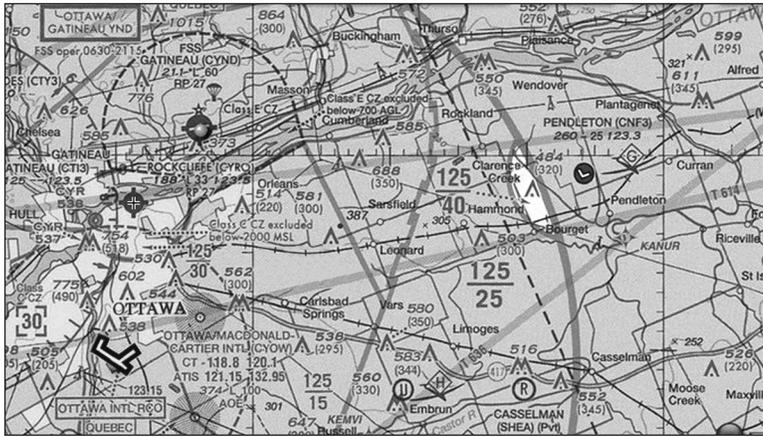
Mark Schneider, MSC

THIS EPISODE OFFICIALLY BEGAN with a registered letter I got at the end of August. Registered? – must be important, return address "Transport Canada" with enough stickers, stamps, and labels to cover most of the envelope. This did not bode well. I was intrigued, and opened it in the parking lot to find out that I was being investigated concerning an alleged contravention of Canadian Aviation Regulations, s.601.09(1) for a flight on 31 May. A single bell went off, "oh yeah, that flight". Note to self, read up on s.601.09(1) when I get home (it's airspace).

The following is my version of the incident, unfortunately we do not have the version from the person who observed me allegedly being in Class D terminal airspace. That Thursday I took the afternoon off – a good breeze out of the NNW, streeting by the end of the day with cloudbases up to 7000 – a May day! The class D airspace around Ottawa International has a 24 nm radius except for near Pendleton a/p, home of the Gatineau Gliding Club. GGC had brokered a 2 nm radius cutout inside the class D just west of their airport to allow flexibility to their operations since the field is only 2 nm east of the terminal airspace (see diagram). This cutout has a 4000 foot ceiling before one enters class D above.

This was my tenth flight of the season and I was well-versed in using *XCSoar* software on my tablet. One of the cool features of the program is that once you get close to an airspace boundary, it beeps in order to warn you that you are 2 km away from the line and that you must acknowledge for the moment/day of your position. By doing so, you go back to the default moving map page with all highlighted airspace boundaries. During an average flying season, I would fly within the YOW Class D terminal airspace fairly often. Regulations state that in order to enter the class D airspace one must make radio contact prior to entering the airspace; it takes me about three seconds to say, "Ottawa Terminal, this is glider Charlie Golf Golf India Xray". Once they acknowledge, you are legit to fly within the airspace per 601.09(1).

On this day, I flew into the above mentioned cutout area in the mid-3000s, did a few turns, snagged a thermal and started to climb. *XCSoar* also zooms in and beeps when you get within 200 feet of the airspace limit above (4000 feet), time to move out and clear this extension area. We are now just outside where the arc meets the 24 nm boundary and circling in a good five knot thermal in Class E airspace (good to 12,500).



The radio has been on terminal frequency since the 2 km beep; now the speaker comes alive with a slightly anxious voice of a regional airline pilot stating that he had to make some 'evasive maneuvers' in order to avoid a glider.

The first thing that crossed my mind was, "I wonder where that is?" The pilot and the controller went back and forth a few times before I saw the 50/70 seat Regional Jet fly directly below me by 4–500 feet. I remember glancing at the altimeter [5400 feet] and the moving map [glider outside the terminal airspace] – I'm legit. The next thing I want to do is call Terminal and give them a rant. This was not possible at the time since our regional pilot was on the radio for an extended period of time ("I want to report an incident ...") which caused the planes behind him to stack up on the radio. You know this happened because once the others get on the radio they are talking like auctioneers since they are behind the curve on where they should be in respect to their calls.

Once these aircraft got their calls in, I called Terminal, identified myself as the glider pilot who had the RJ fly below at 400 to 500 feet while flying outside the terminal airspace, asking, "do we have a problem here?" One could feel the hesitation before the controller replied. Perhaps those involved were surprised that I was monitoring the terminal frequency. The rest of the flight was uneventful.

Fast forward three months to the arrival of the registered letter. TC assigns a civil aviation safety inspector for each open file, this inspector does all the leg work, writes up the report and hands it off to their respective manager. This manager reviews the report and hands it off to the Regional Manager, Aviation Enforcement. There are three possible outcomes to an investigation:

1. The file is closed with no further action (not guilty).
2. A sit-down with TC with 601.09(1) as the topic of discussion (admission of guilt).
3. Suspension of licence and fine (repeat offender).

The investigation consisted of e-mails of about once a month and each e-mail stated that I had the right to remain silent but please call so that we can discuss your file. In other words, they had to prove that the air regulation was broken and not me proving my innocence. The last e-mail from the investigator stated "... if we do not

hear from you by such and such a date, our findings will be based on the available information". The three pieces of information available to them were copies of timesheet log entries proving the glider was flying that day, taped audio transmissions, and the radar data.

Well I've learned, in watching cop shows and listening to politicians, that one denies everything and admits nothing, so I used the "keep my mouth shut" defence. But a big part of my conscience was saying, "you did nothing wrong – defend yourself and call them on it". I thought about it for two weeks, and a few days before the deadline I made the call back to TC late on a Friday afternoon in early December.

The phone interview lasted about twenty minutes. One could tell by the questioning that they have been trained to ask you questions in such a way that your answers are in their favour. The same question is asked from different perspectives. Not that the questioning was frustrating (repetitive), but at one point the investigator realized that my answers were repeating themselves as well, and the questioning slowly stopped. They were looking for an admission of busting airspace which I denied. In hindsight, 'innocent or guilty' do not apply because TC seems not to want to hear your side of the story. They were not interested or could not answer my questions which were:

- Why was an RJ at 5000 feet, 24 nm away from YOW?
- What was an RJ doing 3 nm from an active gliding airport?
- Why was a file opened in the first place?

A commercial jet pilot in our club told me that they should have been around 9000 feet for their descent into YOW. The only reason that comes to me is the Costa Concordia: "Let's fly low so I can show you the hobby farm I want to buy". The RJ flying that close to a known glider airport is legal but foolish. Radar tracking data would have proved (or not) that their airspeed was 250 knots or less (air regs) and, based on their radio talk time, they saw me 1.4 nm (2.7 km) before flying below me.

The file was opened because the RJ pilot wanted to report an incident because he thought I was flying within the class D airspace. I stated that I wasn't. So it was my word against his. To prevent this investigation from happening again, one should get on the radio after hearing them wanting to report an incident and say something like, "Mr. RJ pilot, before you report this, you better be sure that you were not breaking an air regulation by flying faster than 250 knots."

After eight and a half months my adventure with Transport Canada concluded with, "In light of the available information it has been determined that no further action will be taken. The matter is now closed." They do not tell you why they closed the file. Was it because the airspace was never entered in the first place (radar echoes and telephone questioning)? Did their information show the RJ flying in excess of 250 knots? Did I dodge a bullet? Yes, and it was shaped like a jet.

the “performance triangle”

Bernard Eckey

AT A RECENT COACHING WEEK held in Australia a fellow glider pilot suggested that I read a little booklet on the mental aspects of golf. “It is almost compulsory reading”, he said. At first I thought that golf and gliding have very little in common but, on reading through the first few sections of this booklet, I saw that many of my suggestions in Chapter 6 of *“Advanced Soaring Made Easy”* were confirmed and repeated. I liked what I saw and read on until I came across a section entitled, “The performance triangle”. It made me pause and think! After reading it again I found myself reflecting on more than fifteen years of coaching and the many discussions I have had with fellow glider pilots over the years.

“Why are you flying gliders”, has been one of the questions I frequently ask but, with a few exceptions, the answers I receive appear to be somewhat vague and shallow. When I’m asked exactly the same question I often talk about the satisfaction that comes with flying hundreds of kilometres without resorting to an engine. Often I add that I’m doing it without creating noise and without polluting the environment. But now there was a much deeper explanation in this little booklet. Best of all, the author isn’t relating it to golf or any other activity. Instead he expresses the opinion that the vast majority of individuals engage in a sport primarily for three reasons:

- the rewards that come from performance,
- the experience and enjoyment stemming from the activity, and
- the learning (or growth) that takes place during that activity.

The author calls it the performance triangle and claims that by focusing on only one or two aspects we are short-changing ourselves. Then he turns to the competitively minded and asks, “When is the enjoyment happening – after you have won or during the course of the activity?” Clearly there is satisfaction in both but those who look for pleasure in a top placing often miss the joy in the activity itself. In any case, the benefits are further limited when the all-important third aspect is neglected.

That brings us to learning and growth. To many of us this may not sound like an appealing aspect of our sport but isn’t learning what every activity is all about? Learning and performance go hand in hand and are mutually reinforcing. Put differently, when we learn we perform

better and our enjoyment instantly increases. I have yet to meet a pilot who achieves performance without serious prior learning. After all, what we learn stays with us for the rest of our flying career.

Like every other sports person, a glider pilot will revel in a good performance and it is not hard to see why. Performance equals success and success equals fun. Whether we like it or not, without ongoing learning we will have neither success nor fun. Then it only becomes a question of time until the activity gets boring and loses its appeal. All too often the result is a drop-out or at best a watching of things from the sideline.

This raises the question whether there is a hidden message for the gliding movement as a whole? I leave the answer up to you but would like to remind you that we have a steadily declining membership despite the fact that we attract plenty of new members every year. All of them have put their hard-earned money on the table to join our ranks but all too often they throw the towel half way through their initial training or shortly after.

Could a greater emphasis on learning combat our high drop-out rate? Again, you be the judge but the questions immediately springing to mind are:

- Are we providing regular ground training?
- Is our club library up-to-date?
- Are we encouraging our members to attend theory lessons?
- Is our post-solo training as good as it should be?
- When did the club last provide real practical outlanding training?
- Is the club culture conducive to learning and personal growth?
- Is the club management actively initiating learning opportunities other than normal flying activities?

If the answer is “Don’t know” or “Maybe”, we would be well-advised to look a little deeper into the benefits that personal growth and enhanced learning can bring to our sport, our club, and to the entire gliding movement. ❖



Walter Chmela awarded the Queen's Diamond Jubilee medal

Walter Chmela, the founder of York Soaring, was awarded the Queen's Diamond Jubilee medal on 16 October by his MP, Chungsen Leung. The medal recognizes his over fifty years of volunteer work and devotion to soaring, mentoring young people, and flying records (his 37 year old Canadian citizen altitude record of 40,843 feet (12,449m) still stands. Under his leadership York became one of the largest gliding clubs in Canada. It won SAC's *Roden Trophy* for excellence so often that the requirements were changed so other clubs would have a chance.

To encourage people to take up the sport he loved, he bought gliders and eventually an airfield with his own money. He made a point of keeping charges low to attract young people and women. Over 3000 glider pilots (ages 16 to over 80) and 550 Air Cadets learned to fly at York. The Hong Kong Air Cadets have been sending officers and cadets to York since 2009.

In 2000, Walter co-founded *Youth Flight Canada*, a charity offering bursaries to youth. Its affiliate, *Freedom's Wings*, gives people with disabilities the feeling of freedom through gliding. Canada's first fully accessible glider was acquired after a 2-year trial. Intro flights and flying instruction are free. He ensured the success of both programs by offering free use of York Soaring's airfield and facilities. The scholarships and flights for handicapped people have now been introduced by other clubs in Canada. Now in his 80s, Walter continues working with *Youth Flight Canada* as its treasurer.

His commitment and dedication to aviation prompted the FAI, the world governing body for aerospports, to award him the Paul Tissandier Diploma in 1993. He was also inducted into Canada's Aviation Hall of Fame.

Of the 200 or so esteemed members, he is the only one whose occupation was not in aviation. In 2008, the club's airfield was re-named Walter's Field in his honour.

Neil Macdougall

On Sporting Code simplification

I wrote an article in the 2012/1 issue, "*Saving the Poor Badge Pilot*", that gave some history of the Sporting Code and how it has tended to become more complicated over time, and why. The consequence has been problems and confusion in record or badge claims and questions of interpretation even from the "experts" like national Claims Officers.

I shortened that article into a more formal paper on Code simplification for the March IGC meeting, asking for international suggestions on good ways to proceed. It was favourably received. As a result, the paper is now on the IGC website; the download link is <www.fai.org/downloads/igc/discussionpaper>, with an e-mail address established for responses, and copies were sent to all the big gliding magazines for general exposure.

Tony Burton

† Charles Yeates

The Canadian gliding fraternity has lost one of its '60s and '70s top soaring pilots.

The funeral announcement published in Halifax said: "... on June 19, Charles Yeates joined his great love, Kris, in eternity. Kris passed away only a month earlier on May 11, 2012. Charles had a wide circle of friends throughout the world. While he enjoyed many successes in business, his true passion was flying gliders ..."

I first got to know Charles in 1959 when he was vice-president of SAC and I was a director: a relationship that continued through '60 and '61, and again in '67. I do not know much about his early history in Canadian gliding, do know that Charles' first glider was a Slingsby Kirby Cadet, a 40s-era British solo trainer! A member of SOSA, he soon became a top cross-country pilot, in 1957, '59, and '61 earning the BAIC Trophy for the best flight of the year with his 1-23, and again in 1966 in a Std. Austria.

Charles was always active competitively. Nationally, he won the Shell Trophy for winning the Canadian Nationals at Regina in

2012 Instructor and Safety trophies

Walter Piercy Trophy (instructor of the year)
Dean Toplis, Great Lakes Soaring

Dean has been the CFI for the past five years, served on the board of the club, and has served as Chief Tow Pilot. As CFI he made 158 instructional flights and 31 tows in 2012. He organized the club's 2012 ground school, and it was attended by 18 new students and some other members of the club. Dean attended each ground school lesson and introduced the speakers as well as giving a number of the lessons himself. He wrote a huge proportion of the Great Lakes Ground School lesson plan content.



Hank Janzen Trophy (for safety work)
Pierre Gavillet, Montreal Soaring Council

Pierre made a huge effort at researching, designing and applying the principles of Safety Management System techniques over the last three years at MSC. His leadership in the development and introduction of a Safety Management Program for MSC has been exemplary. In particular, his risk assessment for the Lake Placid wave camp, for the many SAC members from various clubs who fly at Lake Placid, has made a difference in this very different environment.

1959, flying a 1-23 and again at MSC in 1967 flying an Austria. Later, from 1991 to 1998, he chaired the SAC Sporting committee. On the World Championships scene, Charles first competed in Poland in 1958, where he placed 18th in the Open Class, then 1963 in Argentina where he placed 9th in the Std. Class, 1965 in Britain where he placed 9th in Open Class, in 1968 in Poland where he again was 9th in Open Class, and in 1999 in Poland placing 20th in World Class. This was his last Worlds competing, but not the end of his participation as he was a valuable team member at subsequent World Championships.

Later, Charles moved to Halifax and then flew with Bluenose. After Charles decided to leave the contest scene, he and Kris chased Canadian citizen two-place records while flying in warm winter locales. Between 1987 and 2009, they accumulated fourteen distance and speed records in various categories.

Charles was an enthusiastic supporter of the World Class Glider concept and became the Canadian dealer for the PW-5 and PW-6. He visited several clubs with his demonstrators and was very generous in allowing club members to fly them.

Terry Beasley

The best new soaring book

The new 3rd edition of "Advanced Soaring Made Easy" by Bernard Eckey is now available in Canada. No topic is missed in this excellent 430 page book. It is recommended by the Flight Training & Safety committee, and all pilot comment is very positive, especially from those fairly new in their training or to cross-country flying. It has been called "the new Reichmann", who up to now has been the go-to author on cross-country soaring theory and practice.

I placed a notice on the SAC Roundtable in December (which many of you did not get to see). Some clubs really jumped on the book – 33(!) orders came from Cu Nim, 14 from Champlain, 13 from Rideau Valley, and 6 each from Saskatoon and CAGC – all small to medium-sized clubs – 98 in all so far.

The 432 page book is \$65 plus mailing (\$13 in the west, \$18 to the east – it's heavy). Mailing more than one together is much cheaper – call me for a quote. However, if your club can organize the sale of nine books, I will have the overseas distributor mail the standard box of 10 directly to the club. That entirely avoids the mailing cost, and **the 10th copy is free** for the club to do whatever it wishes – chain it to a table in the clubhouse or present it as a flying award. E-mail me for further details.

Tony Burton

La vie d'un pilote Français au Canada

Me voilà rentré en France, après 7 semaines passées au sein du club York Soaring. Super expérience, vraiment très différent du vol à voile en France.

Les gens là bas sont tous adorables, très accueillants et font énormément d'efforts pour se faire comprendre par un pauvre Français à l'Anglais très limité!

Ma mission là bas: effectuer des baptêmes de l'air pour le club et pour *Freedom's Wings*, aider au sol, sortir et rentrer les planeurs, enfin en gros, une "aide" étudiante. Ce fut très enrichissant de découvrir une nouvelle culture aéronautique si différente. Tout est différent, de la façon de tenir l'aile pour décoller jusqu'à la formation, en passant par le remorquage.

La météo quant à elle, a été folle tout l'été. Au total seulement six jours de pluie cumulés en sept semaines ! Les jours de thermiques pur ont été rares, laissant place la plupart du temps à de jolis cumulus, parfois "baisus",

mais cumulus quand même. En moyenne, les varios sont moins bons qu'en France, mais le ciel est mieux pavé, rendant les conditions plus faciles.

Les météos fumantes sont... comment dire... extra fumantes! Nous avons eu deux journées successives exceptionnelles. Je n'avais jamais vu ça auparavant en France. La base des nuages à 6000 pieds en moyenne, des ascendances plutôt moyennes pour une journée exceptionnelle (3 m/sec) mais très constant et très facile. Durant ces deux jours, j'ai pu faire un petit circuit d'environ 250 km en Twin, le premier jour en décollant à ... 14h (non préparé car on ne s'attendait pas à de telles conditions, sans GPS et sans carte, avec un ancien du club (Geza) n'ayant plus sa visite médicale, qui en avait les larmes aux yeux au retour).

Le deuxième jour fumant, j'ai pu voler sur: un Astir. Quand on se met en tête que l'on pilote la meilleure machine monoplace de la plupart des clubs Canadiens, on se sent de suite le roi du pétrole. Et moralement, c'est super efficace ... ce fut un super circuit, cette fois-ci un peu plus préparé, avec une carte et de gros cercles noirs matérialisant les zones interdites (peu nombreuses), dessinées par Zach, un jeune pilote du club juste avant mon départ.

Et fort heureusement, un logger de fortune qui a quand même marché et a pu me logger 455 km Netcoupe (468 km OLC) à 75 km/h de moyenne (cf trace GPS ci-contre).

Malgré ma prudence extrême (pas envie de me vacher dans ce pays où je connais très peu la langue et où je ne suis pas certain d'être aussi bien couvert par les assurances qu'en France en cas de dégât), et mon obstination à vouloir rester haut, le rythme fut quand même assez bon. Avec un pilote connaissant bien le coin, le 500 passait sans pousser. Et je n'imagine pas combien en LS-1 ... bref, fumantissime! Ce vol est aujourd'hui le record de distance pour un planeur du club, oups, pas fait exprès!

J'ai également pu visiter une toute petite partie du pays en voiture de location (très peu cher là bas, environ 25\$/jour pour une voiture toute neuve...)

J'encourage tous les pilotes Français hésitant à tenter cette expérience. Et j'espère aussi que cela donnera l'envie aux jeunes Cadets Canadiens de venir découvrir le vol à voile en Europe ... je les ai fait tant baver en leur montrant nos conditions et nos machines les pauvres, eux qui sont habitués aux vieux Schweizer 2-33 et dont l'un des rêves est de

pouvoir piloter un jour ... un Astir! J'espère que cela les a motivé à continuer et qu'ils sont convaincus que le monde du vol à voile est infini.

Un énorme merci donc à tous les membres de York Soaring, et plus particulièrement à Mel, Eva, Tony, Patrick, Zach, Dennis (for the LS-3), Paul Chalifour, Charles Petersen, Mario, Dee et Matt Watson, Stan, Wayne, Jean, John P, John C, Gaze, et Paul Moggach.

Jerome Rablade

One girl's flights

In the 2011 winter/spring I studied hard with the other cadets at my squadron in hopes of receiving the glider pilot scholarship summer camp. There was fierce competition as we all wanted to go to the camp and become a member of the sky. I have wanted to fly ever since I was a little girl having my first flight in an airplane. I flew with my Air Cadet squadron and love being in the air. When the cable drops your stomach is in your throat with excitement and adrenaline. You're weightless, no longer tethered to the world. One of my dreams is to soar through the clouds.

I thought that dream had disappeared last year when I was told I didn't make it. My mom urged me to branch out and look at other options available to me and I did. I discovered the Saskatoon Soaring Club, and my hope to someday be in the sky returned.

My gliding bursary helped me to go out and glide with the club last summer. I am so grateful to those who created it and made the bursary available to many other young people like me. I spent my summer in the L-23 Blanik having many aerotow flights with the different instructors belonging to the club.

At the end of the season I was eight flights away from soloing and I had got up to 7000 feet! This flight was one of the most memorable flights I've had to date. It was one of my last in the season and there was great lift that day. My instructor and I shared one of the thermals with a couple of birds.

Next summer I hope to refresh the skills I learned last year and to reach my dream of becoming a glider pilot. Without the help of the bursary I would have had an extremely difficult time to get where I am today. It helped me a lot and for that I wish to say thank you to those who helped make the bursaries possible and for choosing to give one of them to me.

Thank you very much, **Tu Clothier**

SAC Marketing & Publicity committee 2012 report

The new Marketing & Publicity committee was launched at the SAC AGM in March 2012. Since then, several initiatives have been started. The first initiative was a full page colour ad in COPA *Flight* alongside Bob Katz's excellent series on gliding specifically focused at power pilots. The advertisement was run in the June 2012 issue. The ultimate goal was to have a regular advertisement in COPA *Flight* on a monthly basis. SAC has purchased a 12-month quarter-page ad for 2013 and our first one appeared in the February edition of the publication.

The committee activities were largely put on hold for the summer months as everyone enjoyed the flying season. However, I continued to explore opportunities to publicize our sport on a national scale. In August, I recruited a couple members from my club and we visited the Royal Canadian Air Cadet

Prairie Region Gliding School. This was a very successful visit and a great way to share our sport with an interested group of young people. For 2013, I would like to coordinate visits to all the Region Gliding Schools. I would also like to create an eye-catching poster to be distributed to each cadet during this visit as a keepsake. A more detailed report of my thoughts on attracting current and former Air Cadets to our clubs can be found in the Fall 2012 issue of *Free Flight*.

For 2013, there are a handful of ideas the committee is planning to explore. In addition to the monthly advertisement in COPA *Flight*, the committee is planning to approach several Canadian magazines to explore the possibility of articles on gliding in Canada. Some ideas of magazines that the committee may approach include Canadian airline in-flight magazines (WestJet's *Up Magazine*, Air Canada's *EnRoute*, Porter's *re:Porter*), *Canadian Aviator*, *Wings*, and possibly some magazines that focus on outdoor living.

New for 2013, SAC also has a new program to assist clubs with their local marketing and publicity efforts. SAC will support the marketing and publicity costs incurred by a club by matching at 50% of the expense to a maximum of an amount equivalent to 10% of the paid SAC memberships on 1 October of the year the expenses were incurred. To apply for this program, forward a description of the expense and receipts associated with the expense to Jay Allardyce.

The committee is always looking for innovative ways to promote our sport nationally. If you have an idea you'd like to share, please do not hesitate to contact me, Jay Allardyce, at <allardyce.j@gmail.com>.

Free Flight in colour?

This issue and subsequent ones will have a lot more colour in each issue, but you will have to go to the .pdf version archived on the SAC website to see more than the colour cover.

Airspace 2012 annual report

As 2012 drew to a close and 2013 started, it appears that the long-threatened move toward Class C airspace has begun in Ontario. Nav Canada has been under pressure for a number of years to positively separate small and slow (us) aircraft from the big guys. In theory they have two airspace classification options available to them to accomplish this:

1. *Class C* This is positive control, radar serviced airspace – very soaring unfriendly.
2. *Class E* Transponder required. This is soar-

ing friendly, for VFR traffic there is no ATC intervention; separation of the big and little fish is provided by all aircraft in the airspace having transponders, allowing onboard systems (TCAS) to provide separation.

The problem is that gliders have an exemption from the requirement to carry transponders (*CARs 605.35(1)*) and this exemption effectively removes Option 2 from consideration. This problem has been simmering for at least a decade but various forces in the last three years have put this solidly on the front burner. In public and private discussions Nav Canada has said that since there is no appetite for removing the transponder exemption they were going to start moving to Class C in areas where it is a problem. In general they would rather not do this, it costs them money to set up radar sectors, but in many cases it is the sole remaining option.

Current situation Last year the control zone around London a/p went to Class C (from D). This had little impact on soaring. This year it appears that the Kitchener control zone, and the Quebec City and Ottawa terminal control areas are next on the slate for conversion from Class D to Class C. The Ottawa TCA in particular will have a chilling effect on local clubs if it goes Class C. Meetings are scheduled as this goes to press.

In the near future the WTM (Windsor-Toronto-Montreal) corridor project is moving to completion, probably in spring 2014. It was supposed to be completed last summer but negotiations with the US military for routings

in Michigan held up implementation of the final phases. Nothing is official at this time but indications are that large swaths of what is currently Class E transponder required airspace on the west and north sides of Toronto are under threat of being changed to Class C. To repeat, nothing is official but it is hard to imagine any outcomes that will result in soaring not losing access to some airspace around Toronto.

Moving forward we have no indications of specific areas that will be examined next, but the trend appears pretty clear. If we wish to mitigate it we are faced with a stark choice: either hope the loss of airspace to Class C is not too severe or petition Transport Canada to remove the transponder exemption and try to retain the option of equipping and flying in the airspace by keeping it Class E transponder required. Neither option is ideal.

On another subject, the Alberta airspace study and realignment is ongoing. It appears there will be some impact on operations at Cu Nim while Chipman (Edmonton) might actually gain airspace. This was promised two years ago for implementation this spring, however due to the pressure to get Calgary ready for the new runway operations it has fallen by the wayside. Don't expect the issue to be dormant for too long though; it is likely this will start to move ahead again this spring.

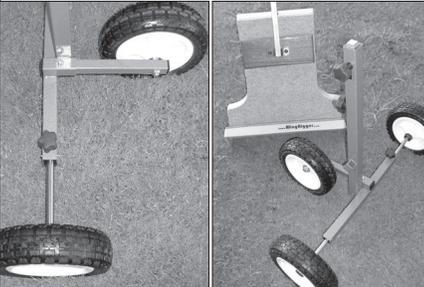
That's it – generally a quiet year but one ending with many indications that the coming years will be much more challenging.

Scott McMaster, chairman

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Solo Assembly System

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2013 insurance information

As in all previous years, insurance coverage will be extended through 30 April to renewing aircraft to allow for the processing of renewals. The policy year will run from 31 March 2013 to 31 March 2014. It is important to complete your renewal as early as possible before 30 April. Failure to renew your coverage and submit premiums can cause your coverage to be void in case of an incident, with no payment of your claim. As I update this report, we have completed negotiating the 2013 Insurance renewals. Several changes to the plan this year:

- Base rate premiums *decreased* approximately 5% across the plan. This reflects our stabilizing loss ratio as well as recognizing ongoing work by FTSC, many clubs and every individual to improve our flying and handling practices.
- There will no longer be options for alternative hull deductibles of 5% and 10%. There was very low participation in the options and the available pricing did not make the trade-off between increased owner risk and premium benefit a prudent alternative to offer.
- Claims-free bonuses will also increase slightly over last year, resulting in further savings to qualifying aircraft.
- Aircraft flying with PowerFLARM are eligible for a 5% discount on their premium at renewal. Unfortunately, we are not able to offer prorated discounts for those purchasing a unit part way through the year. A PowerFLARM serial number will be requested.
- The renewal process will not be driven from the renewal website this year. Each owner and clubs will receive a renewal e-mail with the quote and a link for direct renewal and payment. The e-mails will be sent dur-

ing the last week of March to the address we have on record for your aircraft and will contain instructions and links for those wishing to make changes to their coverage. Insurance certificate documentation will be e-mailed upon the payment clearing.

- *Paypal* will no longer be available due to its cost. Online payment will now be processed through the commercial *CertaPay* system which provides for:
 - a. Direct debit from your bank account. This will make on-line payment available for club insurance payments as well as for private owners. Pilots who choose this option will need to do an easy one-time, no-cost, on-line registration to *CertaPay*.
 - b. Credit card payment.

Club renewal packages will be e-mailed to each club insurance contact and private owner during the last week of March. It is also important to let us know if you have changed your e-mail address.

Due to changes to the renewal process this year, it is *critical* that you read your renewal notice when you receive it. If you have not received your notice by the time you read this, contact me directly at <insurance@sac.ca>.

Your SAC membership “validates” your insurance coverage, so ensure that you deal with your SAC membership promptly in April or May by submitting your membership to your club. Failure to be a current SAC member could create a situation where your insurance coverage may be considered void in the case of an accident or claim.

It’s important that clubs forward their membership updates to the SAC office in a timely

manner. Ensure that member information and fees as applicable are submitted for *all* club members to ensure coverage. Make use of the on-line membership list submission from the SAC website so that the SAC list is as current as possible. If you have questions regarding the on-line membership update process, contact John Mulder at <johnmulder@shaw.ca>. There is more detailed information on the structure and coverages available in the SAC insurance plan on the SAC docs web page. Open “*Insurance 101*”.

In June, we will be validating private owner renewals for SAC membership. I will be sending e-mail notification to any private owner not showing as a current 2013 SAC member based on the membership as submitted to the SAC office by each club.

Fuel tank spills Be aware that most property insurance, including the policy for our club premises, specifically excludes environmental damage. Some clubs have already approached us in this regard due to government requirements around fuel storage. We are working on sourcing separate insurance coverage for fuel spills from tank storage.

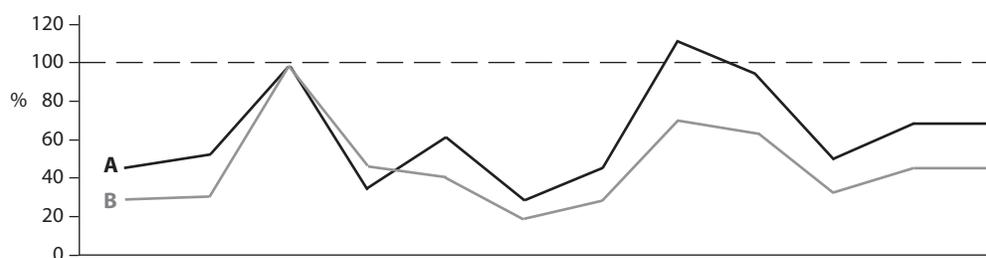
Keith Hay, Insurance chairman

Towpilot wanted

Summer towpilot for SOSA. A non-paying position in exchange for hours. Tailwheel and gliding experience preferred. Ideal for budding commercial pilot. Send resume to: Herrie ten Cate <htencate@rogers.com>

SAC INSURANCE HISTORY, 2001 – 2012

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Insured Clubs	38	35	33	36	32	29	29	23	24	25	23	22
Total Aircraft	306	276	351	368	337	336	313	288	278	295	290	280
Hull Value (\$M)	9.49	8.56	13.35	13.60	12.7	12.3	11.7	11.5	12.0	13.1	12.7	13.5
Hull Loss Ratio (%) A	42	51	97	32	60	26	42	110	96	47	66	66
Total loss ratio (%) B	26	29	96	45	38	16	27	68	63	30	43	44
No claim bonus paid (\$)					9538	7632	8400	6586	5140	6887	8191	12758



Safety & Training

Local training flights

from a talk by Helmut Reichmann years ago at a gliding conference.

It's really not necessary for us to travel to the ends of the earth and fly the most expensive sailplanes at so-called "Soaring Edens". After all, it rains even there sometimes! Such undertakings may well be worthwhile as far as experience is concerned, but are really only necessary for training in the most extreme cases. We can train effectively near home in fact, even on local flights around the airport.

Here are a few examples of ways in which local flights can be made useful training experiences, as well as fun – after all, boring holes through the sky is just that – boring.

- We can always try to climb as well as humanly possible in every thermal, to out-climb others, to change thermals often, perhaps even to set a height limit above which we'll only accept thermals of a given strength or better. Below the limit any lift can be accepted.

- We might try a barograph contest: During a given time period (one or two hours), we'll try to gain as much total altitude as possible. We may also rule that one may not climb in the same thermal twice in succession.

- We can fly in a two-seater with a pilot of similar abilities, taking turns at flying and observing each other's technique, criticizing and being criticized, and explaining our reasons for flying here or there and what we expect to find on arrival. We'll be astonished at how often we are wrong!

- We can set an altitude limit above which we won't climb, for practice in finding lift at low altitude.

- On really weak days, we can see who stays airborne longest. (For safety reasons, circling below 350 feet is forbidden.)

- Every landing is planned as a spot landing. Better pilots start their approach intentionally too high or too low, for practice in different outlanding situations.

Such local training flights can increase the interest of club flying operations on those days that are just too weak for cross-country flights, and are ideal for the training of new pilots who are not yet ready for cross-country.

Even the normally unloved training ships are suddenly competitive among themselves. Especially talented pilots will become evident more or less automatically – these are the ones we can expect much of when they start flying cross-country or in competition.

Moreover, there's nothing wrong if these talented pilots don't always turn out to be the ones with the most hours in their logbooks or the flight instructors. Ambition has its place in a soaring club, but not envy or jealousy.

A good instructor should be proud if his former student ends up flying better than the instructor himself – it's the greatest success an instructor can hope for, and proves how much better his instruction is than the instruction he himself received earlier in his career. A good instructor will continue to help his former fledgling toward cross-country flights and, if he is interested and ambitious, toward competition with club cooperation.

A crash analysis from Italy

If you think that what happened here could not happen to you, you should leave the sport.

In Italy last summer, a highly experienced competition pilot crash-landed on a ridge. He realized that a landing in the trees was inevitable and had enough time to orient the approach attitude of the glider to maximize his chances of survival. In an analysis that appeared in *Gliding International*, he wrote:

Damage to the glider The wings took a beating at various points from the tree limbs and the spars were broken in several places. The fuselage was broken near the tail wheel whilst the tailplane was torn off. The nose was pierced on the right from a branch. It opened up the shell at dashboard height but fortunately built-in cockpit reinforcement expelled the branch.

Damage to me Haematoma and contusion to the right leg, stretching of ligaments and many bruises on the left arm, fracture of two sacral vertebrae, crushed L1 vertebra with D7, D9 requiring stabilization.

Causes of the accident I am guilty of 'improper conduct' during a contest flight. During the flight when parallel to the ridge, I thought I would take what lift there was and adjusted my speed accordingly. My external scanning had been too slow and too wide-ranging. I was passive, with a lack of response

and attention. All this was due to a state of great exhaustion. The flight conditions were extremely tiring, all the time flying along a difficult ridge. I did not drink and eat properly during the flight as I always do.

Weather It was a day of weak thermals average of 1 m/s and which were relatively sparse. The "Meteo France" weather forecast for the area confirmed turbulence and strong up-drafts and equally strong downdrafts caused by interaction of the wind with the local topography.

The helicopter pilot reported considerable difficulty in maintaining a hovering attitude at the crash site because of very strong turbulence.

The chain of events Summarizing the links in the chain that led me to the accident:

- I had no physical activity during the winter or the spring. It was the first year that I have not skied, I did not go to the pool and I did not do any cycling.
- In the three weeks before the event I had been busy all day, including Saturdays and Sundays at my usual management occupation.
- During the early days of the event I did not sleep well.
- The day before I outlanded immediately after release. This fact should have suggested that I stop.
- I was tired, and when you are tired or you don't want to fly, you should not take off.

Other considerations In all my years of flying, I have always tried to avoid making serious errors. For several years I have been aware of being exposed more and more to trivial incidents that happen due to over-confidence. So every time I got on board the glider I would say to myself, "be on guard – be careful". I have always been convinced that some accidents, even fatal ones, have been caused by such trivialities.

In the more than 100 contests I have participated in, not all flight days was I 100% psychophysically, but I always adjusted the conduct of my flights. For me this is the cornerstone of flight safety – adapt your behaviour to the glider, the weather, the geographical context and one's state of being. This time I didn't do this, and the serious thing is that I did not notice the problem in time.

This will be the most difficult thing to process and to forgive of myself!

Pilot data: *gliding since 1975, TT 6396 hr, total on type (Ventus 2cxa) 447 hr, TT previous 30 days 31:42 hr.*

Adrenaline, and reacting to an emergency

I learned from a police psychologist that when we are confronted with a sudden life threatening situation, our bodies will give us a shot of adrenaline. One effect is that of pulling the blood into the central organs to stem the flow of blood if we are hurt. Another effect is diminished mental capacity – the classic “deer in the headlights” situation.

If you are confronted with something that causes this adrenaline jolt when you are flying, you will *not* be able to sit and calmly reason your way out of the situation you find yourself in. A friend gave me a good saying: “you don’t rise to the occasion, you revert to your training”.

The police psychologist reinforced this. He was part of a study that looked at situations where police had used their guns.

The least dangerous situation was where a police officer was on duty and was called to a situation. The second least dangerous situation was where an officer was off duty, working a security job. By far the most dangerous situation was where the officer was off

duty and with their family and had to respond. In this situation they are no more equipped to handle the situation than the average citizen.

Here’s an example: we have an instructor with 5000 hours who had a rope break at 100 feet. He side-slipped in the Blanik and ground-looped it before he hit the fence. When the dust settled, his student asked why he never used the spoilers. Obviously the adrenaline kept him from thinking about them – since spoilers are never used in the takeoff, they didn’t exist for him in this situation.

The analogy is this: if you have training and you have been thinking about that training and how to handle the situation before entering into it, you are far more likely to be able to have those skills available when you get the adrenaline jolt.

Because of this, I now mentally go through my emergency procedures for a rope break on take-off before I hook up. This includes moving all the controls the way I’d need to if the emergency happens. Conclude from this what you will.

Brian Bange

Recommended reading

You’ve probably forgotten all about many really good articles that have appeared in past issues of *free flight*. Today’s recommended reading is:

“the comfort zone principle”

The article is directed at instructors on improving student skills by always moving them just out of their comfort zone. Skills advance best when a pilot is slightly nervous and tense – not much learning is occurring when you are satisfied with what you are doing now. This is also important for any pilot wanting to expand their breadth of skills, and ties in nicely with the article, ‘FEAR’ in this issue.

Check it out – download the 2006/03 issue in the SAC archive.



- *Glider maintenance*
- *Major structure repair*
- *20 years composite experience*
- *Annual inspection*

- *Maintenance de planeurs*
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incentive to visit the club. Air Cadets represent a great opportunity for future growth in our membership so events similar to this are a great means of increasing awareness of our clubs amongst the Air Cadets. I hope this will result in more of them joining our clubs in the future. I encourage other clubs to seek innovative ways to connect with current and former Air Cadets as I believe they represent an important group to focus on for membership growth at our clubs.

As you can see, there are a lot of innovative things that clubs across the country are doing to promote themselves in their communities. If your club is doing something unique to promote itself, I'd like to hear about it. Feel free to contact me at allardyce.j@gmail.com to share your ideas.

I would also encourage clubs to poll visitors and new members to determine how they heard about the club and keep track of these stats. These statistics give you very important feedback to determine how best to spread the word about your club and where to focus your energy. Many of these ideas are not costly at all, but they do require people's time. If you can use your volunteer's time towards promotional ideas that will result in the best yield, that benefits everyone.

In closing, I would like to remind clubs of the new SAC program to assist clubs with local promotion of their clubs in their community. SAC will reimburse clubs 50% of their expenditure on marketing and promotion up to a maximum of 10% of the club's paid SAC dues for the year. If you would like to make a claim for your club for 2013, e-mail me with the details and a copy of paid invoices and/or receipts.

May the 2013 season bring fantastic thermals and growth in membership at all our clubs. ❖

Advertising that worked

George Domaradzki, RVSS

The Gatineau Gliding Club and Rideau Valley Soaring School have been alternately coordinating the Ottawa Glider Pilot Ground School for over 20 years. Course attendance has averaged around 15 students, but only about a third of these students eventually join a club to take up gliding. A few years ago we started giving out a free flight certificate to students in order to encourage them to come to one of the two airfields in the spring. This has had some success, but still less than half the students come to the airfield to take their flight.

We had used free or inexpensive methods of advertising to make the public aware of this course. We put ads in regional papers or in community sections of papers and recruited our members to put up posters at various locations. This led to limited success – attracting perhaps 5 to 10 students, with the rest finding out about the course through our websites. The low number of new members was barely sufficient to compensate for the turnover at our clubs.

So, in the fall of 2012, we decided to put an advertisement in the *Ottawa Citizen*. SAC pledged to help us with the cost through the SAC Funding Support for club-initiated membership marketing efforts. The representative in the *Citizen* advertising department was very helpful. She suggested using an "earlug". An earlug is a small ad in the top right corner of the front page of a section. She proposed that we also put an ad in the online version of the paper. She recommended more than one day of advertising because of the proven effectiveness of "repeat advertising".

So, we asked for two earlugs on separate days and one week of online advertising. This came to \$735. The cost included the design of the ad. The online version even included some animation. They looked like this (it is about 80% of actual size here):



The ads proved to be successful. We ended up getting 55 requests to attend the course. Unfortunately 15 had to be turned away because our venue could only hold a maximum of 40 students. A questionnaire I gave the students revealed that 25 students found out about the course through the ads in the *Citizen*. The remaining 15 had heard about it through other ways (word of mouth, posters at stores or work, web surfing, or referral from Air Cadet squadrons).

Of those who had found out through the *Citizen*, nearly all saw it in the print version rather than online. We have yet to see whether this will produce an increase in members, but from the discussion in the classroom, I expect many will be showing up at our clubs this spring.

This was a concrete demonstration of the power of advertising. Next year, if our clubs can handle the increase in students, I will recommend more ads in the print version rather than online. ❖

Eric Gillespie has now "retired" as the Ontario Zone Director. I want to take this opportunity to thank him for all the volunteer work he did for SAC over the past six years. Eric was a valuable contributor and knowledgeable advisor to the BoD. His participation will be missed.

We can never thank enough the volunteers who work on SAC committees as chairman or members – you can see them listed here on the inside back cover. A special thanks also to Martin Gagnon who worked hard to set up a new SAC forum. My apologies if I forgot anyone – and if you are willing to participate in SAC national activities in any way, contact your Zone Director or a committee chairman.

Safety Sadly, 2012 was a tragic year for gliding in Canada. Last year, an experienced glider pilot, Derek Mackie, died in a glider accident. Another one was seriously injured and is lucky to still be alive. In 2011 we lost two other experienced glider pilots and instructors. Take a moment to have a thought for them, their friends, spouse, kids, parents and family. Take a moment to think that it could be you this year.

Remember that our sport is not without serious risk. We have to do everything possible to improve safety all the time. We have a very bad average of 19 reported accidents and 1.5 pilots per 1000 killed in a glider every year in Canada. With 1077 members in 2012, statistics suggest that one of our club members will die flying this season and twenty may either be injured or seriously damage their gliders if we don't raise our safety and self-discipline level. This season, have this in mind. We can make a difference; over the last five years, the fatality rate is about half that of the previous five.

We have to learn from the mistakes of others because our life is too short to make them all ourselves. Take the time to periodically read accident and incident reports to improve your safety sensitivity.

We receive safety reports from about half of the clubs, and how the others are reporting within their clubs is unclear. If you are to correct an unsafe situation, first you must know about it. Reporting incidents, analyzing why they happened, and making sure they don't happen again, manages the risk. Have you read the National Safety Program? Does your club follow it? Fly often or at least do a circuit with an instructor before flying if you have doubt. Please let my first words in next year's annual report be: "None of our friends died last year".

Let 2013 be your best soaring season. ❖

season. Don Crocker and Capt Ole Madsen would fly to Terrace on the airlines and the three of us would then fly the Super Cub and the glider back to Prince George at the end of the weekend. This would be my first exposure to "Mobile Ops" with the Northern Wing, and believe me, it was something else.

I did six fam flights for the squadron on that weekend. One of them was 32 minutes off a 2000 foot tow. That was considered a long flight back then for the Air Cadet Gliding Program, (especially when there were cadets waiting to go glider flying). I also managed to land the glider on a gravel service road within the airport boundary when high winds (read – I screwed up) forced me to land short of the designated landing area. In addition to fam-flying, our crew conducted the squadron's annual Op Eval (right before we took their equipment for the spring season). At the end of the flying day it was time to start heading towards Prince George so we started loading up the Super Cub and preparing the glider for departure to points south.

We decided that Ole would fly the tug and Don and I would fly the glider. The weather was less than perfect, cloudy, raining and windy but the equipment needed to be moved. I remember I wasn't too happy about departing in those conditions but the guys from Northern Wing knew what they were doing and I was just along for the ride. We flew from Terrace to Smithers, and stayed the night. The flight took 1:36 hours passing by the airport at Woodcock on the way. Once in Smithers, Don and Ole sweet-talked Central

Mountain Air into letting us put the aircraft in their hangar for the night as there were no tiedowns on the field for us.

The next day we departed early to Burns Lake for a fuel stop. I didn't log the flight time because Don was PiC on that leg but my best guess is it took 1:30 hours. While Don and I were touching down in the glider, Ole was already fuelling the Super Cub for the next leg to Prince George. The airport in Burns Lake has a 5000 foot runway at 2343 feet asl. Its runway runs parallel to the Trans-Canada/ Yellowhead Highway and the CN rail line (which turned out to be a very good thing).

For takeoff, C-GIUT was loaded with Ole, full fuel tanks and all of our baggage. C-GCLB was loaded with Don and me. It was also May and a little bit warm outside. As the little 150-horsepower Super Cub struggled down the runway we were all about to get a lesson in density altitude.

On that particular takeoff it was quite obvious we were heavy, we were not at sea level and it was warmer than usual outside. Ole used every inch of that runway to get C-GIUT airborne. Ole could have let us go at anytime, so it was really Don and I who were the ones in trouble. Thank goodness that the rail line was there because Ole slid the Super Cub nicely into the rail line cut and we used it as our climb corridor. I kept pushing the spoiler/dive brake lever on the glider forward just to make sure they weren't deployed; they weren't. There was about a minute (more like five minutes) that I actually prayed for a train not to appear; that said, I would have made for a pretty funny story because we were

high enough to miss a train but low enough to scare all of us.

Anyhow, we crossed over the town of Burns Lake (located an unlucky thirteen miles from the airport) around 1500 feet above ground and never got a noise complaint – doing the math, the rate of climb for our formation was not that great. It took another 1:42 hours to get from Burns Lake to Prince George and it was raining when we arrived.

We tied down the equipment, had our laughs, and said our goodbyes. That was the last time I flew with the cadets. My career took me on a different path and I left the Air Cadet Gliding Program soon after this trip.

I did see the Super Cub once again in June of 1996 at Cranbrook, BC. It had her squadron titles removed; she had been sold to a private owner that January, ending 747 Squadron's self-sustained gliding operation. Their glider was sold to the Air Cadet League of British Columbia, her history then becoming somewhat anonymous as "Glider 8" in their fleet of twelve gliders.

On reflection, the fact that 747 Squadron had its own self-sustained gliding operation in the early 1990s it was really something to be proud of. It would no longer be allowed under the current structure of the Air Cadet Gliding Program. It took good, dedicated people like Ron, Murray, Bob, Al, Don, Ole and Tom Byrne to bring glider flying to the Air Cadets of 747 Squadron. ❖

Murray is currently a towpilot flying Bird Dogs at Hawkesbury with MSC.

the case for knowledge

from page 17

PowerFLARM traffic features) not that it makes much difference in Canada for now, but in the near future it will.

The troublesome story about low PowerFLARM utilization in Canada is the lack of collective approval. Old and well-anchored arguments kick in. The first one is on cost, although why pilots would put a price on safety is illogical considering the expense involved. The other issue is quite typical also; why would one consider installing a collision warning system when one has never experienced a near miss?

The foundation of the threat and error management model that we acknowledge as modern, active safety enhancement is based on combating these paradigms. We now have the opportunity to instantly reduce

mid-air collisions with the introduction of this tool, so why dither on its implementation?

Ironically, Canada has barely 200 aircraft to equip. If respected operations in New Zealand, France, Germany, and Switzerland have successfully demonstrated the operation of FLARM, what do we in Canada know more than these respected colleagues to prevent immediate integration of this safety tool?

Ironically, safety is only measured by the number of accidents suffered by a type of operation. Successful, active safe flying is not measurable. Only in the long term will the lack of such disastrous accidents make us appreciate leading edge use of knowledge and information. ❖

Note from Dan Cook

We had a petition on the SAC Roundtable to gather the names of pilots who use Power-

FLARM and who would urge other glider pilots to obtain and use these devices for flight safety. PowerFLARM can have a significant impact on situational awareness and safety if most (not necessarily all) glider pilots use it. I would hope that a fair number of my soaring colleagues would feel the same way. I only care about rational flight safety – PowerFLARM is as rational as we can get. If you agree, then send Marc an e-mail adding your support <marcarsenault@sympatico.ca>.

the Free Flight CD – \$6

248 issues of free flight – 1970 to now, and two article anthologies. 70 selected soaring photos – great for club events & computer wallpaper. Order from editor, payment by check or PayPal.

not only in soaring but all aerospots. No meeting of the TSP was held in 2012, though the Sailplane Development Panel (SDP), met during the Worlds in the USA. At this meeting safety was an important topic of the discussions.

The Safety Pays Working Group (SPWG) was set up by the International Gliding Commission to implement the "Safety Pays" proposal from the Sailplane Development Panel (SDP). This proposed a list of items that the competitors at FAI-sanctioned soaring contests could use to increase their scores. The SPWG reported at the SDP meeting that they do not want to introduce competition bonus points, stating "there must be no influence of Safety Pays initiatives on scoring ..." However they discussed the idea that a certain number of items from the shopping list have to be installed to participate in a competition. Work on this initiative continues. In the meantime the SDP will work with the SPWG, for example to better define the requirements on stewards, organizers, and training items such as cockpit egress tests.

National Safety Program status We received one more club Safety Program manual and an additional Safety Audit. Accident reporting remains at about 50%. It appears the more serious the accident the less likely FTSC is to receive a detailed accident report. Most clubs' Safety Audits are now outdated (more than three years) and their last audit should be reviewed by the club Safety Officer and any changes noted. It's that simple. Please let us know if you have made changes or improvements.

On a positive note, more clubs are starting to forward their Annual Safety Reports to FTSC and this is a significant indicator of a generative safety culture. These are invaluable inputs into our national safety report produced by Dan Daly. If your club has not done so please consider participating. It is an opportunity for an independent outside look and the potential of improving safety nationally.

FTSC Chairman	Dan Cook
members:	Joe Gegenbauer, Gabriel Duford, John Toles
National Safety Officer	Dan Daly
OSTIV TSP Chairman	Ian Oldaker

2012 SAC Flight Trophy Winners

- BAIC Trophy** – best flight of the year – pure glider
Bruce Friesen (Edmonton), Standard Austria
870.66 OLC pts, 598.84 km, 70.12 km/h
- Canadair Trophy – Adam Zieba** (York), best 6 flts – motorglider
3861.25 OLC pts, 3599.24 km total, 599.87 km average
- Canadair Trophy – Trevor Florence** (CRSC), best 6 flts – pure glider
3728.76 OLC pts, 3804.39 km total, 634.1 km average
- "200" Trophy** – best 6 flights, pilot under 200 hrs P1 at season start
Alan Daniel (SOSA), DG-800/18m
1832.73 OLC pts, 1728.65 km, 288.11 km average
- Stachow Trophy – Tim Wood** (York) absolute alt. >5000 m
maximum altitude – 27,474 feet (8374 m)
- Silver C Gull Trophy** – youngest pilot under 21 to earn Silver Badge
Robert Zachemski (SOSA), qualified at 17 years, 346 days
- Roden Trophy** – club soaring skills development – **Winnipeg GC**

FAI records Roger Hildesheim

Although the number of record claims was down in 2012, this was more than made up by the quality of the records flown. Tim Wood showed us the potential of using the Cowley wave by smashing Dave Mercer's 100 km speed triangle and 100 km speed to goal records with speeds of 183.3 km/h and 180.3 km/h respectively. The details were given in the 2012/4 (winter) issue of *free flight*. Meanwhile on the other side of the continent, Brian Milner was busy in May smashing distance records on the Pennsylvania ridges with a flight of over 2000 km. I am still awaiting the documentation on this flight from the SSA. This flight was over thirteen hours in duration. You can do the math regarding his average speed! Nick Bonnière was also showing us that you do not have to have a ridge or fly in the Rockies to set new records when he flew his 630 km free triangle distance record in May out of Pendleton. Talk about a warm up for the GGC MayFly contest!

Remember to always use the most current record application forms – there were some updates to them this year.

So went the 2012 record season. I hope that the milestones set this year will inspire all of us to go out try to beat a record (or two) in 2013.

magazines

GLIDING AUSTRALIA Bi-monthly journal of the Gliding Federation of Australia. <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 check or credit cards accepted. <office@glidinginternational.com>. Register on line: <www.glidinginternational.com>.

SAILPLANE & GLIDING – the bimonthly journal of the BGA. £39/yr airmail, £22.75 surface. <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>. (505) 392-1177.

SOARINGNZ – Personal check or credit cards accepted, NZ\$122. McCaw Media Ltd., 430 Halswell Rd, Christchurch, NZ <j.mccaw@xtra.co.nz>.

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Fox One 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 <www.foxonecorp.com>.

High Performance Sailplanes Dealer for Antares gliders, ClearNav instruments and soaring computers and varios, SAGE mechanical varios, Strong parachutes and Cobra trailers. For product details visit <www.langelaan.com> or e-mail <willem@langelaan.com>.

MZ Supplies Canadian dealer for Schleicher sailplanes, and Cambridge and Borgelt instruments. Ulli Werneburg <www.mzsupplies.com>, <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>. <nick.bonniere@withonestone.com>

Windpath 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>, info@windpath.ca, (905) 848-1250.

CANADIAN RECORDS (as of 1 Jan 2013)

T A record set entirely within Canada – listed only if a “C” record is flown.
C indicates a record by a Canadian citizen originating outside the country.
(These are awarded only if a greater “Territorial” record does not exist.)

RECORD	OPEN	15 METRE	CLUB	FEMININE	MULTIPLACE
DISTANCE (km) 3.1.4a Free distance 3.1.4b Free out & return 3.1.4c Free 3 TP dist. 3.1.4d Free triangle dist. 3.1.4e Distance to goal	Marsden / Apps 1093.0 T 1984 Tim Wood 690.2 T 2010 Adam Zieba 1016.4 C 2010 Tim Wood 1002.4 T 2008 Adam Zieba 1474.1 C 2010 Nick Bonniere 630.8 T 2012 Marsden / Apps 707 T 1984	Mike Apps 1093.0 T 1984 Tim Wood 612.6 T 2011 Adam Zieba 1016.4 C 2010 Tim Wood 1002.4 T 2008 Adam Zieba 1474.1 C 2010 Nick Bonniere 630.8 T 2012 Mike Apps 707 T 1984	Mike Giaticotis 480.6 T 2002 Tim Wood 628.1 T 2010 Adam Zieba 956.4 C 2010 Tim Wood 882.1 T 2008 Adam Zieba 1387.1 C 2010 Bruce Friesen 609.5 T 2011 Tim Wood 412.8 T 2010 Adam Zieba 557.7 C 2010 Nick Bonniere 719.9 T 2010 Adam Zieba 1387.1 C 2010 Tim Wood 628.1 T 2010 Bruce Friesen 599.2 T 2011 Spencer Robinson 655.9 C 2003	Ursula Wiese 607.0 T 1986 not claimed 750.2 C 2003 Sue Eaves 508.7 T 1995 Tracie Wark 592.6 C 2000 Tracie Wark 523.2 C 2007 Antonia Williams 305.0 C 1975 not claimed	Chester Zwarych (R Adam) 495.0 T 1986 Ernst Schneider (S Midwinter) 393.3 T 2008 Charles Yeates (Kris Yeates) 464.8 C 2008 Trevor Florence (J King) 689.0 T 2002 Charles Yeates (Kris Yeates) 590.0 C 2008 C Zwarych (H McColeman) 310.0 T 1984 Charles Yeates (Kris Yeates) 406.5 C 2009
ALTITUDE (m) 3.1.4k Absolute Altitude 3.1.4m Gain of Height	Bruce Hea 10485 T 1981 Walter Chmela 12449 C 1974 Dave Mercer 8458 T 1995	15m records began in 2007, earlier times shown are “starter” values Tim Wood 183.3 T 2012 Tim Wood 95.2 T 2007 Kevin Bennett 113.1 T 1988 Jerzy Szemplinski 94.8 T 2009 Walter Weir 111.8 C 1990 Walter Weir 105.7 T 1991 Willi Krug 108.8 T 1982 Peter Masak 106.5 C 1987	Tim Wood 172.3 T 2012 Tim Wood 99.0 T 2003 Tony Burton 101.4 T 2008 Dave Springford 108.0 C 2006 Tony Burton 103.3 T 2003 Rolf Siebert 128.9 C 2004 Bruce Friesen 85.1 T 2001 Tracie Wark 97.4 C 2006 Spencer Robinson 103.6 C 2003 not claimed	Deirdre Duffy 898.6 T 1991 A Cservenka 977.2 C 1969 Deirdre Duffy 657.5 T 1991	Bob Shirley (P Campbell) 908.3 T 1961 Walter Chmela (VanHartik) 10390 C 1975 Bob Shirley (P Campbell) 710.2 T 1961
SPEED, ▲ (km/h) 3.1.4j 100 km SAC 200 km 3.1.4i 300 km SAC 400 km 3.1.4j 500 km SAC 500 km 3.1.4i 750 km SAC 750 km 3.1.4i 1000 km SAC 1000 km	Tim Wood 183.3 T 2012 John Firth 110.6 T 1984 Charles Yeates 116.3 C 1994 Kevin Bennett 113.1 T 1988 Peter Masak 148.9 C 1985 John Firth 99.0 T 1987 Rolf Siebert 140.1 C 2004 Walter Weir 105.7 T 1991 Peter Masak 151.2 C 1985 Willi Krug 108.8 T 1982 Spencer Robinson 118.7 C 2003 Peter Masak 106.5 C 1987	Tim Wood 183.3 T 2012 Tim Wood 95.2 T 2007 Kevin Bennett 113.1 T 1988 Jerzy Szemplinski 94.8 T 2009 Walter Weir 111.8 C 1990 Walter Weir 105.7 T 1991 Willi Krug 108.8 T 1982 Peter Masak 106.5 C 1987	Tim Wood 172.3 T 2012 Tim Wood 99.0 T 2003 Tony Burton 101.4 T 2008 Dave Springford 108.0 C 2006 Tony Burton 103.3 T 2003 Rolf Siebert 128.9 C 2004 Bruce Friesen 85.1 T 2001 Tracie Wark 97.4 C 2006 Spencer Robinson 103.6 C 2003 not claimed	Ursula Wiese 59.6 T 1984 Tracie Wark 132.3 C 2000 Tracie Wark 99.6 C 2002 not claimed not claimed	Ernst Schneider (D Smith) 112.7 T 2008 Charles Yeates (Kris Yeates) 79.2 C 2007 not claimed not claimed
SPEED, O&R (km/h) SAC 300 km 3.1.4i 500 km SAC 500 km SAC 750 km 3.1.4i 1000 km	Tim Wood 124.8 T 2010 Walter Weir 191.3 C 1989 Kevin Bennett 126.3 T 1992 Walter Weir 150.9 C 1996 Walter Weir 145.0 C 1994 Brian Milner 147.0 C 1999	Hal Werneburg 115.2 T 1983 Walter Weir 191.3 C 1989 Kevin Bennett 126.3 T 1992 Walter Weir 150.9 C 1996 Walter Weir 145.0 C 1994 Walter Weir 142.6 C 1993	Bruce Friesen 113.6 T 2002 Jerzy Szemplinski 125.4 C 2007 Tim Wood 98.1 T 2008 Jerzy Szemplinski 125.4 C 2007 not claimed not claimed	Ursula Wiese 59.6 T 1984 Tracie Wark 132.3 C 2000 Tracie Wark 99.6 C 2002 not claimed not claimed	Ernst Schneider (D Smith) 112.7 T 2008 Charles Yeates (Kris Yeates) 79.2 C 2007 not claimed not claimed
SPEED, GOAL (km/h) SAC 100 km SAC 200 km SAC 300 km SAC 400 km SAC 500 km	Tim Wood 180.3 T 2012 Rolf Siebert 183.7 C 2004 Nick Bonniere 131.2 T 2010 Adam Zieba 151.7 C 2010 Tim Wood 128.2 T 2008 Adam Zieba 151.7 C 2010 Adam Zieba 151.7 C 2010 Tim Wood 92.7 T 2010 Adam Zieba 151.7 C 2010 Dave Marsden 97.1 T 1970 Adam Zieba 151.7 C 2010	Tim Wood 180.3 T 2012 Tim Wood 128.2 T 2008 Adam Zieba 151.7 C 2010 Tim Wood 128.2 T 2008 Adam Zieba 151.7 C 2010 Tony Burton 81.5 T 1990 Adam Zieba 151.7 C 2010 Charles Yeates 77.1 T 1966 Adam Zieba 151.7 C 2010	Tim Wood 169.5 T 2012 Rolf Siebert 169.0 C 2004 Nick Bonniere 115.4 T 2010 Adam Zieba 142.5 C 2010 Tim Wood 112.8 T 2008 Adam Zieba 142.5 C 2010 Adam Zieba 85.6 T 2010 Adam Zieba 142.5 C 2010 Adam Zieba 100.4 T 2010 Adam Zieba 142.5 C 2010	Tracie Wark 106.4 C 2002 Tracie Wark 129.1 C 2000 not claimed not claimed not claimed	Trevor Florence (N Marsh) 105.1 T 2000 Charles Yeates (Kris Yeates) 127.0 C 2009 Trevor Florence (J King) 91.5 T 2002 Jock Proudfoot (G Fitzhugh) 70.2 C 1981 not claimed not claimed

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info@erinsoaring.com

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www.gatineauglidingclub.ca

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www.YorkSoaring.com

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