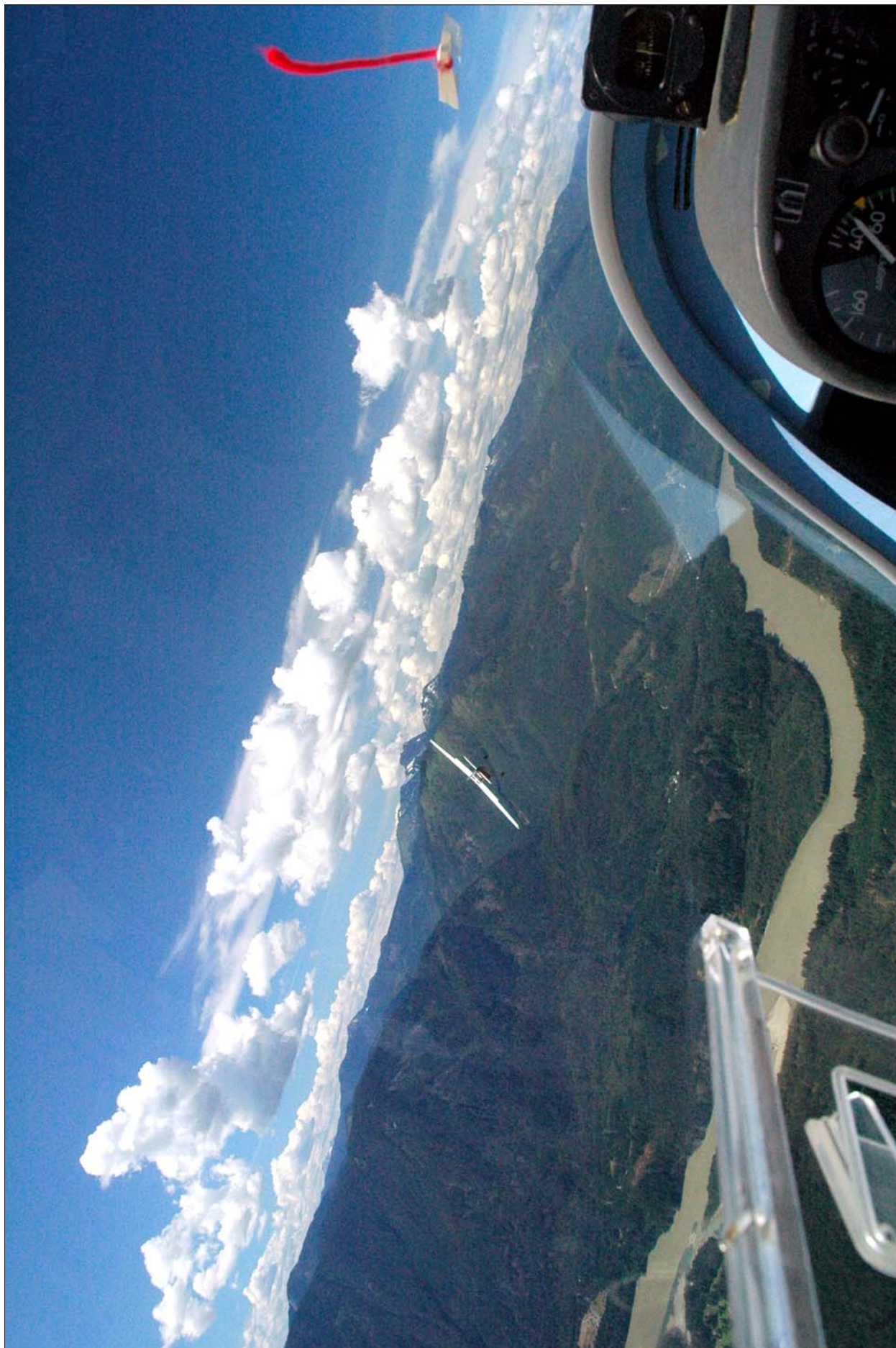


free flight libre



08/3
Summer



IN 1945, A GROUP OF FORWARD LOOKING SOARING ENTHUSIASTS organized the Soaring Association of Canada to “promote, enhance and protect the sport of soaring in Canada”. Over the years, this mandate has been interpreted and applied in a variety of ways. It is interesting to go through back issues of *free flight* and read articles relating to these issues. In many cases, articles written 20, 40, or 60 years ago are not much different from the topics that are being currently discussed. Promotion of the sport has always been a controversial issue. Promoting can mean marketing, advertising, or informally spreading the word. Who are the best “promoters”. There is a group that feels SAC should be directing a fair portion of its operating budget to national advertising. Others feel clubs are the most effective way – they are the most directly affected and know their market. Some of the best growth of new members over the years has come from individuals who speak enthusiastically about the sport and convince others to come out and share that enthusiasm. The new website has also been an excellent promotional tool.

Alberta Zone director John Mulder organized an attempt to promote the sport nationally while raising funds for our National team to compete in Germany. He put together a media template that clubs could use to promote a national soaring week, May 17–25, at the local level. The idea was to get the media to promote intro flights and report on the sport and the fund raising event for the National team. Clubs were informed, and the information was on the website and the Roundtable. Several western clubs stepped up, but for all the effort that went into this project, the results are disappointing. Silver Star (Vernon, BC) got excellent media coverage while raising \$900. Central Alberta Gliding (Red Deer) generated \$500, Saskatoon Soaring Club contributed \$100 plus private member donations to the contest fund, Edmonton Soaring generated \$326 and the Alberta Soaring Council donated \$500. SOSA contributed \$3000 to date. Clubs that didn't participate missed a good promotional opportunity as well as supporting our team. It's not too late for other eastern clubs to help Jerzy, Willem and Dave represent our country in Lüsse.

My understanding of the term ‘enhance’ is ‘to raise to a higher degree or level’. Over the years, the sport has been enhanced by the level of the participants competing for Canada at North American and World soaring events. Skills are honed by competing at local, provincial, and regional levels. Canadian competitors have placed very highly in recent events, with the elite representing us this summer in Germany (see Jörg's article beginning on page 4). The sport has also been enhanced by an increasing participation in the On Line Contest. Many more pilots are venturing away from their clubs and recording cross-country flights. Twenty-one clubs with more than 150 pilots are participating so far this year.

Our association has been very involved over the years in protecting the sport. SAC has developed an excellent working relationship with Transport Canada. For example, a few years ago SAC was able to negotiate an end to the requirement for individual radio licences and their associated fees. Within the regulations, clubs provide flight training, issue licences, and recommend instructor ratings. Committees representing a strong national organization, in cooperation with COPA, have been very effective in negotiations with Transport Canada and with NavCanada. Current issues include protecting airspace, transponder requirements, ELT requirements, and working with the European Union to simplify type certification when importing gliders. Soaring in Canada is also being protected through a national insurance plan available to all members, an increased emphasis on flight training and safety, and the hard work of all the SAC committees. The archived issues of *free flight* provide an excellent history of the promotion, enhancement and protection of the sport by SAC. Reading these issues, we can learn a lot about our organization and the many benefits it has provided to members over the years.

While aware of the rich history of SAC, the current directors and committees are looking to the future. This is the first issue of *free flight* that will now be published quarterly. The magazine is no longer the first source of information for members – that can be accomplished through the website. The focus will be on a larger issue with more stories, articles, and expanded features and events of current interest. Members are encouraged to contribute – Tony told me that getting enough this time was a real struggle – so if you enjoy reading your *free flight*, consider where those words must come from. YOU, that's where!

Planning for the future, the current Board is carefully looking at a number of issues. A reduction in expenditures and increase in membership resulted in a modest surplus last year. There are current proposals to promote and enhance the sport through investment in simulators, raise national and junior team profiles, develop youth assistance, etc. The challenge is to find a balance that will be acceptable to most, from the call for fee reductions to creative uses by special interest groups, to enhancing soaring for all members. Fly often! Fly safely!

free flight

2008/3 – Summer

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

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Cover

15 August 2007, the VSA Grob 103 releases at Hope Mountain with first-time glider-rider Mike on board with pilot George Eckschmiedt.
photo: Mike O'Cain

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Preparing for the 30th World Championships

Jörg Stieber, Team Manager

AFTER THE 2007 NATIONALS, Dave Springford, Jerzy Szemplinski and Willem Langelaan, three of our top seeded pilots, decided to take up the challenge and compete as the Canadian Team in the upcoming 30th World Gliding Championships. I felt honoured to be asked to serve as team manager. The competition for Open, 18m and 15m classes will be held in Lüsse, Germany 2–15 August, 2008. Standard, Club and World classes will fly in Rieti, Italy 6–20 July, 2008. Since the Canadian Team will be competing in 15m and 18m class, we will all be together in Lüsse.

Last fall we had our first team meeting to identify timelines, action items and to make plans. Gliders needed to be found, arrangements for tow vehicles, affordable accommodation and air travel needed to be made. Most of all, however, we needed to raise funds. Since Canada had not participated in World Championships for five years and the Wolf Mix fund had performed well, there was about \$10,000 available from the Wolf Mix fund. Although this is a significant amount, with an estimated total cost of \$60,000, there was still a major gap to be bridged with fund-raising.

Team Website and Fund-raising

With the help of John Brennan, a Team brochure introducing the individual pilots was produced, along with a multi-level sponsorship package. The documents were formatted for electronic distribution as well as hard-copy mailing. Dave spearheaded the creation of the Team website with the dual purpose of providing advertising space for our sponsors and of sharing the Team's preparation with the Canadian gliding community at large. During the official training week in Lüsse and while the competition is under way, we will provide daily news updates from the Canadian perspective via the team website. It also provides live blogs of the individual pilots, detailing their day-to-day preparations.

In past years, there was often a disconnect between Canadian pilots flying in the Worlds somewhere halfway around the globe and the gliding community at home, with information and stories feeding back rather slowly and sporadically. It is our goal to make this the best communicated Canadian participation in the Worlds ever. With a time difference of six hours to central Canada, we should be able to give you a brief heads-up in the morning followed by the daily highlights around noon in Canada. So save the link <http://sac.ca/team/index.html> on your browser and check daily on how your Team is doing!

Our fund-raising efforts, mainly driven by Dave and Jerzy, have been quite successful. To date we have raised about \$20,000 in additional funds through industry sponsors and various activities such as raffling free club memberships, seminars and the National Week of Soaring. Many thanks to our friend John Mulder and the clubs in Western Canada for promoting this event! All commercial sponsors are listed on our website – check it out!

The question of vehicles suitable for towing is not fully resolved yet. Renting cars with trailer hitches could prove to be the single most costly item in the Team's budget. I wrote a letter to the President of the BMW Group Canada asking for help in arranging for suitably equipped vehicles in Germany. To my surprise I received a personal response within days. Unfortunately, it said, there are no vehicles with trailer hitches in the BMW fleet in Germany. Willem wrote to Volvo in Germany but no joy there either. So far, Jerzy has found a loaner in Poland and a recent immigrant to Canada has graciously offered the use of a vehicle he still owns in Germany.

⇒ p30



The SOARING ASSOCIATION of CANADA

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

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

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

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

Material from *free flight* may be reprinted without prior permission, but SAC requests that both the magazine and the author be given acknowledgement.

For change of address and subscriptions for non-SAC members (\$30 or \$55 for 1 or 2 years, US\$35/\$60 in USA & overseas), contact the SAC office at the address below.

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Deadline for contributions:

10 March, June
September, December

Letters, etc

L'ASSOCIATION CANADIENNE DE VOL À VOILE

est une organisation à but non lucratif formée d'enthousiastes et vouée à l'essor de cette activité sous toutes ses formes, sur le plan national et international. L'association est membre de l'Aéro-Club du Canada (ACC), qui représente le Canada au sein de la Fédération Aéronautique Internationale (FAI), laquelle est responsable des sports aériens à l'échelle mondiale et formée des aéroclubs nationaux. L'ACC a confié à l'ACVV la supervision des activités véliables 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.

Les articles publiés dans *free flight* proviennent d'individus ou de groupes de véliables bienveillants. Leur contenu n'engage que leurs auteurs. Aucune rémunération n'est versée pour ces articles. 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. Les photos vous seront retournées sur demande.

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 signaler un changement d'adresse ou s'abonner, contacter le bureau national à l'adresse à la gauche. Les tarifs au Canada sont de 30\$ ou 55\$ pour 1 ou 2 ans, et de 35\$US ou 60\$US à l'extérieur.

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About club cross-country action

Hello everyone,

Although I haven't been a member of Cu Nim for a number of years, I'm still on their e-mail list and maintain an active interest in how the club is faring. In that regard I've been very heartened by recent e-mail comments about efforts to encourage more cross-country soaring at the club. I recently read an article by Jerry O'Neil that appeared in the January issue of *Soaring New Zealand* which discussed the impact of a cross-country soaring program on his club.

As Jerry explains in the article, membership in the Canterbury club (Christchurch) was hemorrhaging because of the boredom the pilots were experiencing as a result of flying only locally. Unfortunately, the editing of the talk he gave deleted the most important information – the results of implementing the cross-country training program. A chance encounter with Jerry during this past winter when I was vacationing in New Zealand provided me with an opportunity to ask that question. He explained that the program has been very successful and has been continued to this day. It stemmed the exodus of post-solo pilots by moving the student's goal from solo status to cross-country flying, thereby providing a new challenge with attendant rewards. In the 15 years between 1993, when the program was initiated, and the present, the club doubled in size and is now one of the largest and most active clubs in NZ. Most importantly, the members are now enthusiast glider pilots. Most amazing, this was accomplished during a time when participation in soaring, both NZ and worldwide, has been declining.

Having established the importance of an active cross-country program to any gliding club's health, a second point that I'd like to suggest is that initiating such a program isn't dependent upon Cu Nim mortgaging the farm to acquire an expensive, high performance, two-seater. In any cross-country soaring program, the first and most important step is to provide students with opportunities to practise their off-field selection and landing skills. A landout is a landout, whether it occurs at a near-by strip or 50 km away and either will generate sufficient stress (with corresponding deterioration of pilot skills) to provide the required training situation. Any of the club's Blanik trainers can be used very effectively for this step.

Once a student has mastered the skills of landing an L-13 off-field, the next logical step would be to land the L-33 Solo in the

same fields. The remainder of the cross-country training can be carried out with a combination of lectures and "follow the leader" flights with one of Cu Nim's experienced cross-country instructors.

Although articles covering most aspects of cross-country soaring can be found in past issues of *free flight*, there is a new book on the market that directly addresses the issue of the new glider pilot who is interested in spreading his wings. The title is *Advanced Soaring Made Easy* by Bernard Eckey. Major sections are: Local Soaring, Meteorology, Extended Local Soaring, and Advanced Cross-country Soaring. Although I obtained my copy through John Roake in NZ, I see that it has recently become available at Cumulus Soaring. Good luck to you all and I look forward to seeing lots of Cu Nim cross-country flights on the OLC.

Mel Blackburn, Rockies

On late badge claims ...

I just returned from the Ridge to find an envelope full of claims from SOSA Senior OO Dave Springford. The enclosed letter said:

"Hi Walter,
Here are some badge claims from last year. They were being held hostage by the OO's wife who had kicked him out of the house and started divorce proceedings late last summer, and he was only recently able to retrieve the papers from his desk at home – ahh, the life of an obsessed glider pilot!"

So my question is – can I process these in spite of the six month rule? Is that a SAC rule or an engraved-in-stone FAI rule. One of the claims is a 500 km flight.

Walter Weir

... I thought perhaps an exception could be made in this case. Tony

2009 International Vintage Soaring Meet coming to Elmira

The International Vintage Soaring Meet is to be held in 2009 in Elmira, New York. We, of course, are in the early stages of planning and would like to welcome as many Canadians to the meet as possible. The dates of the event are from 27 June to 4 July, 2009.

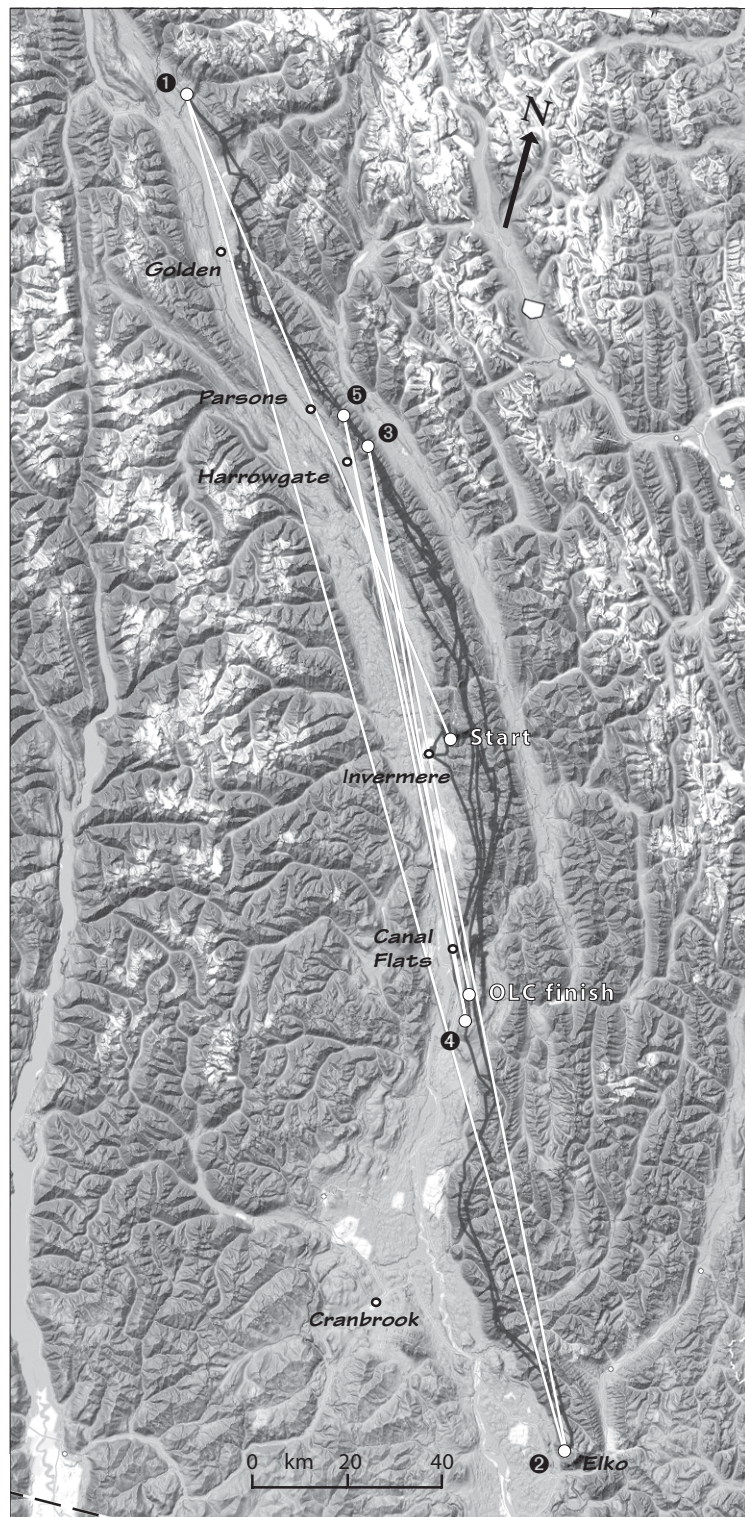
Walter Cannon, organizer
<supercub1@sbcglobal.net>

See poster on page 31.

a 1000 km out of Invermere

it simply happened

Allan Spurgeon, Rockies Soaring



1000 KM FLIGHTS IN CANADA are not all that common. I'm very fortunate to live in Calgary, Alberta and have a summer home in Invermere, BC, in the heart of the Rocky Mountains. We have excellent soaring conditions from April through October but in reality there are only a few days in the year suitable for 1000 km attempts. These days are hard to predict in advance, so one has to be ready in all respects. On 21 June last year, the longest day of the year, I attempted a declared 1000 km Diploma flight.

Thinking about a 1000 km flight didn't start on that day, probably not even that year. I have been a mountain power pilot for 35 years but have only been a soaring pilot for 10 years or so. Each year, I worked at improving my skills, setting optimistic goals and working diligently to fulfil them. I specifically focused on increasing my knowledge of the special techniques of mountain soaring. I always tried to maximize the realistic performance of the glider I was flying. I developed a keen interest in safe flight at and below ridge tops, I constantly explored for special places where lift could commonly be expected, I continuously increased my personal endurance, and specifically I tried to increase my average flight speed.

After I earned my glider endorsement, I bought and flew a 1-23, followed by a PW-5, in which I earned all three Diamonds, then a DG-400 in which I posted a few OLC 750s and finally I bought a Ventus 2Cm, AX1, in which I earned my 750 Diploma badge and achieved a 1000 km OLC flight, both in 2007.

I was not anticipating a 1000 km attempt on this particular day. I changed my regular morning routine because there was cloud at 8:30 am and I found this rather unusual and curious. I observed the sky from Tex's Coffee Shop till 9:30 am when I decided it really was working and I should launch. Fortunately, I have my motor-glider stored in a hangar at the Invermere airport and can launch at will, without assistance. AX1 was quickly pre-flighted and pushed out to the tarmac.

There are a lot of simple things to do – things I learned by trial and error. Things that, left undone, can spoil long flights. For example, I use a Volkslogger flight recorder and I learned it's a smart thing to erase previous flight records. If you forget – the logger can run out of memory and then it stops recording! Very sad when this happens, especially when you are on a task. Trust me, I learned the hard way more than once! Fill the water bottle – sounds so simple. However, if you count on the

water cooler in the clubhouse and it turns out to be empty and you decide to go elsewhere for water, then kiss 20 minutes goodbye. The glider's oxygen system has to have oxygen, adequate battery life, and the tank valve in the glider must be on. Finding a flow fault in flight is not fun especially when you go high and want oxygen. I use oxygen on most of my flights and have learned all too well the limits of my ability to twist my arms and neck to reach the nearby, yet impossibly located tank valve or on/off switches on the EDS unit. I don't have a microphone in my glider. I use noise canceling headphones for launch and I like wearing them all day. They need a battery, so spares are a good idea, and are best stored at the airport. I like to check in regularly, so somebody knows where I am in general. Dead batteries equal poor communication.

Food is a must, especially on long flights. Rationing is good as well. Gobbling up your lunch in the first hour or two is bad form. Have a good working relief system and lots of it, it's not much fun to land with a full head, so to speak! Hopefully, the glider batteries were charged after the last flight. I have a starter battery and an avionics battery. If I forget to charge either, then the day is shot. Glasses, sunglasses, hat and sunscreen are all important. Having them in the house or the other car just doesn't cut it. Can't forget petrol for a motorglider. It eats up lots of critical time if the fuel tank is empty, especially if the gas can is also empty or there is no oil left to add to the gas. All this stuff is so simple and basic, but I can assure you from experience that each component has the ability to drain serious flying time from a day, especially when you need all the air time possible to do a long flight. The magic word is "preparation."

I declared a 1000 km Diploma flight in my Volkslogger and launched on runway 33 around 10:30 am. This was my earliest launch in Invermere. I took a low thermal and shut down the 40 hp Solo engine at 5344 feet asl, another low for me. A little spoil-your-day incident took place on the launch – the Volkslogger's power cable vibrated loose and it shut down! A simple little thing I had forgotten to check before take-off – and this wasn't my first experience with this issue. I reinstalled the cable while still under launch power and circling, but now I'm not certain if I had invalidated my 1000 km Diploma flight attempt and should land and start the flight over. I muttered a personal insult and decided against landing. I would just fly on and do whatever. It's so easy to lose focus and get distracted.

I was facing a long day ahead. My first declared turnpoint was 235 km north of Invermere near the Mica Dam. I was anxious to get going. There really wasn't any great lift as I transitioned north from Invermere. However, this is my backyard and I know all the little tricks about getting away and flying at or below ridge top level. I flew 100 km north all the way to Mount Seven near Golden below the ridge, generally at altitudes of 6800 – 7200 feet asl. I wasn't planning to go that low but this is what was required to keep advancing, since the early day cloud bases were still hovering at the ridge top level. I made Mount Seven in fair time but I found conditions were less than robust. There was

mountain and valley obscuration with lots of precipitation, especially closer to the Bush Arm. I pretty much knew at that point the Diploma 1000 km attempt was over. The declared turnpoint at the Mica Dam was unreachable. I'm also thinking I should not leave the ridge at Mount Seven since I was only at 7200 feet asl. Perhaps I was just too early for Golden, and maybe, just maybe with a bit more time, the sun would poke out and start producing normal thermals.

I know this area very well and decided to leave the security of the ridge and push on a bit, bearing in mind of course final glide back to the Golden airport. It was normal to count on lift at the north end of the Blaeberry ridge – if not there then surely on the north side of the Blaeberry River at the low ridge abeam Donald Station. It was a nice plan but it didn't work. There wasn't any wind at all in the lower elevations and the sun stayed hidden behind the lower clouds. I went 30 km north of Golden airport which was about 135 km from Invermere. This was as far north as I was comfortable with.

I wasn't very happy with the air and couldn't climb so I turned at 6500 feet asl and limped back to Mt Seven, arriving at 3425 feet asl about 850 feet agl above Golden airport. Now I'm quite disgusted and somewhat agitated as (1) the 1000 km Diploma attempt was over and (2) worse yet, I was probably going to have to land at Golden. Having to land at Golden really sucked since it was still early and I could make a pretty good day of it. I don't like landing out or firing up the iron thermal. In my 10 years of gliding, I've never landed out, except at an airport, and I've only done one airstart out of gliding distance to an airport.

I wasn't concerned about making it to the Golden airport but I didn't have any wiggle room. I thought I was already too low for a safe airstart so that was not an option. A man on a quad saw me and came down the road from the hang glider launch point. He stopped, waved and watched me from above while I scratched. Little by little I used all my scratching techniques, lessons I learned from my PW-5 days, and inched my way up to near 5200 feet asl from a low point of 3077 feet. At 5200, I was still below the ridge at Mount Seven, but I felt comfortable leaving the scratching post and exploring a little further south looking for enough lift to get on top of the ridge. It took 35 minutes and some effort to get established on top of the ridge south of Kapristro Mountain.

Once established on top of the ridge around 8000 feet asl, I wasted no more time in this place and dashed towards Invermere with minimal thermalling. Needless to say, I was relieved that all was good again, although I was a bit drained. Crossing the Radium gap southbound, the air mass conditions changed. It got very, very turbulent, more than usual, and rough enough for me to think about pulling spoilers and calling it a day. After all, soaring is supposed to be fun, right? It's not always so and this really wasn't much fun, just lots of hard work.

Once I got south of Fairmont Peak, near Canal Flats, conditions smoothed out and I was able to climb and main-



Kevin Spurgeon

tain higher altitudes. I easily crossed the Canal Flats gap, in my usual way, over the low ridge in the valley, till I re-connected with the Hughes Range via the northeast sloping ridge, east of Premier Lake. The conditions there were now super, and it was on to Teepee Mountain, Lakit Lookout, and the Steeples. The Steeples are an impressive series of high peaks over 8600 feet, 110–120 km south of Invermere. These are spectacular and well worth some exploration on a day where you aren't pressed by a task. South of the Steeples lies the Lizard Range which is much lower in elevation, usually with lower cloudbases resulting in lower transition altitudes. This is a good time to do some thinking about wind, especially for the return flight. Getting stuck below the Steeples on the way back to Invermere with a north wind will be a challenge and visiting the ultralight strip there is a likely outcome. Conditions on this day were robust along the Lizard Range and there was no problem scooting to Elko, which by the way has a lovely grass runway.

Briefly I thought about pressing on to the US border but there were showers around and I couldn't face the risk of another major beat down. So, I turned north at 8800 asl without leaving the ridge at about 150 km from Invermere. Dick Mamini was cruising around in his PIK-20E in the Elko area. He had been to the US border and was headed northbound. It was nice to fly with him and chat for a while. He wished me luck and I gave him a wave and carried on north across the Canal Flats gap towards the Fairmont ridge.

I headed north without incident but there were showers popping up on the ridges north of Radium. Even though I had lots of altitude, the showers were heavy and I could only go as far as Harrogate, 65 kilometres north of Invermere, before I had to turn south again. I raced back south, bouncing past Invermere and Fairmont once again and went off the ridge south of Canal Flats to about 55 km from Invermere. I had lots of alti-

tude, I was at 8000 feet, and maybe should have gone further south but it was getting later in the day and I generally prefer coming home from the north versus the south late in the day.

About this time I started mentally adding up my legs thinking about how far I might actually be able to go on this goofy day. After numerous re-additions from memory, I realized I had actually gone quite far. I was thinking just maybe I could squeeze in a personal best, or maybe even a 1000 km OLC flight. That would be cool. It's funny how the simple math seemed impossible and I went over it time and time again. I knew I only had two OLC legs left to use and I thought if I could get north to the Golden area again, then at least a personal best would be in the bag. However – tic tock – the clock was relentless, the day was disappearing and the sky was most definitely blueing out. Great.

I limped out northbound along the ridges to Parsons which is about 70 km north of Invermere. I was determined to go as far as possible within reason. I turned south at 7000 feet asl which was an altitude for that time of day and circumstances that made my mouth dry. Once again, I muttered a personal insult, beating myself up for stretching my comfort zone. In reality, I'd have no problem making the emergency fields at Brisco and I was very confident I could stretch it to the Radium airport. I'm pretty cool and experienced with late day side-hilling and I got all the way back near Invermere with no problem. I checked in around 9 pm with Trevor at the Invermere Soaring Centre and managed to find a couple of good climbs taking me to over 9000.

More math again. I calculated that I had made 950 kilometres – more than enough for a personal best. However, now I was sufficiently high and could dash to secure the final 50 km to achieve a 1000 OLC. I only had the one leg left.

⇒ p31

the MayFly contest

"there is no shame in landing out"

Roger Hildesheim, GGC

PENDLETON AERODROME (the home of GGC) was established as a flight training facility in the 1940s and that spirit of learning, fun and adventure is alive and well with the 2008 edition of GGC MayFly contest.

The 10th anniversary edition of the GGC MayFly competition was held on the Victoria day weekend with 11 pilots/teams representing four clubs. In spite of a pessimistic weekend weather forecast, we still managed to get three contest days (Friday, Saturday & Sunday). Conditions improved each day with Sunday being the best day of the contest. Careful timing of launch and start allowed for a 2 hour task on Friday and 2.5 hour tasks on Saturday and Sunday. Two-seaters from RVSS (Grob Twin II) and GGC (Puchacz) paired the seasoned XC pilots with less experienced pilots. Evening programs included detailed analysis of the day's flights and a musical interlude (Celtic harp) on Saturday evening thanks to Lucile Hildesheim.

History The MayFly competition has its roots in the GGC "Un-Nationals" contest (see *free flight* 1993/5) which was started about 15 years ago by Glenn Lockhard and Rick Officer. The idea was simple – have an easy-to-score fun contest where flying and communicating with other pilots is encouraged to introduce pilots into the more structured flying of contests and FAI badges. The Un-Nationals was usually held in August and attracted a variety of low and high time pilots looking for something a little more structured than just flying around on weekends. In 1998, the format of the contest was changed slightly to account for the rapid advances in GPS recording technology and shifted to its current annual time frame of the Victoria day long weekend. Even with the variability of weather in May, the benefits of strong lift and just about every field being an available runway due to small or recently planted crops far outweighed holding it during the traditional summer holiday season.

Rules The contest now almost runs itself. The rules have not changed for ten years, the scoring program (a macro-driven Excel spreadsheet) developed and maintained by Nick Bonnière is error-free and easy to understand. My days as scorer are transitioning to my daughter Sonia as she is now familiar enough with the program to run it. The rules were formulated to try to maximize getting a contest day in with variable May weather. A unique feature of the handicap system is that pilot skill level as well as glider performance is handicapped so that less experienced pilots have a fair chance of scoring well and/or winning. Experience handicapping is applied to the calculated score as follows: 0 to 200 hours – 90%, 201 to 500 hours – 80%, 501 to 1000 hours – 60%, over 1000 hours – 50%. History has shown that a balance has been achieved, as experienced pilots can't sit

back if they want to score well. One point per km flown multiplied by a blended handicap. It's that simple...

The courses are three co-centric paths of increasing distance. The inner quad (47.1 km) uses three turnpoints to the east of Pendleton with the furthest being 16.2 km from Pendleton. The next triangle is 88.4 km long and uses turnpoints that are also local airports for additional pucker factor reduction. The largest task is a 111 km triangle.

Once any of the three tasks is started, it must be completed before heading out on the next circuit of the same course or the next task. Some years, flying around the inner quad during MayFly was like racing the Grand Prix with some pilots electing to do 5 or 6 laps of the course trying to increase their speed and efficiency each time. The other benefit is that you are almost always within sight of other gliders and only a radio call away from coaching. There really is nothing like a group of 5 or 6 gliders all heading out on course with the goal of getting everyone around if at all possible. Not exactly head-to-head competition but then we are trying to teach and learn at MayFly and, oh yes, have fun! We all know learning is enhanced in a fun environment.

Every evening includes a tutorial/analysis of the day's flights: the good, the bad, and the ugly in a positive and constructive environment. Strategies for rounding turnpoints in windy conditions can be compared and contrasted with other pilots' flight traces. The learning curve for newer MayFly pilots is fairly steep.

Day 1 (Friday) The Thursday evening forecast did not give much hope for Friday but by the morning things started to improve. After a flight operations safety briefing and review of the MayFly rules, the gliders were gridded and ready to launch at 14:00. After a short delay to launch a sniffer and verify that conditions met minimum start requirements (thermals to 3000 feet agl and consistent lift), the start gate opened at 15:35 and within 15 minutes all competitors were on course. Due to the short task and weather uncertainty, the task was limited to as many laps as pilots could do of the inner quadrilateral course in 2 hours. Raw scoring distances ranged from 15 km to 112 km with one safe landout. The total distance flown by all pilots was 670 km.

Day 2 (Saturday) The forecast again indicated uncertainty with rain showers moving in midafternoon. After the morning pilot briefing and the mandatory daily contest chant, *"there is no shame in landing out"*, the gliders were gridded by 11 and a sniffer launched at 11:30. After another 20 minutes, the spotty lift started forming into solid thermals and the launch continued. The start gate opened at 13:00 with an open course selection with 2.5 hour task time. Raw scoring distances flown ranged from 54 km to 148 km with most pilots returning to the field under a gentle rain shower that was still producing 1 knot lift. Two safe landouts were recorded. Total distance flown by all pilots was 847 km. ➡ **p31**

Who invented this sport, anyway?

the “Bald Eagle”

MY FRIEND ROGER WAS AT TORONTO SOARING for the Ontario Provincials, travelling with Lucile, Sonia, and Patches the Rabbit. Roger showed me the Robin Williams video about the origins of golf – you can Google it only if you are over 18. The gist of the video is that a Scotsman, having been over-served with their eponymously-named National Beverage, invented the game of golf, described as “Whacking a ball down a gopher hole with a stick”. In order to make the game more interesting (read: ‘difficult’), the hole was put hundreds of yards away, the stick was hard to use and there would be obstacles in the way.

The flag was put there to give you ‘hope’, and, once successful, you had to do this again seventeen more times.

Roger thought there were some similarities in the development of the “Sport of Gliding”. I think Roger’s on to something. Many times, while driving to the gliding club in marginal weather, I have passed courses full of intrepid golfers, and wondered why they would want to be outside on such a poor day. Duh! In soaring, the club beer fridge was put there to give you ‘hope’. It’s a long, hard road that has no drink at the end of it.

Roger suggested I should get to work on a diatribe blaming everyone involved in gliding since Daedalus and Icarus drank too much ouzo. It might go something like this – and I would suggest never, ever inviting Robin Williams to your club for an intro flight:

Williams: Och, I’ve invented a grrreat way to pass a summer afternoon. You hop in your aircraft and fly someplace.

Me: Sounds good. Let’s crank up the engine and head off into the wild blue yonder.

Williams: Heck no! You’ve got to glide there, with nae engine, like a lawn dart.

Me: Oh, so you only go a short way, then.

Williams: Heck no! You’ve got to fly a long, long way, seeking sustaining lift, thermic or orographic.

Me: So, you only fly when there’s lift on your route.

Williams: Heck no! Lift may-or-may-not be there, and if it is there, may-or-may-not be on your chosen route. If “No” to one or both, then it’s a lot like golf – you’re heading tae a gopher hole.

(Note: My friend Pat O'Donnell landed out in a golf course in Vermont and is proud to note it was only a Par 3.)

Me: So, you fly someplace, given the right conditions, and land to get a burger. Or to use the washroom.

Williams: Heck no! You’ve got to keep flying to various waypoints, all upwind, and as for washrooms, well laddie, that’s what empty Scotch bottles are for.

I was going to write more about how they kept adding stupid rules to make it harder for me to fly a task. Then I decided to do some research into the actual beginnings of gliding. Here’s what I have found. Like everything else these days, it seems to have been “Made in China”.

At <http://en.wikipedia.org/wiki/Glider> one reads: The common types of glider are today used for sporting purposes. The design of these enables them to climb using rising air and then to glide for long distances before finding the next source of lift. This has created the sport of gliding, or soaring.

(Note: I question the phrase “long distances” and I resent the implication that the next step is “finding the next source of lift”. For me, the next step usually involves planning a landing pattern. Glider pilots look for circling birds as an indicator of thermals. Turkey vultures are common examples of birds to get close to, as they glide gracefully with a minimum sink rate of 2 feet per second. One day, Jim Fryett, who was high above me of course, looked down and radioed that some hungry-looking vultures were in fact following ME, flapping their wings madly to stay aloft in the sinking air.)

History

In China, a glider was designed in the 5th century BC by a contemporary of Confucius. There is also a report that Yuan Huang Tou made a successful glide, taking off from a tower in 559.

(Note: There is about a thousand year gap here between the first and second flight. This shows a huge improvement in current wait times at modern clubs. Also, this would be the very first use of a “Huang” glider.)

Abbas Ibn Firnas in 852 flew off a mosque in Córdoba, Spain using a huge wing-like cloak to break his fall, which he survived with minor injuries. This was the first example of an early parachute. He recognized that aviation was difficult and asked himself: “What man-made machine will ever achieve the complete perfection of even the goose’s wing?”



The evolution of gliding

(My vote would be any airplane that, like the goose, goes south for the winter, with me aboard.)

In 875, at an age of 65 years, he made the first attempt at controlled flight when he invented a weight-shift hang glider with artificial wings as flight control surfaces, by fixing feathers to a wooden frame fitted to his arms or back. Written accounts at the time suggest that he made a ten minute flight, from the Mount of the Bride, near Córdoba.

(Note: Incurring overtime charges at his club.)

Abbas was seriously injured in the resulting crash.
(Note: Thus began the issue of high insurance premiums)

This was the first attempt at controlled flight, as he was able to alter his altitude (*I normally alter mine down*) and change his direction to return to where he flew from.
(Note: this was a long-time goal of Ray Wood at SOSA, who was trying to raise his own personal best of returning to his airport of launch twice in a row – see ff 2002/1.)

The flight was “largely successful”.
(Note: From now on, that is how I will log ALL of my flights.)

However, after successfully returning to his starting point, the landing was bad and he crashed to the ground. He injured his back, and left critics saying he hadn’t taken proper account of the way birds pull up into a stall, and land on their tails.
(Note: Nosewheel be damned, tailwheel pilots unite!)

He’d provided neither a tail, nor means for such a maneuver, and he later said that the landing could have been improved by providing a tail apparatus.
(Note: Since the Wright Bros. were about a thousand years hence, and flying had yet to be invented, how did they know about stalls?)

Eyewitness accounts

Abbas stated the following moments before he flew: “Presently, I shall take leave of you. By guiding these wings up and down, I should ascend like the birds. If all goes well, after soaring for a time I should be able to return safely to your side.”

(Note: From now on, I shall use this litany to replace the old ‘All clear Above and Behind?’)

Several eye witnesses reported the event. “Having constructed the final version of his glider, he invited people to come and witness his flight. People watched as he flew some distance, but then the glider plummeted to the ground causing him to injure his back...” Another account states: “We thought (him) mad... and we feared for his life!”

(Note: I readily identify with him, on both counts.)

An historian described the event as follows: “He covered himself with feathers for the purpose, attached a couple of wings to his body, and, getting on an eminence, flung himself down into the air, when according to the testimony of several trustworthy writers who witnessed the performance, he flew a considerable distance, as if he had been a bird, but, in alighting again on the place whence he had started, his back was very much hurt, for not knowing that birds when they alight come down upon their tails, he forgot to provide himself with one.”

Legacy

“Ibn Firnas was the first man in history to make a scientific attempt at flying.” Ibn Firnas’ flight was apparently the inspiration for Eilmer of Malmesbury, more than a century later, who would fly for about 200 metres using a similar glider in England (circa 1010).
(Note: I think that he was an ancestor of Derek Piggott or Ann Welsh.)

As Westerners teach their children about Sir George Cayley, Lilienthal and Santos-Dumont, the Islamic countries tell theirs about Ibn Firnas, 1000 years before their time. The Libyans produced a postage stamp honouring him. The Iraqis built a statue in his memory on the way to Baghdad International Airport, and the Ibn Firnas Airport to the north of Baghdad is named for him. The Ibn Firnas crater on the moon is also named in his honour.
(Note: It would be too much of a cheap shot to relate the “crater” to his poor landing.)

The first heavier-than-air (ie. non-balloon) aircraft to be flown in Europe was Sir George Cayley’s series ➡ **p29**

Époustoufflant! Quelle journée!

Jean-Guy Hélié, CVV Québec

Comment vais-je l'appeler, le vol de ma vie ? C'est ce que je me suis dit après mon atterrissage. En tout cas il mérite bien qu'on le qualifie ce vol hors de l'ordinaire, mais voyons quel adjectif qualificatif vous lui accorderiez après avoir lu ces lignes.

C'est un lundi de juillet que prend place cet événement, il fait beau, le vent souffle du nord assez fort pour que l'on doute des conditions dans lesquelles nous irons voler. Aux alentours de midi, quelques cumulus se forment et se déforment tout aussi vite qu'ils apparaissent, comme une horloge, toujours à la même place, juste au-dessus de la colline au nord du champ et ils se prolongent vers nous jusqu'au dessus de nos têtes juste pour nous taquiner. Ce sont dans ces conditions que mon vol a commencé.

Je sors le LS4 de son hangar, le prépare et à 13h10 nous prenons notre envol, grâce à Claude Rousseau toujours au rendez-vous pour nous remorquer. On se fait amener au faite de la colline située à l'est de notre piste et je largue à 2 300 pieds afin de pallier aux conditions difficiles qui m'attendent à cause de ce vent très fort qui nous vient du nord. À force de tourner dans un angle assez prononcé je parviens à gagner de l'altitude non sans me faire déporter puis je parviens à me rapprocher de ces nuages en perpétuelle évolution.

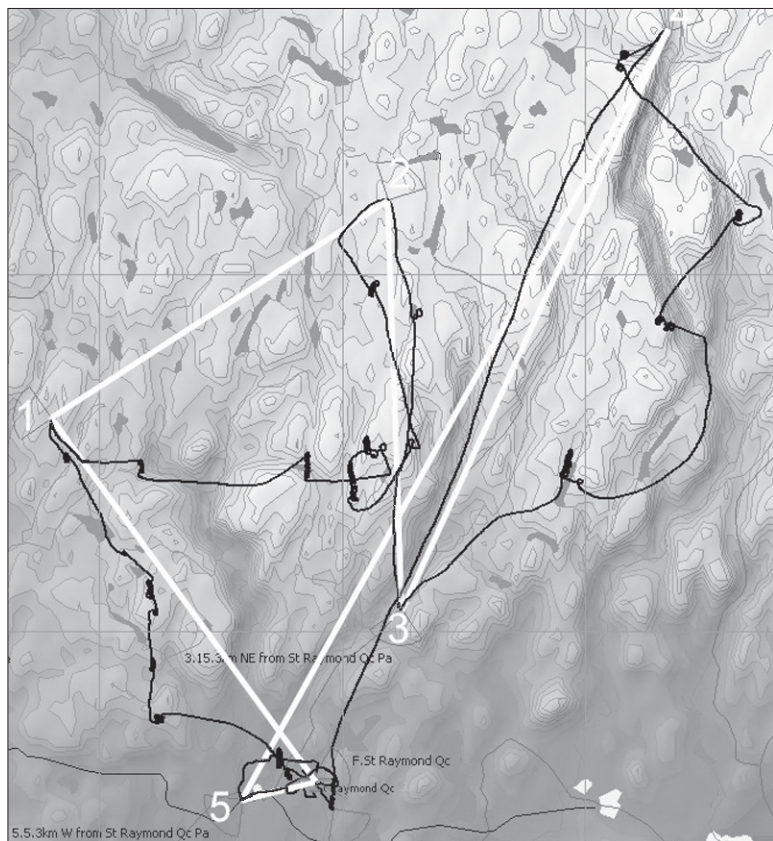
Comment négocier avec de tels nuages en mouvement constant pour ne pas dire fuyant, mais ma mémoire et mon expérience de mes quelques 25 ans au CVVQ me permettent d'arriver à grimper assez facilement afin d'aller voir ailleurs, plus haut, plus vite, plus loin, diront les gens de la CAS.

Après avoir atteint tout près de 5 000 pieds et durant toute cette montée, je regardais vers l'ouest, toujours vers l'ouest, 300 km quand arriveras-tu... mais encore aujourd'hui il faudra faire une croix dessus. Cependant me dis-je, je peux faire un vol intéressant malgré ce vent, mais ce vent il n'est pas inutile, il aligne les ascendances de façon tout à fait extraordinaire vers le nord et justement, je vois un de ces alignements qui sont à ma portée, juste au-dessus de l'entrée de la ZEC Batiscan-Neilson secteur rang Ste-Croix. J'y arrive à 3 600 pieds, je ne risque rien, j'ai le vent dans le dos pour revenir au club si ça tourne mal.

Bien voyons donc ! Je grimpe à nouveau à 5 000 pieds dans un thermique à 3 ou 4 nœuds de moyenne, puis là vers le nord, je vois ma route toute tracée avec ces cumulus qui m'invitent, tous aussi puissants les uns que les autres ou presque. Je grimpe à 6 000 pieds et même, je réussis à grimper en ligne droite. Quel sport merveilleux, merci à ceux qui de près ou de loin on fait de moi un pilote de planeur, piqué, inoculé à tout jamais, tant et aussi longtemps que le tout-puissant me le permettra.

Que se passe-t-il donc, c'est l'enfer, je suis ravi, j'atteins 6 400 pieds, puis 7 300 au-dessus du Lac Petit Batiscan et je continue ainsi jusqu'à la fin de cette rue calorifique pour dépasser largement Rivière à Pierre. Et là je regarde à nouveau vers l'ouest, très loin, dans le coin du Lac au Sables, il existe une rue similaire à 25 ou 30 km, mais de ma position, l'est, est tout à fait prometteur. Je redescends de quelques kilomètres vers le sud, puis je pointe le nez du LS4 (Ils auraient pu se forcer pour trouver un autre nom à cette formidable machine). Je pointe le nez de mon 'Mirage'. Je fonce vers de nouveaux thermiques, en passant au-dessus de Vénus, repère baptisé par Jean-Marc Piuze, en direction est vers le Lac Bienville où j'y atteins un nouveau sommet 8 200 pieds. Il est 14h45, donc je peux espérer atteindre 9 000 pieds qui sait.

Actuellement à une trentaine de kilomètres de notre club, je remonte le vent à 70-75 kt indiqué pour me rendre à la hauteur du camping du Lac Ste-Anne dans le Parc des Laurentides, à mi-chemin entre ce dernier et Le Grand Lac Batiscan. C'est ce lac que j'avais qualifié de grand tableau noir dans un article écrit dans le "Pingouin du club" il y a 2 ou 3 ans, on doit bien être à 40 km de St-Raymond mais à 7 200 pieds.





Un peu ennuyé de me retrouver seul dans ces grands espaces que je voudrais toujours et sans cesse partager, je décide de redescendre vers le sud et je parviens à peine à identifier St-Raymond qui me semble à bout de bras. Alors je pousse sur le manche et mon 'Mirage' avance et fonce tête première avec grande finesse de sorte que vite je suis rendu à 10 km au nord du Lac Sept Îles et au-dessus de la rivière Ste-Anne, oui, celle-là même qui découle du Lac du même nom, avec encore 6 000 pieds à dépenser. Là, une pause s'impose, je

m'informe auprès de Pierre Gagnon au sujet de son vol, il me raconte qu'il s'accroche, je lui souhaite bon vol puis pour une fois, je regarde vers l'est au lieu de l'ouest "and I see that the best is not west but east" (NDLR : ceci est un jeu de mot basé sur le mnémonique pour se souvenir des erreurs de la boussole en virage (best-west, east-less).

Comment renoncer à une telle attirance, des cumulus se forment en d'immenses nappes et semblent rattachés les uns aux autres vers une direction dont je me remémore chaque minute d'un passé pas si lointain. Il est 15h30, je me dirige vers le NE, je longe l'extrémité nord de la zone aérienne interdite de la base militaire de Valcartier CYR. Je peux voir la route 175 qui monte vers le nord et Chicoutimi, je crois identifier Stoneham. Bref, je suis en pays étranger ou presque mais je sais bien où se trouve mère-patrie (club). Encore et encore mes amis me soulèvent et c'est avec grand plaisir que je monte et touche du bout de l'aile un gros cumulus à 8 870 pieds à 15h44.

Quoi encore me direz-vous, et bien non ce n'est pas tout. J'aperçois la Vallée de la Jacques Cartier. Ceux qui d'entre vous y êtes allés, me chanteront les louanges de cet environnement extraordinaire, ceux qui l'ont survolé à basse altitude en avion ou hélico n'en ont que de bons souvenirs, moi y compris. Justement je vois un avion qui s'éloigne à des dizaines de km, probablement un Beaver ou un Cessna 185. Ça me fait penser que je devrais changer de fréquence, donner ma position, ma direction, mon altitude et bien sûr mon identification. Sur la fréquence 126.7, je dicte : *"Planeur Juliet Charlie Roméo, à la verticale de l'accueil de la Vallée de la Jacques Cartier, à 6 800 pieds en monté, trafic en conflit, contactez Juliet Charlie Roméo"*.

Bonjour, il me fait plaisir de m'occuper de l'édition du contenu francophone de la revue Vol libre de l'ACVV. Une revue n'est rien sans ses précieux collaborateurs qui la meublent. Ainsi donc j'aimerais remercier Jean-Claude Hélie, Sylvain Bourque et Bill O'Brien pour leur participation dans le présent article. Vous avez envie de vous impliquer dans la revue et présenter des textes francophone? Rien de plus simple: envoyez-moi vos idées, sujets ou articles, si possible avec photo, à mon courriel <dupont_simon@yahoo.ca>

Bonne lecture,
Simon-Pierre Dupont, Association de Vol à Voile Champlain

Awesome! What a day!

Translation – **Bill O'Brien**

HOW SHOULD I REMEMBER THIS FLIGHT? The flight of my life? Or, a really exceptional flight? Maybe after reading my story you can decide for yourself!

It's a nice Monday in July, with a north wind strong enough to make gliding conditions doubtful. As noon approaches, small cu are already forming in tempting cycles over the hill just to the north of the field, stretching above our heads as if to invite us. Into these conditions I will launch.

Having pulled the LS4 out and finished my preparations, Claude Rousseau tows me aloft at 1310. The conditions after release at 2300 feet are challenging with the wind, but with steep turns I climbed towards the ever-cycling clouds. I felt the advice of the CAS experts and all the experience gained over 25 years in this area as I climbed ever higher.

Ever looking to the west, I topped out at 5000 feet and wondered if today was my day for my long-awaited 300 kilometres! With this wind, a favourable series of thermals appeared in front of me leading to just above the entry to ZEC Batiscan-Neilson and the route Ste-Croix. I figured that with a floor of 3600 feet and a tailwind, I could always easily make it back to the club. But this was never a concern as I easily climbed to 5000 feet in 3 or 4 knots average and saw a cumulus street inviting me further along my route. Advancing, I easily reached 6000 feet without turning. What a great sport! Thanks to all the people who taught me over the years... I will keep gliding forever.

What can happen now? 6400 feet becomes 7300 feet over Lac Petit Batiscan – still exploiting this cloudstreet well past Rivière à Pierre. I see another cloudstreet forming 25 to 30 km away but I felt that my current track is promising. Returning more to the south I move rapidly, the LS4 is a great machine. I locate new thermals and, passing over Vénus (reference point named by Jean-Marc Piuze) towards Lac Bienville, I attain 8200 feet. It's only 14:45, maybe I will even get to 9000!

Now finding myself 30 km from the club, I speed towards the north at 70–75 knots to get to the camping area at Lac Ste-Anne in the Parc des Laurentides, halfway between here and the Grand Lac Batiscan. We must be 40 km from St-Raymond but at 7200 feet.

Flying alone in large areas gets boring, so I turned to the south. Flying ever forwards with my LS4 'Mirage', I find myself 10 km north of Lac Sept Îles and over the Ste-Anne river, still with 6000 feet of altitude. Checking with Pierre Gagnon about his flight, he informs me that he is working hard to stay aloft.

It appears to me that east may be best (instead of the old memory trick: West is best!) How to not be in awe? The cumulus are forming attached to each other in long lines. It's now 15:30 and I move towards the NE just skirting the Valcartier CYR. I can see Route 175 ➔ **next page**

À ma grande surprise quelqu'un m'interpelle d'une voix forte comme s'il était à coté, tout près, me demandant si je suis en planeur. Je lui réponds que oui, je suis bien en planeur et il me dit bravo! Ces gars-là connaissent très peu de nos supers bolides... S'ils savaient... Vite ils entreraient membres d'un club de vol à voile et piloteraient de grands oiseaux blancs aux ailes effilées qu'ils feraient virevolter en les pointant vers l'infini...

Je continue mon vol, vers le nord encore et encore, les cumulus eux, se bousculent laissant quelques trous bleus pour que les rayons solaires réchauffent le sol, tout à fait nécessaire à notre survie, mais où est le danger. Oui je sais, je suis maintenant à 50 km de mamavoile (du club), c'est mon Colibri qui me le dit et de plus il me raconte que le vent souffle toujours du nord à une quinzaine de km/h. J'ai le bonheur d'être à 7 700 pieds au-dessus des montagnes qui défilent à tout azimut. Elles sont courus par des rivières, définies par de grandes étendus d'eau qu'on appelle lacs et mes yeux ont peine à tout voir.

Je voudrais que le temps s'arrête afin que je puisse tout mémoriser. Je m'imagine être un aigle puissant, survolant son immense territoire, en fait, toutes sortes de pensées heureuses traversent mon esprit et aucune peur ne m'habite. Je sens que mon champ de connaissance s'agrandit et je comprends mieux comment parvenir à peu de risque à un but ultime. Connaître ses limites, tenter toujours de les pousser plus loin est nécessaire pour avancer et ressentir les performances de sa monture sont des atouts qui peuvent nous mener très loin... Mirage (LS4), quelle machine!

En terrain connu, je suis à la hauteur du Petit Lac Jacques Cartier. Oui vous vous rappelez je vous ai déjà raconté plutôt que... bon! On continue... à 7 600 pieds et là ça me tente grandement, oui je suis à 20 km de l'Étape, si vous préférez du Grand Jacques Cartier, à mi chemin entre Chicoutimi et Québec. Il est maintenant 16h20, je pourrais tenter... Quels sont les risques ? Des cumulus sont toujours présents mais ne peuvent me garantir d'un succès absolu, ici, y'a pas de place pour atterrir. Je décide que non, je n'irai pas et à regret, je tourne le dos. Ce n'est que partie remise. Oui j'y retournerai dans un avenir prochain. Pourquoi suis-je si sûr? (En fait, j'ai en tête un projet, celui de rallier l'Étape en partant de St-Raymond, poursuivre vers La Tuque avec retour à St-Raymond, ça donne un peu plus que 300 kilos, pour effectuer un tel vol ça prendra des conditions excellentes et indéfectibles toute la journée durant).

Voyons la suite et la finale...

Maintenant à 8 000 pieds à la pointe nord de la Vallée de la J-Cartier, je mets le cap au sud pour m'apercevoir qu'une brume sèche a envahi ma trajectoire de retour. Je ne vois aucunement la plaine au sud, que des montagnes, petit moment d'inquiétude, de plus aucune trace de cumulus sur mon chemin de retour, que la ligne de haute-tension qui pointe vers le sud en ligne droite et que je m'empresse de suivre. Ainsi, je suis parti à plus de 60 km de St-Raymond à 8 000 pieds, en volant à une vitesse moyenne de 84 nœuds. Je suis arrivé au club à 4 200 pieds, ça c'est *SeeYou* qui le dit. C'est pour cela que je dis que la mission était possible. Si vous êtes intéressé à voir ce vol, il est disponible sur OLC-Canada 2005 <www2.onlinecontest.org/olcphp/2005>, en date du 11-07-2005.

J'ai vécu un moment d'exception par ce vol. Il est difficile de rendre exactement les moments d'émotions l'entourant par l'écriture, mais puissent mes mots vous inciter à ne jamais abandonner un sport aussi formateur, qui exige patience, détermination, courage, contrôle de soi dans les situations difficiles, mais l'indescriptible plaisir que procure l'accomplissement d'une tâche, un défi, en planeur au-dessus de notre toute belle et verte patrie...il faut le vivre...

from p13

towards Chicoutimi and also Stoneham. I'm in a new area but the familiar terrain of the club is nearby.

The lift is working and I reach 8870 feet at 15:44. With a pleasant view of the valley of the Jacques Cartier I see other aircraft operating at lower altitudes, probably a Beaver or a Cessna 185. I report my position on 126.7: "*Glider Juliet Charlie Roméo, vertical entry to the Jacques Cartier valley, at 6800 and climbing, traffic in conflict contact Juliet Charlie Roméo*". To my surprise, I receive an answer – I am being asked to confirm that I am a glider! What an experience they are missing!

I continue my flight northward and find myself 50 km from the club. My Colibri confirms the north wind and at 7700 feet I feel comfortable. The scenery of rivers and grand spaces is beautiful. I wish for time to stand still in order to take it all in. I feel much in control of the situation and the limits to respect, and that on this flight I have gained experience. In order to progress, you must know your limits while trying to push them further. The 'Mirage' (LS4) is indeed a wonderful machine!

Back into familiar territory (A few years ago I came here with the Jantar), I am near Petit Lac Jacques Cartier. Still at 7600 feet, I am 20 km away from le Grand Lac Jacques Cartier (l'Étape). But it's getting late, already 16:20 but the temptation is there. I decide to be careful and respect the lack of good fields and turn to home. I want to return to this sector, maybe a project to go to l'Étape, towards La Tuque and return to St Raymond. Some day the conditions will be right for that 300!

The rest:

Now at 8000 feet just north of the J-Cartier valley I head south and encounter a thin fog that is concerning and is in my path to home base. I can no longer see clearly to the south and the cumulus are gone; the hydro lines become my guide home. I started home from 60 km out and 8000 feet. At an average speed of 84 knots I arrived over the club at 4200 feet, according to *SeeYou!* That is why I say that this mission is possible. If you are interested the flight is on OLC-Canada 2005 <www2.onlinecontest.org/olcphp/2005>, dated 11-07-2005.

It was truly a memorable flight for me. It is difficult to put all of my emotions onto paper with the right words, but I hope that I have passed on some of my passion that I have for this wonderful sport. It is a sport that demands patience, determination, courage and selfcontrol in all conditions. But the pleasure of such flights is indescribable!

Emergency bail-out procedures

Part 1

not being prepared can have a negative impact

Bob Fieldhouse, Silver Star Soaring

THIS REVIEW IS INTENDED *only* to provide a basic overview of an emergency egress from your glider and the basic elements required to get to the ground safely under a round parachute. I have written it simply to inform you, "What time it is" – it is not intended to teach you "how to make a watch"! It is up to each pilot to assess their unique emergency situation and to implement a plan specific for their own aircraft, safety equipment and physical capabilities.

Most emergency rigs contain a round parachute: they deploy quickly, they are less prone to malfunction, and landing them is uncomplicated, requiring little training, if any.

The most overlooked consideration regarding parachutes – *is it being cared for and stored correctly and has it been maintained and stored correctly in the past?* This is especially true during your non-flying months. Avoid storing it in areas that can get extremely hot. An aircraft cockpit, the trunk or back seat of your car on a hot, sunny day can have a cumulative and detrimental effect in a relatively short period of time. These are not good places to keep your parachute.

Excessive heat and humidity will degrade the overall condition of your parachute. Excessive heat can cause the rubber "stow-bands" to deteriorate. These rubber bands, which stow the suspension lines in an orderly fashion and retain them, can deteriorate and become very sticky over time. This may not allow the suspension lines to unstow correctly during deployment.

Ultraviolet light has a damaging and permanent effect on the materials comprising the rig. Avoid leaving it in the sun for any length of time. Fluorescent lighting has the same effect. The effects are cumulative. Mold and mildew will ruin a parachute. Do not store the rig anywhere other than in a dry, warm and rodent and insect-proof place away from sun and sources of UV.

Has your rig been packed recently by a qualified rigger? This is the only way to ensure that every part of it is serviceable, safe and hasn't become a home for a mouse, insects or the rotting affects of mildew. So it is not a good idea to keep the rig in your glider, glider trailer, garden shed or a damp unheated basement.

How to wear a parachute

It is crucial that your straps be adjusted correctly and your rig is ready for a bail-out. There will be no time to tighten or adjust in an emergency!

Chest strap Do up the chest strap first. It helps to keep the rig on your shoulders while you do up the leg straps. *Do not overtighten.* The geometry of the harness is designed in such a way as to have the main lift web (shoulder straps) as parallel to each other and vertical as possible. Overtightening the chest strap can cause a large portion of the opening shock to transfer to the chest strap stitching. If the strap and stitching have been UV damaged, this shock to the strap could cause it to fail. Also ensure the buckles engage and lock securely.

Leg straps Adjust tightness so that when standing upright there is slight pressure on the shoulders. When seated, this pressure on the shoulders will not present itself. Loose leg straps can allow your body to fall out of the harness. This can occur during the opening shock if you happened to be bent forward at the waist and/or have your legs tucked up. If loose, the leg straps could slide down your thighs to the back of your knees. Essentially, you'll slip out of your harness backwards, ass first! A tight chest strap is of no help here!

If quick-ejector snaps are incorporated into your harness, make sure you feel the lever snap over the detent balls. Unless seated all the way, the lever can easily be snagged and opened. It takes very little force to release a partially locked quick-ejector snap – their design is such that when unlocked and opening, they actually eject the buckle. You could very easily end up without a leg or chest strap. When buckling up your seat belt in your glider, be aware of this. Be equally aware of the potential to unlock these quick-ejectors when removing your seat belts.

Deployment handle Ensure that the handle is secure. A loose handle can snag and pull the pins that hold the container closed. If a "premature deployment" occurs on an emergency bail-out, your situation can get ugly if your parachute becomes entangled with the glider.

If visible on your rig, check the closing pins and closing loops at the beginning of each flying day. Ensure the pins are through the loops by at least 1/2" and that the loops are not frayed. If accessible, pull slightly on the activation cable near the pin(s). If your system uses two pins, then pull gently on the activation cable at the top-pin and confirm that the cable slides through the housing easily. You'll see the cable move at the handle end in relation to your pulling it slightly at the pin end. ➞ **p31**

Thoughts on developing the HP-24

Bob Kuykendall

Bob has designed a high performance fibreglass sailplane, the HP-24, with a goal of perhaps selling some kits in the future. For the past years he has been working through the interminable process of building and finishing the "plug", then making the molds for the airframe parts from it, then forming the actual flying bits. All in his workshop in California. All while living an actual life with his wife and kids and hiking and rock climbing. His resourcefulness and tenacity in carrying on with the project is truly remarkable. You can check this out for yourself because Bob has kept a project website going with many photos of the process and chat on how he has done everything. It's at <www.hpaircraft.com/HP-24/>

Now that the aircraft is close to completion, having produced a lot of fuselage, wing, and other parts, he was asked how has serial production figured into the way he has been producing parts for the prototype. He has interesting tidbits of insight. It does seem like economic forces are moving back to favour the HP-24 project.

THAT'S A GOOD QUESTION, but not one I've thought a lot about lately. I'm not so sure I have an answer that will make much sense, but here goes. Please forgive me if my reply wanders a bit far afield.

I don't know if there ever really was a definite start date for the HP-24 project. It started as something I just noodled around with, and eventually made a fairly inconspicuous transition from charts to parts. I know that the earliest 3-views date to early October 1999, which if I recall correctly is a few months after I brought all the Bryan Aircraft HP leftovers out here to California. This 7 October 1999 3-view, labeled "SP-24" shows a

glider that is basically a "Super HP-18, <www.hpaircraft.com/hp-24/sp-24_3view1.gif>. It has less fuselage camber, a slightly shorter fuselage, a V-tail, and uses the HP-18 fuselage from the wing trailing edge aft.

My original intention was to develop a nice forward fuselage and wings, and use as much HP-18 as I could get away with. I have an HP-18, and I've flown it enough to know that it offers a lot of bang for the buck. However, I think that the extremely reclined seating required to achieve low frontal area, and the somewhat limited downward visibility that results, is not conducive to comfortable, relaxed soaring. Also, I found the side stick to be



28 January 2006. The moment of anticipation as the heavily reinforced frame of the right hand side fuselage mold is being raised to release the first article fibreglass fuselage.



The first fibreglass fuselage, fresh from the mold.

quite a challenging interface with the aircraft, especially in view of the rather neutral stability that Dick Schreder designed into the ship – hence my earlier project to develop and deliver a retrofit centre stick control system for the HP-18.

I think that comfortable seating, room to move around a little, room for systems and gadgets, and great visibility have a definite positive contribution towards both overall enjoyment and overall performance. I reckon that what the HP-24 gives up in frontal area is more than made up for in the ergonomic advantages, and that the good wing/body junction sealing, attention to detail in control surface hinging and sealing, and aerodynamicist Steve Smith's wing design will put the ship up into the 40:1 range.

Through the year 2000 I used Web survey tools to conduct simple surveys of the sailplane and homebuilt aircraft markets, and decided that there was potentially enough interest in a high-performance kit sailplane to justify messing about further with the idea. I say "potentially" based on Heisenberg's Uncertainty Principle; it is very difficult to accurately measure the market for an aircraft or kit until you actually enter the market with something to sell. You can show 3-views and renderings and specs until you are blue in the face, but until you show up at the airfield with something big and fast and shiny, you won't actually know if real people will put down real money.

I also floated a few ideas and collected feedback about possible configurations. In this process I learned to my lingering regret that the flaps-only configuration would be a rather hard sell. I was heartened to find that there was a sizable market of folks who loved Dick Schreder's 90-degree flaps, and who would like to see them on a nice slippery composite ship. However, it was discouraging to see how many more pilots there were who would have nothing to do with them, and would not buy a glider for which they were the only glidepath control option.

Another funny thing I tried out was the idea of asymmetry in the basic configuration. My thought was that the development and tooling would be easier if I placed the wing spars at the chordwise station of maximum depth of each wing, and then staggered the wings so that the spars could overlap inside the fuselage. It's not that uncommon a practice, there are a couple of aircraft so configured. One good example is the Rutan *Voyager*, the around-the-world-un-

refueled airplane now in the Smithsonian. I thought it was a neat idea, but others didn't, so I dropped the idea.

Probably the actual beginning of the HP-24 project was in February or March of 2001 when we decided to go ahead and start making the forward fuselage plug. At the time, Steve Smith, a friend, aerodynamicist, and avid soaring pilot, was getting ready to do some big renovations on his house, and we arrived at a deal whereby he would make the forward fuselage plug in his garage, and I would do the architectural drawings required to get his house renovation through the building permit process. I finalized the forward fuselage shape and commissioned a set of CNC-cut Masonite station templates. Then Steve and I glued them onto slabs of 3" foam that we rough-sawed to shape on his bandsaw. We stacked these bits onto a 6" aluminum tube (actually an RS-15 tail boom), and Steve proceeded to sand, fill, skin, paint and polish the assemblage into the forward fuselage shape that we started calling "Moby Plug".

A funny surprise happened in late summer of 2001. At that time we were starting to see preliminary 3-view drawings of the new LS10, which Wolf Lemke and his crew at Rolladen-Schneider had been fiddling with for quite a while even then. These early 3-views showed a rounded canopy rail quite unlike the earlier LS gliders, and more in line with what you see on the later ASW ships, the Antares and the Sparrowhawk. It seemed to me at the time that rounded canopy lines were all of a sudden the thing to have on a glider, that straight canopy rails were passé. So, somewhat in a hurry I redrew the canopy rail on the HP-24, so it also was round and swoopy, and managed to get it and the associated detail design in by the time I handed the forward fuselage plug over to Precomtec R+D for molding.

The rest, of course, is history. When the actual LS10 finally did roll out, the new fuselage with its rounded canopy rail had been abandoned, and the prototype and all subsequent LS10s were equipped with fuselages similar if not identical to that of the LS6, with the same straight canopy rail.

The more than passing resemblance of the HP-24 fuselage to the LS6 is not accidental. I've always thought that Wolf Lemke has the nicest eye for glider fuselages, and I had the LS6 firmly in mind when I drew the origi-



25 May 2008. Situation normal, all messed up. Foreground left, three of the four wing skin molds (fourth mold in other shop bay). Centre, the first-article fibreglass fuselage and canopy frame and assorted junk. Off to the right, materials racks. Background right, molds for horizontal stabilizer. Hidden right, molds for fuselage halves and for the wing spar.

nal curves that became the HP-24 fuselage. I didn't directly copy any of it, but it was definitely one of the defining inspirations for the side view curves. One way to tell that the HP-24 fuselage isn't an LS6 copy is to look at any cross section of the forward fuselage. I designed the cockpit area cross-section with the kind of flat bottomed profile that you see on the early Astirs. I did this to reserve some reasonable amount of fuselage volume for control system push-pull tubes while still allowing a very generous seat pan width for a pilot's butt.

Some other inspirations besides the HP-18 and LS6 are:

- The *American Spirit* kit sailplane, from which I learned how difficult it can be to handle big floppy wing and fuselage skins – upon this experience I formed the resolution to bond the right and left fuselage shells, and upper and lower wing skins together in hard tooling and not leave to the builder this difficult and unforgiving task. Also credited to the *American Spirit* is my resolution to take primary structures and control mechanisms very seriously.
- The *Apis* kit sailplane, from which I learned how far the FAA's "51% rule" could be credibly stretched. (I think that I probably won't be able to stretch it quite that far.)
- The Van's Aircraft RV-series airplanes, demonstrated two key points: one that the homebuilt aircraft market is extremely elastic, and will stretch and grow well beyond its original size to accommodate a worthy product. The second is that the mark of a successful homebuilt aircraft is that it has actual resale value, that it can be sold for more than the cost of the kit plus materials.

One of the great turning points in the project was in March of 2002, when I went to the Seattle Museum of Flight to

give a talk on the project. The talk itself was a bust – I'd misevaluated the audience and completely failed to engage them. However, I did meet Brad Hill there. He had developed a *Carat*-like single seat touring motorglider, and was interested in using the HP-24 wings on his motorglider fuselage. Brad shares my enthusiasm for the project and for gliders and glider design and development. He has also built two of his own gliders and designed a third, and has worked on a couple other projects besides, including Danny Howell's *Lighthawk*.

Brad is an expert in 3D modeling, and offered to produce some 3D renderings based on my 3-view drawings and station profiles. His renderings of the HP-24 suddenly showed that what I was working on had depth and presence, and that it all sort of worked together to look like a real sailplane. Brad's subsequent work on finishing the wing plugs and developing many of the tools and parts central to the project has been invaluable, and has

been an inspiration in and of itself.

About production

There is so much stuff to do to go from zero to first-article in sailplane manufacturing that the overall list is unmanageable and overwhelming. Seriously. Even the most basic project plan stretches to twenty pages or so of major tasks, minor tasks, sub-tasks, dependencies, milestones, etc. Keeping rigorous track of stuff like that is either seriously hard work, or a challenging and fascinating puzzle of mental juggling. I choose the latter.

My approach is to avoid, to the degree practical, looking directly at the big picture. My world at the shop is a feifdom of tiny, bite-sized projects, all of them related, all of them manageable and doable. I know that, so long as I keep a generally accurate picture of the overall goal in my head, as long as I don't screw up or create elements that conflict with other planned elements, whatever work I manage to get done will move the program forward.

Anyhow, back to the production question: I try to make the large tools robustly and accurately so I won't have to revisit them for a long time. Wing molds and fuselage molds, and the orientation and location tools that go with them, should be good for near a hundred units. When it comes down to it, I'm not all that good at the composite handwork, so I cater to my own weakness by making elaborate tools that make that stuff more idiot-resistant. It also makes it easier to have that stuff done by lesser-skilled folks, which is a gift to the future of the program.

The smaller and less important tools, on the other hand,



8 April 2008. In right hand photo, the wing plug root stubs and both spar stub mockups are fitted into the fuselage. The only thing left is to attach the spar stubs to their respective wing plug stubs, and then separate them. In left photo (12 April) Bob is developing the wing spar stub alignment fixtures. The wing root section has been sawn off the wing plug and the fixture is sitting in the wing skin mold. Bob says that design work on the scores of glider parts couldn't be done without a hot glue gun and bits of foam.

are generally made so they're good for a dozen pulls or so, by which time we will have either changed the design or made better tools. Some of these tools are no more than splashes of Bondo on fiberboard, or crude jigs of MIG-welded steel.

Overall, I think that once I manage to toss one of these things into the air, it will be a relatively easy process to make a couple more just like it. Since even high production sailplanes like the ASW-20 are basically still hand-made, there isn't all that great a difference between them and a hand-built prototype.

What remains to be seen is whether the sailplane market will have room for those units in it, whether there will be anybody left in the awkward Venn logic diagram between soaring and homebuilding and resourcefulness, and what the economics of that sector might be like.

When I started the HP-24 project, I knew that the easy credit and low energy prices that prevailed were good conditions for selling expensive racing sailplanes, and also good for running a low-dollar bottom-feeding development project. I also knew that those conditions are not the right ones for fostering the kinds of do-it-yourself skills and resourcefulness, and more importantly, the DIY attitude required among the potential customer base. Under conditions like those, anybody who wants something special can just rent some cheap money and go buy it. The prevailing attitude was that actually making things is for chumps and suckers.

But times are changing. Folks are having to get by on less. High energy prices, weak credit, and a falling dollar are putting European sailplanes out of reach for many more people. Under these new economic conditions, we might actually have enough opening of the market window that I envisioned back in 1999 or so.

We also might see the complete extinction of soaring or even all of general aviation, the dedication of all our airspace to Big Brother's UAVs, and the glider frequency awash with digital wireless traffic. If that comes to pass, all I and others have put into the program is for naught; I might as well have spent it on whiskey and porn for all that it's damaged my body and kept me from my family.

However, in business as well as mountaineering, fortune favours the bold. To act, to move intelligently in any direction, has a greater average rate of return than to sit and wait. As my father is wont to say, always remember to temper your caution with a touch of boldness. ❖

Acknowledgements

Other folks who deserve a definite shout-out are my wife Brigitta who has put up with this nonsense for a very long time. And the late Dick Schreder, who demonstrated that glider development is a matter of bootstrapping, that there's really no such thing as "you can't get there from here." Jim Marske, who showed me the design methodology behind pultruded carbon fibre strips. Also, Doug Gray who has contributed a great deal of his time to help out in ways minor and major. Steve Smith who did the basic design work on my wing shape, designed the winglets, and made the original forward fuselage plug. Harald Buettner of Precomtec R+D who assembled the full-fuselage plug and made all of the original fuselage molds. George Applebay who has always been very generous with his knowledge of composites and epoxies and glider design and development. Greg Cole and Danny Howell, who have both been supportive and encouraging even as they each develop sailplanes intended to move soaring in directions other than that towards which the HP-24 is aimed...

And many, many others whose names escape me now.

the Romanian retrieve

Story & illustrations by **Christine Firth**

This is one of the best retrieve stories *free flight* ever got – these tales, more often than not, being more interesting than the ‘how-I-dunnit’ accounts. Crews will hope crewing in Lüsse is less ‘interesting’. Reprinted from the 1978/3 issue.

THERE I WAS IN THE LONG SOFT GRASS, just dozing off, relaxed and warm in the sunshine, enjoying the summery murmur of bees and the indistinct chatter of foreign pilots on the radio; secure in the knowledge that the even tone of communication indicated that they were all “fat and happy” and high, and able to stay that way.

This was the practice week of the 13th World Gliding Championships in Yugoslavia in Vrsac in 1972. The pilots were practising flying in new and rented ships, and trying to make them ‘go’, and I was practising crewing and glad they were gone – at least for the afternoon. Pains-taking reconnaissance by Tony Burton, Doug Wade and myself had already revealed that the plum location for radio reception was 600 feet up the only local mountain which overlooked the entire Vrsac plain and was topped by a medieval ruin much favoured by Tony and Doug as a vantage point. The road was rather tortuous, which necessitated unhitching the trailer and parking it half way up, but we did not consider this a disadvantage and felt rather smugly that 600 feet of height would give us air-to-air communication even on the largest triangle, while the fact that we might also be able to have air-to-ground communication with our pilot once he had landed back at Vrsac airfield, meant that we wouldn’t have to tire ourselves rushing to the field to find out if the landing was safe. As my mind became as hazy as the sky overhead, a familiar voice cut my complaisance to shreds and leaping up, I left my soft bed and grabbed the car microphone.

“Ninety-nine, I’m landing. Ninety-nine, did you get that? I’m landing, 800 feet and flying a circuit.” The voice was very clear.

“Roger Ninety-nine, we’ll be down shortly,” I enunciated clearly. “I was just getting comfortable,” I added; idle chatter wasn’t such a sin on practice days. I called to Tony and Doug who were photographing local pilots as they did spectacular beat-ups past the ruined tower for the benefit of camera buffs. “John’s landing, we’ll have to go back.” They waved in acknowledgement and started clambering down.

“Ninety-nine”, the voice was very weak and I adjusted the squelch and the volume, “400 feet, going in.”

“Roger, Ninety-nine, we’re just leaving.” I said.

“No, Ninety-nine”, said the voice faintly but clearly and with considerable urgency, “stay where you are.”

“Roger” I said. Tony and Doug cleared the maps and pillows away and got into the car.

“They must have had good times,” said Tony, “that was quite a long task.”

“I don’t think he made it back to the field,” I inclined my ear towards the radio, “he said to stay here.” Doug settled himself more comfortably on the back seat and Tony reached for the note pad. We sat in a state of suspended animation while several other crew cars jolted off down the mountain side. It seemed ages before the little voice said, “Okay, Ninety-nine, I’ve landed in a nice field about nine kilometres from you...” There was a pregnant pause as we waited for instructions and then “... in Romania.” We all sat up and exchanged glances.

“Well,” said Tony, “that lets me out, I don’t have Canadian Forces clearance to go behind the Iron Curtain.” The small voice came on again and confidently suggested that we bring appropriate documents which the Yugoslav organizers would provide and added that if we continued east past our mountain we would shortly arrive at the border crossing, and after passing through a village, would find him beside the same road, in a large field; the map, he told us, showed it quite clearly.

Back at the airfield we picked up the team manager and hurried to the control tower to find the person in authority who would give us papers. Other Canadians rallied round and Yugoslavian-born Branco Glavas offered to replace Tony. It was more than an hour later before we returned to the mountain road to pick up the trailer and start on our journey. My earlier feeling that John was overconfident in his assumption that the contest organizers would provide us with papers at a moment’s notice, had been replaced by misgivings about the whole operation; it had already taken longer than we had thought the completed retrieve would take, and Vrsac was still in view...

“No papers needed ... We have agreement ... You just go and get your pilot.” The organizers had laughed us away. Persistence on our part was not popular and we finally left without papers with a feeling of defeat.

Turning off the mountain road at a small village, we continued east towards the Romanian border and since we were only an estimated five kilometres from our destination, I started calling on the radio, “Ninety-nine... Ninety-nine... Ninety-nine”. We lurched along with the empty trailer complaining loudly on the back. Nobody,

not even the ebullient Branco, could think of anything to say. The dry but somewhat exotic vineyards around Vrsac had been replaced by desolate scrub and the single-lane paved highway had now deteriorated, between the ever-present muddy ditches, into something which could really be rated as a cart track. I was fairly sure that we hadn't missed a turning and the compass was reading east, but when we suddenly noticed a roof, almost hidden in a clump of trees, the move was unanimous to pull into the gateway and ask for directions. The disused track and neglected land should have warned us that the farm would be deserted, but the sight of fallen outbuildings and gaping windows was definitely creepy. I picked up the microphone and waited: "Ninety-nine."

"Golf Bravo, Ninety-nine, your pilot is on the ground," responded a very British voice. I tried to sound polite – "Roger, thank you, George." Evidently some people were still flying...

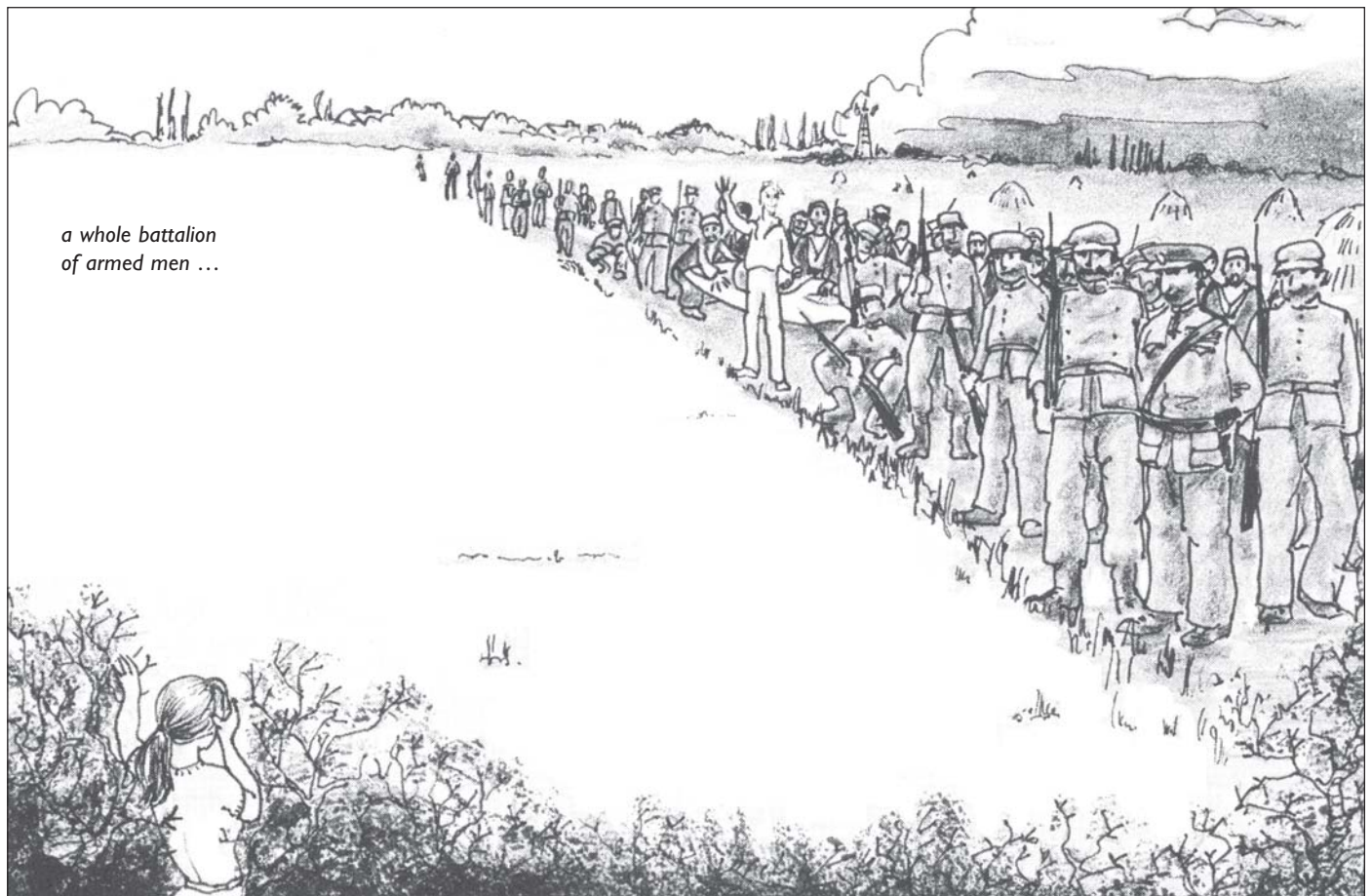
Branco moved eastwards out of the weedy gateway and we lurched along for about 50 yards looking for a place to turn around when suddenly there was a ditch in front of us and a footpath leading back towards the farmhouse on our right. Branco turned abruptly onto the footpath to avoid the ditch and eventually came to a halt, deep in long grass and bushes; raising both arms above his head he muttered something incomprehensible and clenched both fists. Doug, who was inexperienced at crewing, rearranged the pillows on the back

seat and made himself more comfortable. I tried the microphone once more just for something to do with my hands, "Ninety-nine," I intoned without much feeling, and started to force the car door open against the bushes without much success.

"Ah, there you are Ninety-nine," said a bright voice, "over here, I think I'm on the other side of the hedge."

"Roger." I squeezed out of the car, stumbled across the ditch, and clod-hopped over some rough pasture towards the hedge. Some 'hedge'; it was an almost impenetrable thorn thicket some 50 feet thick and 10 feet high, with a wide deep ditch in the middle. Carefully crossing the ditch by some artfully arranged pieces of rotten planking, I pushed my way towards the sunlight on the far side. Small animals had made the footwork relatively easy but the thorny branches above the waist tore at my clothes and hair and left me scratched and breathless.

The sight that met my eyes when I finally emerged, was unreal; I thought I was dreaming and stood stock still wondering what on earth to do. Ahead of me, strung across a huge field, which stretched to north and south as far as the eye could see, was what looked like a whole battalion of armed men, behind whom stood a crowd of civilians. I continued to stand still, trying to control my pounding heart and to refocus this extraordinary vision. I had never seen such a large number of soldiers before except in a parade or in pictures, but even so... there



was definitely something odd about this group; for one thing they all seemed to be in different uniforms, but although their guns were prominently displayed... yes, that was it, they were all grinning; at ME!

I blushed deeply and was thankful to be wearing a shirt, – another instinct made me want to run as fast as possible in a westerly direction. Then I saw John waving and looking remarkably tall and fair amongst such a swarthy crowd and I forced myself to walk forwards.

I considered my greeting; the usual hug to welcome my pilot back to earth was obviously inappropriate, the distance between us seemed enormous, and it was more of a struggle to cross the one hundred feet of grass than it had been to push through the thorn thicket. I remember noticing the roofs of a village in the far distance snuggled in trees, with what appeared to be a watchtower looking over it; beyond the village was a cu nim building beautifully.

I became aware that I was the only person moving; nobody approached me and John remained standing where I had first seen him, holding the microphone. I could now see the Kestrel fuselage and glimpses of other pieces of glider behind the crowd. Funny that they were standing in such a straight line. Then, I saw the grass. On their side it had been newly cut and there were hay stacks behind them; on my side it was just rough pasture, but in between, there was a narrow row of longer grass which now separated us like a barrier.

The strange dark faces still looked relatively friendly but John's smile was rather stiff and there was a certain tension in the air. I don't know what my own expression looked like, but I remember thinking the onus was on me to make the diplomatic move. Obviously I couldn't say 'Hello' to everyone; there were too many of them and most were out of earshot even if they could have understood what I was saying. As the cu nim in the background loomed even higher, inspiration came to me and, walking up to the most heavily decorated officer, I proffered my hand. He took it in his, shook it hard, and nodded.

Doing a sort of bob-curtsey, I said 'Hi' and let go. In a dream I shook a lot more grubby hands, bobbed some more, and finally stood in front of John. I reached towards him, hoping for reassuring arms to steady me, when a rifle was pushed between us and I was walked back across the grass barrier I had just foot-faulted. Behind the rifle was the ever-present grin.

Unnecessarily, John said, "You can't come over here, this is the border. Have you brought papers?"

"Papers aren't necessary," I said without conviction. "I tried but they wouldn't give us any; even to the team manager; they said it was going to be straightforward and there was an agreement about gliders in the contest..." I nervously smoothed my hair, thinking I must look a fright. "They said we wouldn't need any." I repeated lamely.

"Alright," said John. "Don't get upset, 'they' were wrong. You'll just have to go back to the airfield and get some, otherwise I won't get the glider out of here. Why not get Branco – he speaks the language; he may be more persuasive?"

"Well," I said, "Tony couldn't come, but Branco is here anyway." "Good," said John.

The soldiers and other spectators had been listening intently to this exchange and watching us in the way one watches animals or very small children. The atmosphere was more relaxed in spite of the guns and I realized that these Romanians had probably been as non-plussed by the situation as myself. As I turned to go back to the trailer they all started laughing and talking together.

I looked back at John. "I won't be long," I said.

Back through the thicket I found Doug and Branco still lounging in the car.

"Where on earth have you been? What took you so long; you've been nearly 15 minutes?," they said. Well, I thought to myself, they were the longest 15 minutes I have ever spent. I quickly told them what the situation was as we unhitched the trailer, but my tale lost something in the telling and they were no longer listening to me as they swung the trailer into the ditch in order to clear the path. Promising not to be long and wearing a determined expression, Branco backed the car towards the farm gateway, turned around, and with grass end bushes trailing from all four doors headed at high speed for Vrsac.

Doug came through the thorns with me this time and I began to feel that things were looking up; my sense of humour returned too and I now saw the funny side of the situation. I introduced Doug to their leader (a Colonel?), "Crew." I smiled and demonstrated driving and lifting. Everyone laughed; Doug shook hands all round. Pleasantries over, we both sat down in the grass beside the 'barrier' and started to quiz John about his landing.

"I got cut off by a thunderstorm," he said, "visibility was only 3 to 4 miles through haze, the wind was 20 knots from the NW instead of the forecast 10, and I mistook a fairly obvious right-angled canal, which was not on my map, for one 20 miles to the west. I thought I was due south of Vrsac..." He shrugged and his audience reacted with sympathetic expressions. *[The air maps the pilots got for the contest turned out to be notoriously out of date, perhaps for security reasons. Tony]*

"Well," I said, "It seems that we really need some better maps, but anyway it was a super field to land in; pity you didn't land on this side of it."

"But I didn't land here," said John pointing towards the distant watchtower, "I landed in a field on the other side of the village where there were a lot of peasants stooking hay."

I looked in the direction he was pointing in disbelief. "But that's miles away; how on earth did you get the glider here?"

"We carried it." John made a sweeping gesture to include all the peasants in the background and they edged a little closer, anticipating what he was about to describe.

"It was a good landing, nice and smooth" said John, "but I was mad at myself because I could see it was recycling, and small cu were already forming overhead; I sat in the cockpit for a few moments watching the sky. Then I noticed a young maiden coming towards me with a basket."

"A young maiden," I interjected, "Good grief, some people have all the luck. Was she beautiful?" Doug snickered.

"Oh, of course," teased John, "and she brought me a gift."

"A gift?" I queried.

"Yes; of tomatoes," he smiled appreciatively, reached into the cockpit and tossed some over to Doug and me. Everyone laughed and John continued, "however, we weren't alone for very long – first came the haymakers..."

"And the maiden's father," I butted in.

John glared. "... and right behind them, the militia, the border patrol, and the local police."

"Ah," I said to Doug, "that explains all the different uniforms."

"Actually," said John "they were very friendly in spite of the guns and seemed genuinely interested in my situation. I showed them my Yugoslavian 'PILOT REQUESTS THE USE OF YOUR TELEPHONE' card, which seemed to impress them because it looked official, but which none of them understood, and I tried a bit of French and German. Luckily I had radio contact with you, so it didn't matter."

"It was a good job we were up the mountain then, but get on with your story; how did you get the glider all that way?"

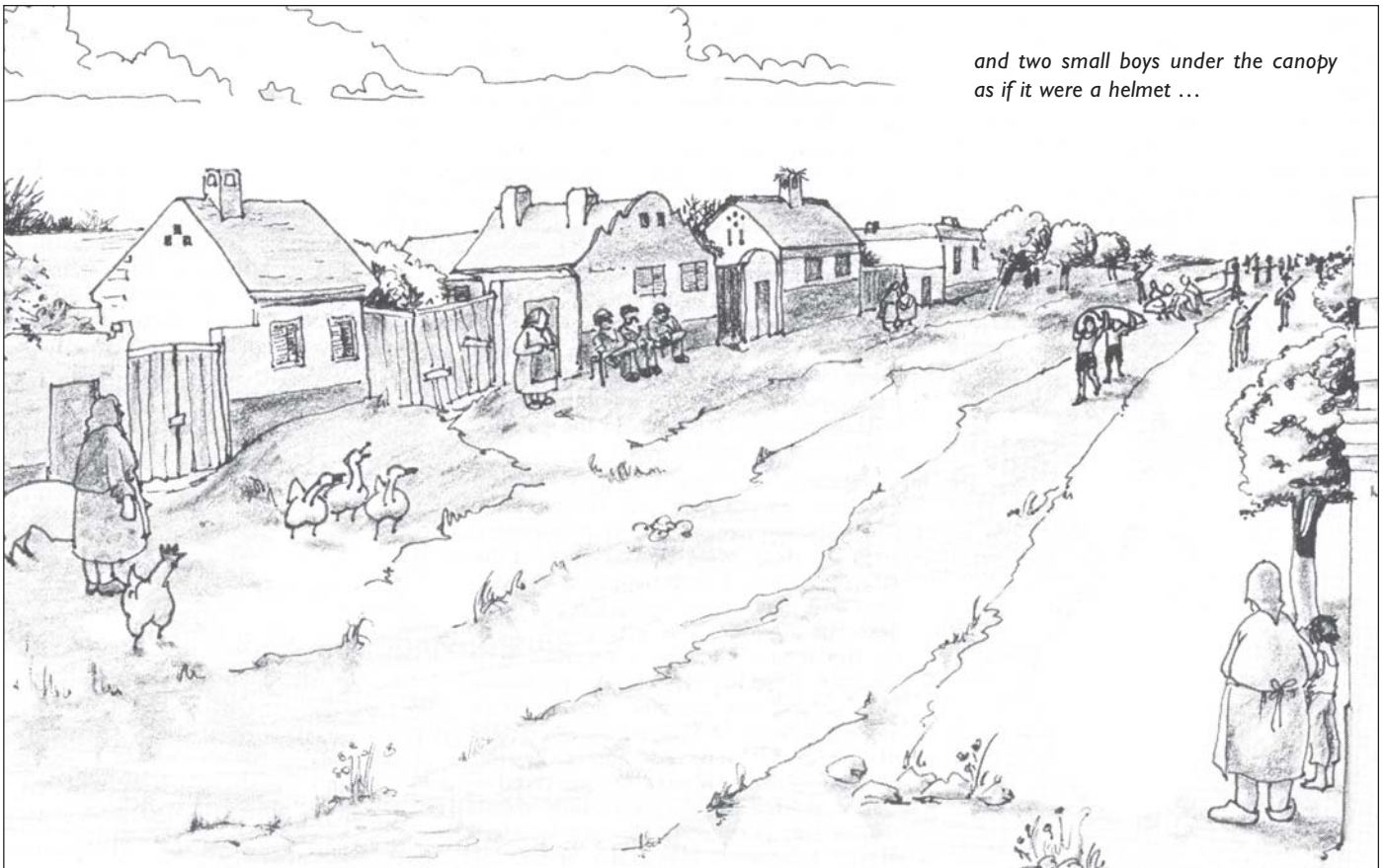
John then looked serious, and his audience exchanged glances. "Well," he said, "actually, I was extremely worried when they drove a really ancient truck up and indicated I should put the Kestrel onto it as soon as possible. They were polite but firm, and gestured with their guns so that I was in no doubt as to what they wanted. At first I pretended I didn't understand, but it was obvious to all of us that I did. Anyway, I tried to make them understand how fragile the glider was and how their crude, rough truck would damage it."

"Like a father trying to protect his fairest daughter from a barbarian?" I cut in.

"If you like," said John, "Anyway, they were adamant that it couldn't remain in the field, so to cut a long story short, we derigged it and carried it all the way here."

"Good heavens," I said, "it's hard enough to get other pilots to derig and move pieces a few feet without a lot

*and two small boys under the canopy
as if it were a helmet ...*



of arguments and dings, how on earth did you manage without a word spoken?"

"Very well indeed; in fact, much better than usual," said John smugly, "You know, they were remarkably gentle and as strong as anything. They had six men – the peasants, not the soldiers – on each wing; four on the fuselage; one holding the tailplane, and two small boys under the canopy as if it were a helmet and they just kept moving, and at a good pace too. They had one rest, about half way here, when they put everything down very carefully on one of the few patches of grass. I was somewhat reassured by the intelligence with which they had followed directions earlier but I still expected them to put the wings down on a rock or something.

You know, the road must have been made by the Romans, it looked really ancient, narrow and made of cobblestones, with deep water-filled ditches on either side, and when we got to the village, it was just like walking into the fourteenth century. There were wallowing pigs, cows and geese all over the place, peasant women standing by their courtyard doors and old men sitting on benches in the shade of mud walls and bougainvillea, and if you can imagine this strange procession headed by the two boys carrying the canopy of a space-age sailplane, moving down the middle as if it were the most natural thing in the world..." He paused for lack of adequate words; "well, it was incredible." "Fantastic," said Doug, "far out."

We sat quietly, trying to take in the vision for a few minutes – very quietly. As I glanced around I noticed that the crowd was considerably smaller and that it had become rather dark. Looking up I saw why.

"Look behind you, John," I pointed. As he turned, the first quarter-sized drops of rain fell on us. He hastily got up and put the canopy on the fuselage and two soldiers helped to lay it on its side, relieving some peasants who had been holding it upright since its arrival. Most of them had already disappeared and one by one the soldiers and police also moved away towards the village. As hot and dirty as I had felt before, I didn't relish being wet and cold either so I followed Doug, who was already beating a retreat to the trailer.

An hour later the storm had petered out and the top of the dying sun was glowing softly in the light of the setting sun. Doug was fast asleep on the trailer floor but I had not been able to get comfortable and felt cold, dirty, tired and hungry; contraband tomatoes were not satisfying for very long. Branco, it seemed, was not getting papers very fast, or maybe he had never arrived at the airport, and without papers, however nice the guards were on the other side, we were at an impasse.

The silence after the last raindrop woke Doug up. "I'm hungry," he said.

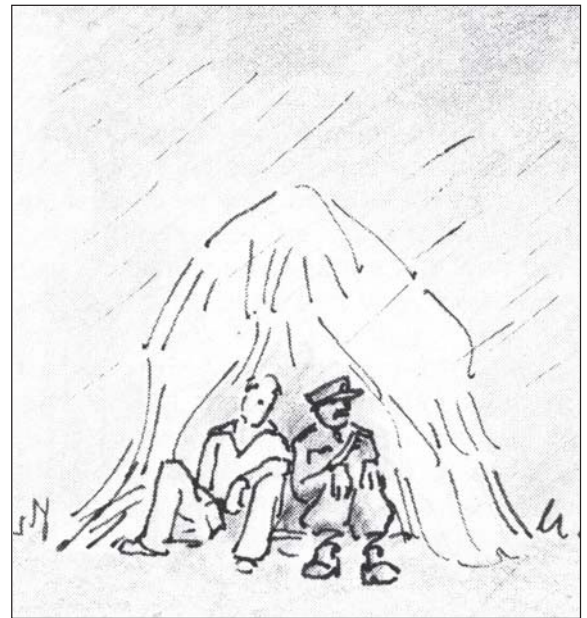
"Yes," I agreed, "me too. I suppose we'd better see what's happening." The grass was soaking wet of course, as we set off towards the thicket, and slippery; the muddy ditch was now a muddy stream, lapping the rotten

planks and threatening to wash them away. We arrived on the other side just as some bedraggled looking soldiers were moving back from the village. John was standing beside the 'Colonel'; the atmosphere was as bleak as the scene – this was beginning to be a bore.

"Where on earth is Branco?" muttered John with admirable restraint. He looked dry, and was wearing a sweater. I had expected to find him thoroughly soaked and had rationalized that it served him right for landing in Romania and putting his crew to so much trouble.

I thought with envy of the rest of the Canadian team whooping it up in Vrsac. "He probably went to the party." I ventured, "How did you manage to stay dry anyway?"

"Oh," said John, smiling at the officer beside him, "the Colonel and I were the only ones left, and since he was obviously constrained to stay with me at all costs, we quickly solved the problem by sitting in a haystack together – it was quite cosy!" The officer did not look the cosy type to me; his expression was, to say the least, inscrutable.



"Well since you're so warm and cosy," I said petulantly, "you might lend me your sweater; mine went away with Branco." Gallantly John handed me the sweater – a soldier edging forward as we were momentarily linked.

The situation was ridiculous. We stood around uncomfortably in the wet grass on either side of the dripping border as the light went out in the western sky. No one spoke and after a while Doug ambled back towards the road to see if he could see Branco. Incredible silence, and then as Doug returned, some more soldiers arrived from the village where the watchtower, in competition with the rising moon, was illuminating the roofs and tree tops.

A muttered conference was held with the 'Colonel', but though the voices were low, the gesticulations showed

that an argument was in progress. John refused to catch my eye; this was getting serious. Finally, the 'Colonel' walked straight towards Doug and, holding out an aggressive hand, demanded "*Dokumenti. Passerpor. Dokumenti.*"

The moonlight made him look sinister and I would have felt threatened if I hadn't felt snubbed – obviously a woman was of no consequence at a time like this. Doug however, with great cool, produced a pocketbook and arranged the contents like a hand of cards for the 'Colonel' and his men. The Romanians peered at the 'Dokumenti' and after much discussion and consideration the 'Colonel', looking impatiently at his watch, returned all but one small card to Doug. He moved as close to Doug as the barrier would allow and, pointing to the large embossed letters on the centre of the little card, solemnly intoned, "*Dough ah glarsch veel sohn varda?*" "Yeah," said Doug and smiled nonchalantly.

"What on earth did he say?" I asked Doug, looking at him with renewed respect – I hadn't realized that he spoke the language. He shrugged his shoulders and said, "Sssh."

The 'Colonel' nodded to his men, produced a scruffy piece of paper and a stub of pencil and appeared to be copying the writing on the card while one of his subordinates held it for him. Turning once again to Doug, he said with great deliberation, "*Dough ah glarsch veel sohn varda,*" before handing back the card.

"Douglas Wilson Wade," said Doug, emphasizing each word. The 'Colonel' looking straight into his eyes, repeated the incantation with more success.

I looked over Doug's shoulder to see what he was holding and recognized a Canadian Red Cross blood donor card replete with name, numbers and a maple leaf.

"*Dokumenti OH K.*" said the 'Colonel' as he swung around to issue orders to his men, and as if by magic the pieces of Kestrel and John were moved onto the Yugoslavian side of the border. As I peered closely at a wing in the darkness, stroking it carefully to make sure it was all right, we saw the beams of headlights and heard a car screech to a halt in the direction of the trailer. Holding the tailplane in John's sweater to protect it from the thorns, I threaded my way through the thicket and found Branco in the pasture by the road. He was not alone.

"I'm sorry, I'm sorry, I'm sorry," he said breathlessly, "the mud was unbelievable; when the rain came the road disappeared and I got stuck. But I have papers, and the Yugoslav army. I found them at the airfield and they helped push the car here. Some of them are still a long way back up the road – you see, I couldn't stop for them, I had to keep moving."

He raised both hands in a pleading gesture then, smiling broadly, he slapped the shoulders of two of the most bedraggled looking creatures I had ever seen,

both covered in wet mud from boots to drooping heads.

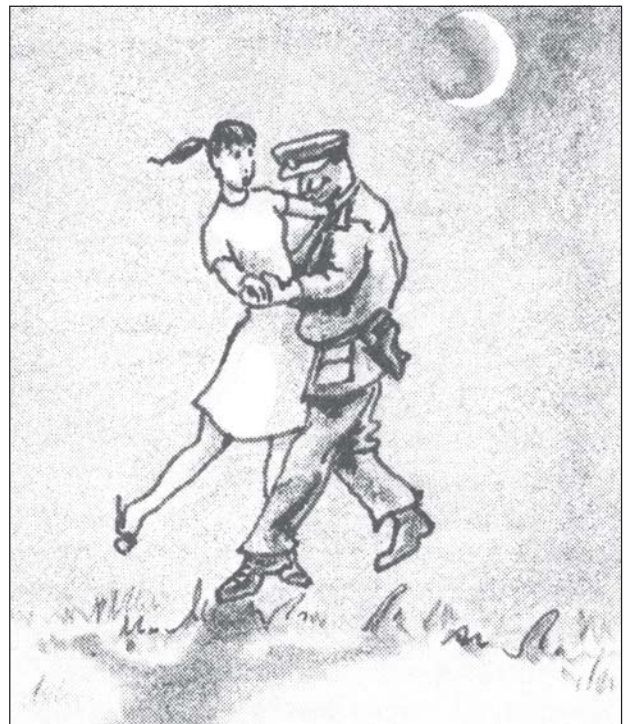
"These two pushed me for the last two miles." I believed him. John and Doug emerged from the thicket carrying a wing at this point and we were all brought back to reality by a peremptory yell, "Come and help for heaven's sake, this thing's breaking my back."

We all rushed over to help – even the Yugoslav army – who somehow managed to get in the way.

"Oh, go back and get the canopy at least," said John, exasperated and tired after the tension and anticlimax.

I left Branco chattering away to a John who just wanted to get the glider trailered, and went back through the thicket. By now there was a wider path and I was used to the rickety planks and, feeling glad that we now had crew, car, trailer and glider close together again, I ran towards the field.

It was very dark after being near the car lights and the whole field seemed strangely deserted, the crowd had dematerialized and I could only just see the white objects against the pasture. As I was peering around, looking for the canopy, the 'Colonel' suddenly appeared in front of me, grabbed me round the waist and proceeded to dance.



We stumbled around in the rough pasture for a couple of circles, falling over each other's feet and laughing nervously; when, as if to seal the pact of our illegal rendezvous, he suddenly stood still, clasped me very tightly and with his interesting eyes fixed on mine, said, very carefully, "*Dog lash vilson varda.*" Then with a loud "*OH K*" he tiptoed across the border and disappeared into the night.

A glider pilot's perspective of CASS 2008

Dan Cook

Flight Training & Safety committee

I attended the recent TC Canadian Aviation Safety Seminar in Calgary and I wanted to share some of what I took from the seminar.

First let me set the stage by saying that we in the gliding community have been working on implementation of a Safety Management Program along the TC SMS guidelines. It has not been an easy implementation process; some of the feedback from clubs has been that it is too difficult a program for them to action. Some clubs have had less difficulty where a few members have come forward to champion (lead) the change. I think most members see the need for SMS but making the effort to change club management has been the challenge. Many feel soaring is a leisure activity, so if change for safety's sake is hard, most are not really interested.

In contrast, I am always amazed at how much effort pilots will make to become good at cross-country soaring or competition. We have had some recent fatal soaring accidents that have been devastating to some in our soaring community. I am certain that if you speak to anyone who has been personally affected by these events, they are interested in anything that can be done to reduce the chances losing one of our family or friends. SMS has proven to save lives but why are we reluctant to make the effort? Do you have to wait until someone you know personally is affected? If you look at accidents from the perspective that it was your child that was killed and not to emotionally disassociate yourself from the event or pass it off that it couldn't happen to you, you might feel and act differently. I think CASS 2008 addressed this and what follows are from my notes and what I took from the workshops/seminars!

Bob Aitken from the School of Instructor Education at Vancouver Community College spoke to us about why change is so hard for humans. For a person to make change they must engage their brain to process information. This takes more effort than routine activity and can make people feel uncomfortable, so they prefer to avoid change. There are also some physiological reasons for this. We are generally good at detecting "errors" or changes in the normal way of doing things. This part of our brain is also hard wired to our emotional control centres. When errors are detected, this can activate the fear centre which can trigger an emotional response or impulsivity in us.

In most people the idea of change affects the part of the brain that sees the world

comfortably as routines. An effort to change what we are comfortable with releases signals and chemicals in our brains resulting in the fear emotion being triggered. For most of us, this is uncomfortable and we will resist both consciously and unconsciously what is triggering the undesirable effect.

This may be a "self preservation" instinct, but for those of us who have come forward to lead the safety management programs in our club, we need to understand what we are up against and how we can help our club members overcome these difficulties.

Leadership is part of managing change. Aitken pointed out we are creatures of habit and good leaders are direct, but can also be indirect. Good leaders can fashion stories of identity. They are able to embody these stories in their life experiences. This style of leadership is important when dealing with diverse groups like the flying or soaring communities.

Changing our behaviour depends on where we focus our attention. A leader can activate change in our behaviour by creating moments of insight where we can see things differently. To help us discover this insight, we need to make an emotional connection with those we are trying to lead through change. We will attend to things that have emotion and meaning. Therefore, we can learn if we can make an emotional connection to the subject!

Safety Management Programs can be more effectively introduced if leaders can make an emotional connection for those who need to be part of the process or use the system to create a safer environment. That emotional

connection is best made by a leader's influence through personal story telling about why it is important.

Aitken also gave an example of an indirect leadership approach taken by a Safety Management expert's visit to a company that had had some fatal accidents. He asked some of the company supervisors who witnessed the loss of an employee to express how it had affected them. Their personal stories of tragedy and sadness captivated their audience and resulted in collective interest towards improving safety at the plant.

So, how do gliding club leaders implement change management well? They need to find the right persons for the safety implementation task, they need to manage performance well, and they need to help implementers with their goals and interests.

Aitken also explained that Emotional Intelligence (EI), not IQ, was a stronger predictor for a person who would be better at a leadership style with making personal connections. EI describes a broad base of emotional maturity and ability in how someone sees and relates to themselves: how they relate to others, how they adapt to changes, how they manage the effects of stress, and their general mood stability. He stated, in our working life we are most often "hired for our qualifications, promoted for our performance, and fired for our interpersonal skills". Therefore, we should seek out those who are good with people rather than those who are generally more knowledgeable about the subject, when trying to find someone to implement safety programs.

SMS programs are, unfortunately, about change management. Change management is about leadership and leadership is about whom we have chosen within our clubs to invoke the proper emotional connections. If your program isn't working, you may need to find someone with the interpersonal skills (EI) who can work the program for you. ❖

from *Calculated risk-taking* by Peter Savage (*free flight*, 1986/4)

The principal point of assessing a risk is to establish that one's skill and experience is sufficient to qualify you to take it. In other words, it is not really a risk at all. The message is that to grow, it is necessary to fly to the full limits allowed by one's skills and capabilities, but never beyond them. The limitations of one's experience can be extended by consideration of the correct way to handle imaginary situations that, to a great extent, can substitute for risking neck and glider when carrying out the real thing for the first time.

Living is risky – the only absolutely safe person is dead.

Your progress and safety lies not in denying the existence of risk, but in accepting it and preparing yourself.

Touring motorglider training

Motorglider (MG) and Touring motorglider (TMG) training was discussed at the FT&SC meeting this spring. More of these gliders are appearing on the Canadian scene as they are gaining popularity. These gliders can be grouped into capabilities of self-launch, sustaining only, and touring. The latter group is increasing in availability and can have ranges in excess of 1000 nm and can be utilized closer to sport plane capabilities. Some of the discussion included:

- *Using the engine as a method of launch*
The motor will be shut off once normal gliding altitude has been reached and the MG is then used as a glider.
- *Use of the engine for cross-country assist*
The MG will be launched and flown as a glider, but the motor will be used to prevent an outlanding, including flying the glider back to base under power in the event lift vanishes. Cross-country distances would likely see Diamond distance attempts with potential returns up to 250 kilometres.
- *TMG use as a self-launching glider or powered sport plane, including remote landing sites at up to 1000 nm ranges.*

Some FT&SC experiences with transitioning pilots to TMG (G109) show the average power pilot can require 5 hours on type to be cleared for solo, and a glider pilot requires 10–12 hours. These flights are mostly touch-and-go, except for about one hour cross-country flying. This translates to about 25 take-offs and landings for the power pilot and about 65 for the glider pilot. Some of this time can be attributed to the particular difficulties associated with the G109 and may not be universal for other TMG types.

Pilots flying TMGs cross-country will potentially have to deal with more complicated issues related to airspace, radio procedures, controlled airports, and ATC procedures. This will require more elaborate flight planning and navigation skills.

The FT&SC recommends that glider pilots who intend to fly TMG receive additional ground school training emphasizing the points above and the use of the recreational pilot permit curriculum as the standard. Alternatively, potential TMG pilots could attend a powered flight ground school to fill in the voids in the glider training. Pilots with a PPL or Recreational Permit would not need the additional cross-country training or ground school. The committee agreed that some recommended standard or practice was needed to advise CFIs of the additional practical training that is required for glider pilots. A Bronze badge is the minimum requirement for glider cross-country flight.

In addition, for glider pilots to fly TMG without power flying cross-country training experience:

- Checkout on type include sufficient number of dual flights to demonstrate normal and emergency handling of aircraft under power and as a glider; and
- a dual cross-country practice in a TMG under powered flight in excess of 50 km and include flight planning, navigation, diversion skills and airport landing.

The CARs are not as clear as the USA FARs when it comes to motorgliders and the requirements for type checkouts and method of launches. The privileges of a glider pilot licence are listed under CAR 401.24 as follows:

- “401.24 The holder of a Pilot Licence – Glider, may, under day VFR, act as:
- (a) pilot-in-command of a glider in which no passenger is carried on board;
 - (b) pilot-in-command of a glider in which passengers are carried on board where:
 - (i) the glider is launched by a method of launch endorsed by the holder of a Flight Instructor Rating – Glider, in the holder's personal log pursuant to sub-section 401.18(1) or (2), and
 - (ii) the method of launch has been used by the holder for not less than three previous solo flights; and...”

This would indicate flying a MG is authorized without a launch specific endorsement unless one wants to carry passengers. MG/TMG pilots are reminded that where the use of the glider motor as a method of launch according to CAR 401.18 requires:

- “(2) Where the holder of a Pilot Licence – Glider, demonstrates, in accordance with the personnel licensing standards, additional methods of launch to an instructor who holds a Flight Instructor Rating – Glider, the instructor shall so endorse the holder's personal log, recording therein the additional methods of launch used.”

This would indicate a glider instructor could endorse the launch method used on MG/TMG (FT&SC has issued recommended SAC MG checkout procedures). However, CAR 421.24 for glider licence standards requires:

- “(5) Skill
- (b) An applicant shall submit a letter from the holder of a Flight Instructor Rating – Glider, qualified on the method of launch for the glider used for the test, attesting to the applicant's satisfactory completion of the skill requirement.”

The FT&SC understanding is that the TC interpretation is if an aircraft is registered as a glider, the pilot requires a glider licence and a glider instructor endorsement (themselves qualified on method of launch) on each method of launch the glider pilot intends to use. The common methods of launch in Canada are currently aerotow, winch, auto tow and self-launching. Therefore, if you intend to use a motorglider as method of launch you will need an endorsement from a qualified flight instructor to meet the CARs. This endorsement may be difficult to get in Can-

ada for MG/TMG as many instructors are not MG/TMG qualified pilots, nor do many clubs offer dual MG/TMG training. One could argue that they meet CAR 401.24 for exercising solo privileges if they do not fly passengers. Others feel their (Power) Pilot Licence is good for MG/TMG, for which there is no regulatory basis. The debate is not yet crystal clear. It may be easier to get the training/certification on method of launch from the glider manufacturer or in the US until MGs/TMGs are more common at the club level. A list of FAA CFGs authorized for MG is found at <http://mysite.verizon.net/engreenwellASA/index.html>.

Accidents in 2008

There have been preliminary reports of two accidents so far this year. There was a tow-plane prop strike and a glider undershoot on approach into the trees. In both cases no injuries but we anticipate substantial damage reports.

Safety Management Program

The club level SMP documents have been incorporated into the Safety Training Package for Club Safety Personnel which can be found in the SAC website Document Vault.

Transport Canada enforcement

A recent review of a glider pilot's Journey log by TC Enforcement Division revealed that the owner had not been recording assembly/disassembly of the glider in the log! CAR Standard 625 for Elementary Work, lists “(13) removal and replacement of glider wings and tail surfaces that are designed for quick assembly” as elementary maintenance work that must be entered in log in accordance with CAR 571.03 *Recording of Maintenance & Elementary Work*. Pilots may have misinterpreted CAR 605.94 Schedule 1 as not requiring this entry as the glider requirement is not specifically listed.

FT&SC had discussed this with the former TC Director of Recreational Aviation, who said gliders had been included in error in this regulation and that this would be corrected in future amendments of CARs. Disassembly of powered aircraft requires sign-off by an AME or other aviation-type engineer, whereas gliders do not require this; hence we should not have to sign off for what can be a daily routine. FT&SC recommends that the inspection after assembly for club aircraft be noted in the DI record kept with the glider.

In addition, glider owners are reminded that *they alone* are responsible for acting on all ADs issued on their glider type – CAR 695.84(b). All ADs should be entered into the Journey log and noted as “not applicable” (with the reason), or the work performed to comply with the AD. This entry should be signed off by an AME (who is only certifying that the work is done in accordance with the airworthiness standards). ❖

WSPA – the Women Soaring Pilot Association

Frauke Elber

Soaring in the United States began after the news of motorless flights at the Wasserkuppe in Germany reached this country. Among the early glider pilots in the US were five women, one of them Anne Lindbergh, wife of Charles Lindbergh. These five created so much enthusiasm that in 1929 a women's glider club formed, the Anne Lindbergh Club.

In the 1930s women started to participate in contests. In the 1950s, when the whole USA had only 1000 registered glider pilots, women's participation reached its highest percentage and performance level. Since then women's participation in the sport has declined percentage-wise. From the early to mid-1970s, American women participated in the international women contests in Europe. The last one was Karol Hines who flew in the then-renamed European Women Championships in Orel, Russia. Karol financed her participation mainly by herself with a small support from WSPA. It wasn't until 1999 that an American woman again participated in an international contest: Liz Schwenkler flew for the US on the Junior Team in Holland. Eight years later, in 2007, Kathy Fosha earned a berth on the Junior Team to fly in Rieti, Italy.

At soaring gatherings, the question always pops up why no American women participate in World championships. Percentage-wise, there are very few women glider pilots in the US and these few are spread over a very big country. Amongst these relatively few only a very small number ever fly in any contest, be it on regional or national level. Geography has a role; the few women very seldom get a chance to meet, since the largest number of clubs can be found along the two coasts. Also, the surprise observation was made that since the women's liberation movement started, the number of women in soaring declined. The reason is probably that many joined the work force and since vaca-

tion time in the US is much less than in European countries, they did not want to invest the time into competition soaring.

To start more interaction among women glider pilots, Bertha Ryan, a glider pilot herself and later a recipient of the Majewska Medal, distributed to the clubs a survey in 1972 to find out how many women glider pilots were in the US. Fifty-seven women responded. Encouraged, Bertha started a small newsletter that later evolved into the bi-monthly *Hangar Soaring*, which became a sounding board for new ideas and communication amongst the women.

Bertha's initiative led to the first week-long women seminar in 1978. It was then decided to hold this seminar annually and each time in a different part of the US, to enable as many women as possible to attend over the years. Out of these seminars grew the idea of forming a Women Soaring Association, which happened in 1986 and whose mission it was to encourage and support the women glider pilots.

Private donations and grants made it possible to establish scholarships to support young pilots (and recently not-so-young pilots) and help to defray seminar costs. Over the years the organization has grown to over 200 members (women and men) and since the early 2000s, men and women from seven overseas countries have joined the organization. Several came across the Atlantic for the seminars, especially when the seminar was held in the Western States.

In 2009, for the first time, the seminar will take place in Europe, in Lesce/Bled, Slovenia. The date for that seminar is 18–22 July, 2009. Preparations for the seminar are already under way and an update will be posted on WSPA's webpage <www.womensoaring.org>.

THE WORST TEACHER

Despite the famous dictum, "Experience is the best teacher," it is actually the worst for a pilot. It is too expensive. I enjoy the nasty habit of stealing that of other pilots. Whenever I hear of an accident I ask myself, DO I FLY IN SUCH A WAY THAT IT COULD HAVE HAPPENED TO ME? If the answer is affirmative, I do my best to correct my habits.

Like a parasite, I stay alive on the flesh and blood of others – I admit it without shame. I love the taste of hamburgers with ketchup and onions, I love my wife's embrace. My imagination is a vivid one, and when I can't see that other glider that's supposed to be in the circuit, I panic. No more beer on a warm afternoon? I limit the challenge of flight to the challenge of my imagination and to my good common sense.

Robert Duncan

Canadian glider fleet

Here's the updated list of all active gliders in Canada. Those on the TC register but rotting on a trailer behind a hangar or are damaged and haven't flown for a while aren't tracked. The list is on the SAC document page. Help keep it current by letting Tony Burton know when a glider has changed owners, is sold out of the country, or you have imported one. Variants are grouped together here.

1-23	4	K7	5
1-26	19	K8	3
1-34	4	Ka6	11
1-35	4	Kestrel	3
1-36	1	Krosno	5
2-22	8	L-13 Blanik	20
2-32	1	L-23 Blanik	9
2-33 (Cadets)	88	L-33 Solo	12
AC-4C Russia	2	LAK-17	1
AC-5M	1	Libelle 201	11
AFH-3	1	Libelle 301	3
AMT 200	1	LK-10A	1
Apis	1	LS-1C	1
ASH-26E	1	LS-3A	1
ASK-13	2	LS-4	7
ASK-14	1	LS-6B	3
ASK-21	1	LS-8/18	6
Astir L3	1	Mini-Nimbus	3
ASW-15	8	Monerai	5
ASW-17	2	Mosquito	1
ASW-19	8	Nimbus 2	2
ASW-20	22	Open Cirrus	4
ASW-24	4	Peterson J4	1
ASW-27	3	Phoebus	6
Bergfalke	1	PIK-20	14
BG-12B	1	PIK-20E	3
Cherokee 2	2	Pilatus B4	9
Club Libelle	1	Pioneer II	2
Dana	1	PW-5	11
DBW-2	1	PW-6	1
DG-100	1	Puchacz	6
DG-200	2	RS-15	6
DG-300	2	Salto	2
DG Club Elan	1	SF-27A	2
DG-303 Elan	1	SF-28B	1
DG-400	8	SHK-1	1
DG-600	2	Skylark 3D	1
DG-800	4	Skylark 4	3
DG-808	1	Slingsby Dart	1
Diamant	2	Std Austria	2
Discus	7	Std Cirrus	7
Duo Discus	2	Std Cirrus 75	2
Duster	2	Stemme S10	2
Egret	1	Super Dimona	2
Elfe	1	SZD-30 Pirat	1
G102	11	SZD-36 Cobra	1
G103	8	SZD-45A Ogar	1
G109	4	SZD-51 Junior	2
Genesis	3	SZD-55	9
Glasflügel 304	2	SZD-59 Acro	1
Hornet	1	Tern	2
HP-11	2	Ventus B	3
HP-14	6	Ventus	11
HP-16	2	VES-1	1
HP-18	8	Vivat	2
IS-28B2 Lark	5	Windrose	1
IS-29D2 Lark	1	Woodstock	1
IS-32 Lark	1	Zephyr	1
Jantar	21	Zugvogel III	1

A spring intro flight



You can come out now, young man.

Ontario Provincial Soaring Competition

Last summer, Toronto Soaring Club hosted the Ontario Provincials over the Labour Day long weekend. It was made possible for our relatively small club with the tremendous support of Great Lakes Gliding Club and some key individuals as Ed Hollestelle (Sr.), Dave Springford and Kerry Kirby. We had so much fun (and now that we kinda know what to do), we decided to do it again!

HEAR-YE, HEAR-YE, HEAR-YE!

The Toronto Soaring Club and Great Lakes Gliding Club will be co-hosting the 2008 Ontario Provincial Soaring Competition from 31 July to 4 August, 2008 at TSC. The 30th of July is a practice day. Yes, the contest is five days long this year. Yes, we moved it away from Labour Day weekend to the August long weekend. (Our reasons have been debated *ad nauseum* and basically come down to weather and scheduling of other contests, with apologies to the fellows going to the Worlds.)

Please check our website for details: www.toronto-soaring.ca/2008ONPROV/2008provincials.html >

We will add more details as planning matures, so check back often, but most of the info is there. **Derek Mackie**

who invented this sport, anyway?

from page 11

of gliders which achieved brief hops from around 1804. After the First World War, gliders were built for sporting purposes in Germany.

(Note: My degree in history suggests the real purpose was to evade the terms of the Treaty of Versailles, 1919, which forbade the development of a German Air Force.)

The sporting use of gliders rapidly evolved in the 1930s and is now the main application.

(Note: I believe that the main application is to simultaneously remove my money and my dignity.)

As their performance improved, gliders began to be used to fly cross-country and now regularly fly hundreds or even thousands of kilometres in a day.

(Note: I hold an FAI World Speed Record for crossing the USA in a J3 Cub, with a 65 hp engine and we never exceeded 600 km in a day. Go figure.)

The space shuttle orbiters do not use their engines after re-entry at the end of each space flight, and so land as gliders. Wikipedia says that to improve performance in gliders:

"Special aerodynamic seals are used." We call them 'wing tape', available at the local hardware. It also states: "Bug-wipers may be installed to wipe the wings while in flight and remove insects that are disturbing the smooth flow of air over the wing."

Finally I know why I have difficulty gliding those elusive long distances. No bug-wipers. ❖

Glidern

Unlike the vehicle situation, arranging gliders were finalized early in the game. Through some old connections that date back to my university days and with the help of Ulli Kremer of the Schleicher company, we found a nice ASW-27 (15m) for Dave. The glider is equipped with an LX computer system, which Dave is very familiar with. Jerzy privately arranged for an ASG-29 (15m/18m). Willem ordered an LS-10 (18m) from DG but there is still some uncertainty if the glider will be ready in time to start the training on 26 July.

Training

With both Jerzy and Dave planning to fly Schleicher products, it was important to give them both the opportunity to fly AS-glidern as much as possible before the Worlds. Our thanks go to Walter Weir who made his ASW-27 available to both of them last August and September. In March, Dave had the opportunity to fly Walter's glider again in Seminole Lake, Florida.

If you have followed the Roundtable, you know that our pilots have been very active, honing their skills in high level competitions around the world.

In January, Willem competed in the South African Nationals in New Tempe, finishing in 9th place. Jerzy finished in 3rd place in the Polish Nationals – a remarkable achievement since there were a number of international heavyweights competing in preparation for the Worlds. Jerzy left many of them in the dust, the most prominent being Janusz Centka, a four-time World champion. Bravo! Dave came 5th in the US Std. Class Nationals, ahead of one of the Std. Class US Team pilots. As I write, Dave has just won Day 1 in the Region 6 contest in Waynesville, Ohio.

I cannot recall any past Canadian Team that has been so well prepared and trained to peak performance as our Team for Lüsse 2008.

A kick in the teeth – transatlantic politics

Despite our efforts and our successes in training, things are far from good and I am mad as hell about it. We had our first inkling in January that there could be a problem when we learned that there were 163 preliminary entries from 34 countries for the contest which was limited to 134 competitors (130 plus three current World champions plus one extra pilot for the host country). At the end of March, once the deadline for final entries had passed which was also the due date for payment of the entry fees, the number of entries had shrunk to 141. Close, but still too many.

According to the IGC rules (which were reaffirmed at the IGC meeting in Rome in early March), in such a case the number of pilots would be reduced according to the International Pilot Ranking List (see below). In retrospect I regret not attending the IGC meet this year, but I doubt that one lonely voice without extensive pre-meeting lobbying among the non-European delegates would have made a difference. Canada ranks low on this list with the result that one of the seven pilots dropped was a member of our Team. Five of the seven pilots cut were overseas pilots, which clearly shows how unfair the Ranking List is for non-Europeans. After the final list of competitors was published, Jerzy's comment was now the field looks more like the European Championships.

I wrote a letter to the organizer with copies to the IGC and the other affected teams, making the following points:

- The Ranking List is fundamentally unfair to non-Europeans.
- It is unfair that we have to reduce from 3 pilots to 2 when Germany has 8 pilots, Britain has 7, and most other European nations have at least 6 pilots.
- Overseas competitors need a guaranteed number of entries since commitments for airline tickets and glider rental are made far in advance of the entries being finalized. For us it is not just a matter of hitching up a trailer and driving to Lüsse.
- There is no fundamental difference in safety between a field of 134 competitors vs. 141 competitors.

The letter had some impact with the organizer but he pointed out that he is bound by the IGC directives. This is something we will have to take up later with the IGC, but for Lüsse the decision stands.

We had decided that the only fair way to determine who has to give up his spot, is to use the Canadian seeding list. It meant that Dave became our reserve pilot. This is particularly painful in light of Dave's excellent showing at the US Nationals and the energy and effort he put in to raise funds and organize things for the Team.

Fortunately, Dave took it in truly sportsman-like fashion and decided to stay in the program and continue with training. I am still hoping to get Dave back into the game. I am working closely with the organizer to make sure Dave gets a chance to slide into the first vacant position if one of the confirmed competitors withdraws. Dave is also our reserve pilot if the delivery of Willem's LS-10 is delayed. Let's all keep our fingers crossed that the Canadian Team will be at the start with all three pilots! ♦

The International Pilot Ranking List and what is wrong with it

So what is this International Pilot Ranking List? The idea was introduced a few years ago by former world champion Brian Spreckly as a means of establishing an international seeding list. <http://www.fai.org/glider/rankings/Ranking_List.php?alpha=0.php>

Individual pilots are ranked according to their scores in National, Continental, and World championships. The "value" of a contest for ranking purposes depends on its level (national or international), on the number of competitors, and on the ranking of the competitors. In practical terms, World or Continental championships with many highly ranked competitors will be much more significant than National championships with few and unranked pilots. A nation's ranking is derived from the average of its five top ranked pilots. At first glance, this all makes sense and looks like a good idea.

So what is wrong with this approach? European pilots have half a dozen nationals they can reach within a day's drive, they have European championships and more often than not the Worlds are also in Europe. Over the past 20 years, only three World championships were held outside Europe (1991 Texas, 1995 New Zealand, 2001 South

Africa). We have Canadian Nationals and US Nationals, no Continental championships and the last time we had a Worlds was in 1991!

When the ranking list was introduced we decided it doesn't make much sense for Canada to participate because the sanction fees and the requirement for Sporting Licenses would add about \$80 per competitor to the cost of flying in the Nationals. At the same time the typically low number of competitors would severely reduce the significance of Canadian Nationals for pilot ranking purposes. Canada has currently seven pilots on the list. Their ranking is based on their scores in US Nationals and other international events. In contrast, Germany has 531 "ranked" pilots. That's why Canada's ranking is 28th out of 39, just behind Ireland. Jerzy's individual ranking is 607, yet in the Polish Nationals he scored higher than Janusz Centka, the second highest ranked pilot in the world.

The International Pilot Ranking List just doesn't work for non-Europeans! Ironically, our pilots' rankings will probably jump up by a few hundred positions once the results of the Polish Nationals, US Nationals and the Worlds have been worked into the list.

Heading south, I knew exactly where I had to go to get the 50 kilometres. I would have to leave the security of the Fairmont ridge and venture out into the Canal Flats gap at 9:30 pm or so. I picked an altitude limit allowing for final glide back to Fairmont, not Invermere. I'm pretty sure there was nothing sort of a disaster that would have kept me honing that limit.

More math again as I had to be sure. I got to the 50 km mark from Invermere and added 2 km for good measure. If I did the math right, the 1000 should be in the bag, but I still had to fly an extra 52 km home for the celebration. I was at 6700 feet asl within easy glide to Fairmont but a bit of a stretch to Invermere. I wouldn't have had an issue if I had to land at Fairmont but I was anxious to get home as the day was nearly done. Amazingly, there was still lift around which I used enough of to get back to Invermere at 5000 feet asl at 10 pm. WOW, what a day!

I triple-checked my gear and landed long on 15, rolling off the runway close to my hangar. The gang was waiting and swarmed AX1 excited to know the result. All I could say

was, "Maybe so, as long as I can add." I was out of oxygen for the last four hours of the flight, my water and lunch were long since depleted, the last relief bag had been filled to the brim, the sun was setting and I was cramped and hungry and exhausted.

We quickly stored AX1 in the hangar but I really couldn't function properly till I knew. Everyone had waited dinner for me. I downloaded the flight on the club's computer. The program optimized the flight at 1001.5 km, OLC. The crowd roared! Only the final number seemed to matter. On reflection, I realized that a lot had gone on through the day, but had I not flown the insurance 2 km at day's end, the flight might have been up as 999.5 km. Wouldn't that have been a nightmare finish!

It's not easy to fly long durations and achieve a 1000 km task of any kind. This was an 11.5 hour flight! These long flights are physically and mentally draining. There's a lot of little things before and during the flight that can have an impact on the outcome. I didn't fly many tasks for the rest of 2007 after that flight. I probably won't attempt another 1000 km flight – unless of course I wake up and it just happens. ❖

bail-out procedures

from page 15

(Pull just enough to see the cable move freely at the handle.) A piece of foreign material can lodge inside the housing creating a "hard-pull" situation or even jam the cable during activation. *This check will ensure freedom of the cable within the housing.*

The handle is secured by Velcro. If it is old or full of foreign material it may not secure the handle adequately. Clean the Velcro or have it replaced if necessary. If the Velcro retaining the handle requires frequent closing then it requires attention.

Getting out

When things have gone all wrong - MAKE THE DECISION – bail out – immediately! If your glider has a specific plan of egress recommended by the glider manufacturer, review it. Hesitation is inappropriate at this critical time! How fast can you open and jettison the canopy, undo the glider's seat belt release, place your hands in a position to egress, get your legs out from under the instrument panel, lift yourself above the cockpit edge and pull yourself out and clear of your disabled glider – while it's spinning? Getting out will likely be made more difficult due to G forces.

Understand the potential for your seat belt harness to get caught on your parachute harness. This is another good reason to have the parachute harness snugly done up; it reduces the likelihood of the glider's seat belt buckle getting caught under a loose parachute harness.

Release your seat belts *after* the canopy is jettisoned. Releasing your seat belts first may bang your head into or through the canopy if the glider is tumbling or spinning. If you're injured or rendered unconscious as a result, you'll likely "ride it in".

Do what ever is necessary to get out of the cockpit. As soon as you are out and clear of the glider: LOOK-LOCATE-ACTIVATE.

- LOOK for the handle.
- LOCATE See where it is and do not take your eyes off it! Place the thumb of your left hand through the handle and form your fingers firmly around the handle. Place your right hand over your left and grip firmly.
- ACTIVATE PULL the handle DOWN towards your crotch.

The parachute will open in about 2-3 seconds (300-500 feet). DROP the HANDLE! If the cable end stays in the housing you can remove it completely by simply pulling it out all the way.

Congratulations (I guess), you are now descending under an open chute. Now what? What trouble can occur during landing? That's in part 2, next issue. ❖

If you think it can't happen to you, read "Bail-out!" in free flight 1983/1 by Mirth Rosser. It is a very exciting story. Bob Fieldhouse is a member of Silver Star Soaring in Vernon, BC and also a sport parachute instructor.

The day ended with a bring-your-own-meat barbeque and SeeYou flight analysis/review.

Day 3 (Sunday)

This was the best day of the contest. Thermals were well-formed with 2-3 knot average by 11:00 with cloud-base at 2700 feet agl. By the time the last glider on the grid was launched, cloudbase had moved up to 3600 and the gate was opened at 12:08. Task was open with a 2.5 hour task time. Again pilots elected to fly a mixture of the three MayFly tasks with the minimum distance of 14 km and maximum distance of 168 km. Two safe landouts were recorded. Of note is that the GGC Puchacz made it around the Windover/Maxville triangle and the RVSS Grob Twin II made it around the inner quad circuit. Evening SeeYou flight review/analysis. Total distance flown by all the pilots for the contest was 1059 kilometres.

The top three pilots of the 2008 MayFly are:

Tim Forbes	291 pts (LS-1) Rideau Valley
Karl Boutin & Remi Knoerr	245 pts (Jantar) Gatineau
Udo Rumpf	218 pts (ASW-24)

Total distance flown: 2576 km on a weekend that was forecast to be a washout. Seven safe landouts over three contest days indicated that the set tasks were just challenging enough. Flight line ops went smoothly with grid launch time improving each day to a best of 40 minutes for 11 gliders with two towplanes.

So went the tenth anniversary edition of the GGC MayFly contest. Special thanks to everyone at GGC who helped out with towing, launching, recovery, scoring and the Saturday evening dinner. Mark your calendars now for the 2009 GGC MayFly.

Hope to see you next year! ❖

FAI badges

Walter Weir

3 Sumac Court, Burketon, RR2, Blackstock, ON L0B 1B0
(905) 263-4374, <waltweir@ca.inter.net>

The following badges/badge legs were recorded in the Canadian Soaring Register during the period 12 Nov 2007 to 8 Jun 2008.

GOLD BADGE

321 Marc Arsenault ACE
322 Ian Grant Gatineau

SILVER BADGE

1024 Robert Lohmaier Prince Albert
1025 Alan Grant SOSA
1026 Gerard Ludgate SOSA
1027 George Haeh SOSA

GOLD ALTITUDE (3000 m gain)

Marc Arsenault ACE 4206 PIK-20B Sugarbush, VT
Ian Grant Gatineau 3380 Discus 2b Lake Placid, NY

SILVER DISTANCE (50 km flight)

Robert Lohmaier Prince Albert 52.0 K-7 Birch Hills, SK
Alan Grant SOSA 67.6 SZD-51 Rockton, ON
Gerard Ludgate SOSA 64.0 SZD-51 Rockton, ON
George Haeh SOSA 66.8 PW-5 Rockton, ON

SILVER/GOLD DURATION (5 hour flight)

Scott Hube SOSA 5:27 PW-5 Rockton, ON
Dennis Mountford Prince Albert 5:56 K-7 Birch Hills, SK
Gerard Ludgate SOSA 5:27 SZD-51 Rockton, ON
George Haeh SOSA 5:15 SZD-51 Rockton, ON

SILVER ALTITUDE (1000 m gain)

Scott Hube SOSA 1320 SZD-51 Rockton, ON
Ross Taylor Prince Albert 2052 K-7 Birch Hills, SK
Gerard Ludgate SOSA 1750 SZD-51 Rockton, ON
George Haeh SOSA 1380 PW-5 Rockton, ON

C BADGE (1 hour flight)

2880 Scott Hube SOSA 2:35 SZD-51 Rockton, ON
2881 Chris Andrews Great Lakes 1:04 KR-03A Colgan, ON
2882 Scott Stitt Great Lakes 1:16 KR-03A Colgan, ON
2883 Michel Desbiens Quebec 1:14 Blanik L-23 St Raymond, QC
2884 Patrick Kessler Quebec 2:28 Ka6CR St Raymond, QC
2885 Gerard Ludgate SOSA 2:30 SZD-51 Rockton, ON
2886 George Haeh SOSA 5:15 SZD-51 Rockton, ON

FAI records

Roger Hildesheim

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

The following records have been approved:

Pilot **Tony Burton**
Date/Place 4 May 2008, Black Diamond, AB
Record type 300 km Triangle Speed, Club
FAI Category 3.1.4j
Sailplane Russia AC-4C, C-GJEC
Speed 101.4 km/h
Task Cu Nim - bridge N of Cowley - McGregor Dam - return
Previous record 78.2 km/h, 2002, Tony Burton

Pilot **Ernst Schneider (Darren Smith)**
Date/Place 28 May 2008, Invermere, BC
Record type 300 km Out & Return Speed, Territorial, Multiplace
FAI Category SAC
Sailplane Duo Discus, C-GDUO
Speed 112.7 km/h
Task Invermere #1 - Bush Ridge - return
Previous record Not claimed (*and it eliminated the Citizen record set in 1976 by Walter Chmela and Heinz Rominger of 65 km/h*)

Pilot **Ernst Schneider (Darren Smith)**
Date/Place 28 May 2008, Invermere, BC
Record type Free Out & Return Distance, Territorial, Multiplace
FAI Category 3.1.4b
Sailplane Duo Discus C-GDUO
Distance 338.0 km
Task Invermere #1 - Bush Ridge - return
Previous record Not claimed

Note: The minimum "starter value" for the 400 km triangle speed record in the 15m column had been listed at 77.9 km/h. This value was in error and has been corrected to 86.8 km/h.

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2	Insigne FAI 'C', écusson en tissu
3	Insigne FAI d'ARGENT
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37	Insigne FAI OR, écusson en tissu, 3" dia.

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33	Insigne FAI 'A', plaqué d'argent (<i>disponible au club</i>)
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35	Insigne ACVW badge de BRONZE (<i>disponible au club</i>)

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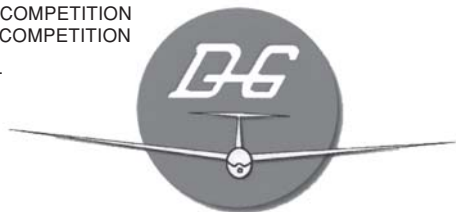
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Invermere Soaring Centre Mountain soaring, camping, glider rentals. Mountain flying instruction in Lark or Duo Discus. Trevor Florence, Box 2862, Invermere BC, VOA 1K0, cell (250) 342-1688, ph/fx (250) 342-7228. Website: <www.soartherockies.com> e-mail: <info@soartherockies.com>.

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Pemberton Soaring Centre Glider rentals, instruction, and rides near Whistler, BC. Rudy Rozypalek, 1-800-831-2611, (604) 894-5727, <info@pembertonsoaring.com>, <www.pembertonsoaring.com>.

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LS series of sailplanes, LX glide computers, Dittel radios, Colibri FRs. Planeurs de grande finesse. AMS-flight DG ELAN Std. class and two-seaters. DG Flugzeugbau GmbH. 15m, 18m gliders/motorgliders and 2-seat gliders. Contact <ed@solairecanada.com>, (519) 461-1464 or <willem@langelaan.com> (905) 274-1286.

Sportine Aviacija Canadian dealer for LAK sailplanes. LAK-17a – 15/18m flapped; LAK-19 – 15/18m standard; LAK-20 – 2-seat 23/26m Open. <nick.bonniere@withonestone.com>.

XU Aviation Sailplane repairs (major & minor) and inspections. Chris Eaves, <www.xu-aviation.com>, (519) 452-7999, fax 452-0075.

ZS Jezow PW gliders Today's technology, polyurethane finished, instrumented, type approved PW-6U and PW-5. CM Yeates & Associates. Avionic trailers with fittings also available. <yeatesc@ns.sympatico.ca>, or see <www3.ns.sympatico.ca/yeatesc/world.htm>, Ph/fax (902) 443-0094.

publications

GLIDING INTERNATIONAL — A fresh new monthly magazine for the gliding community. Extensive around-the-world news. Subscriptions, US\$52. Editor, John Roake, <www.glidinginternational.com>.

GLIDING & MOTORGLIDING INTERNATIONAL — world-wide on-line magazine. Editor, Val Brain, <www.glidingmagazine.com>.

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.

SOARING NZ — Replaces the *Gliding Kiwi*. Editor, Jill McCaw. NZ\$122. Personal cheques or credit cards accepted. McCaw Media Ltd., 430 Halswell Road, Christchurch, NZ. <j.mccaw@xtra.co.nz>.

SAILPLANE & GLIDING — the only authoritative British magazine devoted entirely to gliding. Bimonthly. £39 per year airmail, £22.75 surface. <beverley@gliding.co.uk>.

SAC Clubs SAC Clubs

Eastern Zone

AIR CURRENCY ENHANCEMENT SOC.
Debert, NS
robfrancis@tru.eastlink.ca

AÉRO CLUB DES CANTONS DE L'EST
Bromont, QC
Marc Arsenault
marcarsenault@sympatico.ca

AÉRO CLUB DES OUTARDES
Bromont A/P, QC
http://aeroclubdesoutardes.iquebec.com

AVV CHAMPLAIN
St. Dominique A/P, QC
www.avvc.qc.ca

CVV QUEBEC
St. Raymond A/P, QC
www.cvvq.net
club phone (418) 337-4905

MONTREAL SOARING COUNCIL
CLUB DE VOL À VOILE DE MONTRÉAL
Hawkesbury, ON
club phone (613) 632-5438
www.flymcs.org

Ontario Zone

AIR SAILING CLUB
NW of Belwood, ON
Stephen Szikora (519) 836-7049
stephen.szikora@sympatico.ca

BONNECHERE SOARING
5.5 km N of Chalk River, ON
Iver Theilmann (613) 687-6836

ERIN SOARING SOCIETY
7 km east of Arthur, ON
www.erinsoaring.com
info@erinsoaring.com

GATINEAU GLIDING CLUB
Pendleton, ON
www.gatineauglidingclub.ca

GREAT LAKES GLIDING
NW of Tottenham, ON
www.greatlakesgliding.com

GUELPH GLIDING & SOARING ASSN
W of Elmira, ON
www.geocities.com/ggsa_ca/

LONDON SOARING CLUB
between Kintore & Embro, ON
www.londonsoaringclub.ca

RIDEAU VALLEY SOARING
35 km S of Ottawa, ON
club phone (613) 489-2691
www.rideauvalleysoaring.com

SOSA GLIDING CLUB
NW of Rockton, ON
(519) 740-9328
www.sosaglidingclub.com

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

YORK SOARING ASSOCIATION
7 km east of Arthur, ON
club phone (519) 848-3621
info (416) 250-6871
www.YorkSoaring.com

Prairie Zone

PRINCE ALBERT GLIDING & SOARING
Birch Hills A/P, SK
www.soar.sk.ca/pagcs/

REGINA GLIDING & SOARING CLUB
Strawberry Lakes, SK
www.soar.regina.sk.ca

SASKATOON SOARING CLUB
Cudworth, SK
www.ssc.soar.sk.ca

WINNIPEG GLIDING CLUB
Starbuck, MB
www.wgc.mb.ca

Alberta Zone

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

CENTRAL ALBERTA GLIDING CLUB
Innisfail A/P, AB
www.cagcsoaring.ca

CU NIM GLIDING CLUB
Black Diamond, AB
club phone (403) 938-2796
www.soaring.ab.ca/cunim

EDMONTON SOARING CLUB
N of Chipman, AB
www.edmontonsoaringclub.com

GRANDE PRAIRIE SOARING SOCIETY
Beaverlodge A/P, AB
www.soaring.ab.ca/gpss/

Pacific Zone

ALBERNI VALLEY SOARING ASSN
Port Alberni A/P, BC
http://avsa.ca

ASTRA
martin_dennis@precisioncutters.com

CANADIAN ROCKIES SOARING CLUB
Invermere A/P, BC
www.canadianrockiessoaring.com

HOPE GLIDING CENTER
Hope A/P, BC
club phone: (604) 869-7211
hope.gliding@yahoo.com

PEMBERTON SOARING
Pemberton A/P, BC
www.pembertonsoaring.com

SILVER STAR SOARING ASSN
Vernon A/P, BC
www.silverstarsoaring.org/

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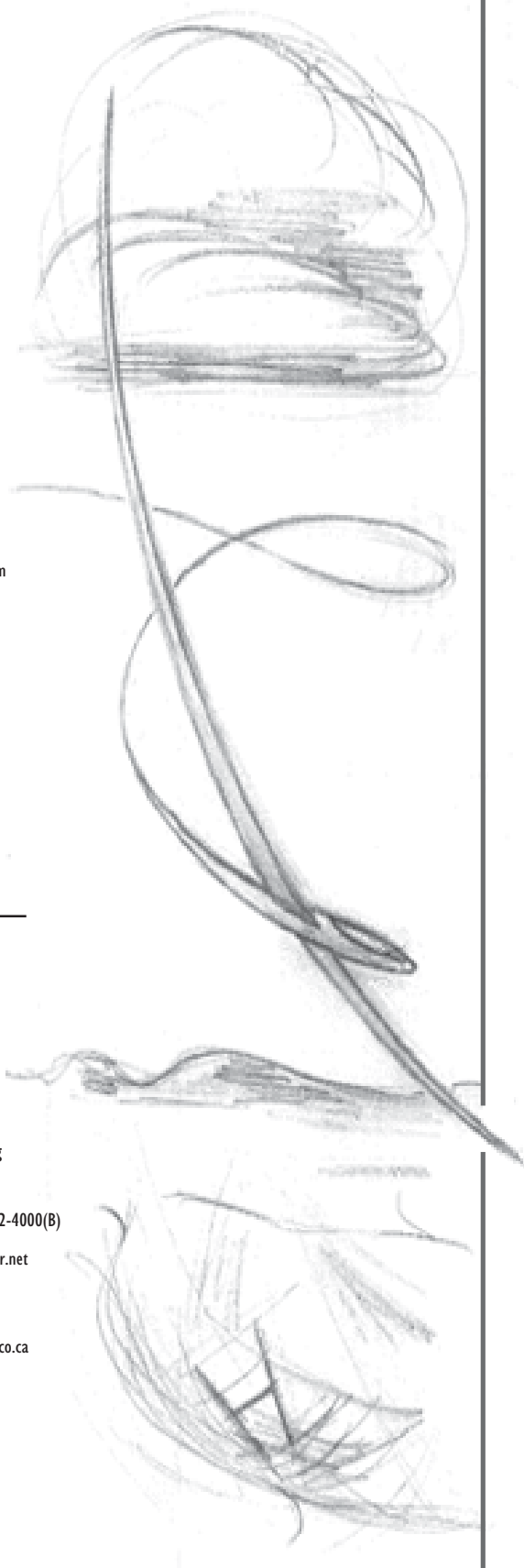
Phil Stade (403) 668-7757
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Video Library

Ted Froelich (613) 824-6503 (H&F)
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fsacvideo@aol.ca

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