2010
Autumn

free flight
vol libre

Priorities

Sylvain Bourque SAC President

COMME LA PLUPART D'ENTRE-VOUS EST DÉJÀ AU COURANT, les dix-neuf L-13 qui volent au Canada son cloués au sol à cause d'un AD. Un accident mortel s'est produit en Autriche, au cours duquel le longeron principal a cédé sous le facteur de charge positif. À cause de ceci, neuf clubs Canadiens sur 27 font face à de grandes difficultés. Je crois que c'est la catastrophe pour trois de ces clubs qui se retrouvent avec aucun biplace fonctionnels pour faire la formation : Saskatoon Soaring, Grande Prairie et Silver Star. L'ACVV travaille actuellement avec notre compagnie d'assurance afin de trouver un plan de crédit de prime d'assurance pour les propriétaires de L-13 assurés avec le plan de l'ACVV. Nous espérons que les L-13 seront de retour en vol avant la prochaine saison de vol.

Félicitation à Jerzy Szemplinski qui est arrivé 4ième dans la classe 18m aux Mondiaux de Szeged en Hongrie ! Ceci égalise le plus haut rang jamais atteint par un Canadien aux Mondiaux. Le dernier fut Wolf Mix aux Mondiaux de Marfa au Texas en 1970. Il y avait 51 participants aux Mondiaux. C'est une réalisation hors du commun.

Nous vous avons fait parvenir avec votre reçu d'impôt de cotisation 2010 de l'ACVV une lettre explicative des différents Fonds de l'ACVV. Si vous avez choisi de donner à un de ces fonds, vous devez le faire avant la fin de 2010 afin d'avoir un reçu pour l'année d'imposition 2010.

La saison de vol à voile 2010 dans les régions d'Ottawa, Montréal et Québec fut plus qu'exceptionnelle. Trois des cinq meilleurs clubs sur OLC Canada sont de cette région. Juillet était tout à fait fabuleux. À part quelques exceptions, c'était loin d'être la même chose dans le reste du Canada qui a eu à faire avec un été pluvieux où souvent les conditions éteint présentes sur semaine et la pluie présente la fin de semaine.

Je vous souhaite une belle fin de saison 2010 sécuritaire !

AS YOU ALL PROBABLY KNOW, the nineteen L-13s flying in Canada are grounded by the wing AD. A fatal accident occurred in Austria in an L-13 when the main spar of a wing failed near the root during an aerobatic routine. Nine SAC clubs out of the 27 are facing serious difficulties because of this. It is a very bad situation for three of these clubs that have no two-seater available for training at the moment: Grande Prairie, Saskatoon Soaring, and Silver Star. The situation is unusual and is not likely to be resolved quickly. SAC is working with the insurance company towards an acceptable premium relief plan for L-13s insured under the SAC plan. I hope that the L-13s will go back to the flight line before the next flying season.

Congratulations to Jerzy Szemplinski for his fourth place finish out of a field of 51 in the 18 metre class at the Worlds in Szeged, Hungary. That ties him for the highest placing ever by a Canadian – Wolf Mix in Marfa, Texas in 1970. This is a tremendous accomplishment!

Along with your 2010 SAC membership tax receipt, we sent you an information letter about the various SAC funds. If you choose to contribute to these funds, you must do so before year-end to get a 2010 tax receipt.

The soaring weather in the St-Lawrence valley region was exceptional. July was perfect. Three of the best five OLC Canadian clubs are from that region. In Southern Ontario, it was quite mixed. There were some great days with very long flights but a number of days, particularly weekends, were not the best. On the Prairies, it was the best of times and it was the worst of times! Spring came late, but produced some excellent soaring. Unfortunately, most were mid-week with weekends wet and cool. In Alberta they had a few good flights in the cool spring. Very good days overall in the summer and not many good cross-country days. Looking at the OLC seems to show a similar experience for the other western clubs with a few exceptions. The West experienced record rainfall and cool conditions all season.

Hope you have a nice and safe end to 2010 flying season!

free flight vol libre

2010/4 – Autumn

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Jerzy hooks up his glider at the World Championships – tough on the back when it's full of water. He placed 4th in the 18m class, the best Canadian result in 40 years.

photo: Maria Szemplinska

are you legal ?

a cautionary tale

Ken Armstrong, VSA

ARE YOU RISKING your business, your estate, your marriage and your happiness during soaring operations? For that matter, are your actions threatening the closure of your gliding club? My primary business for the last 16 years is as an accident reconstructionist and aviation expert to law firms and the courts. I witness actions and inactions on a regular basis that make me shudder when individuals thoughtlessly subject gliding clubs and themselves to high risks situations that could not only lead to accidents, but also to exceedingly expensive litigation afterwards. Most of you are not aware of the details related to post-accident law cases and how devastating they can be.

Follow me now as I create a hypothetical event featuring me risking the club's and other members' assets. Although I am trying to be a considerate and accommodating club member, my action will have quite the opposite result. The potential outcome of these kind actions may seem farfetched, but let me tell you that they are *very* realistic in our modern society …

… It's a bumper crop day of lift around the airport and all the club gliders are already climbing well in the thermals. My motorglider is in the tie down area behind the towpilot's glider, which had been cleared out of the hangar to get the club gliders launched. The towpilot is also a keen soaring pilot and is getting anxious that he is missing out on some soaring delights.

Seeing that I am trapped by his glider, "Bill" asks me if I would mind launching him for some soaring. Unfortunately, I have not joined the club as a towpilot this year due to my schedule and other considerations. However, Bill (who has done me favours in the past when I requested he fill in) presses the point and, realizing I have lots of time on the tug and served elsewhere as chief towpilot etc, I conclude that there is virtually no risk with launching the last tow of the day.

It's important to note here that I know my action was contrary to the club rule that requires a yearly checkout to meet the currency requirements of the club, but we both figure my flight experience is more than enough to ensure a safe flight.

Being a safety-minded pilot, I accomplish a quick walk-around on the aircraft, knowing that Bill has already done a detailed DI. Finally, the glider is pushed out and I warm up the engine before taxiing in front of the glider for launch. I notice a significant vibration at low rpm and figure it's been more than a year since I last flew the tug and I just forgot that the fairly large engine can shake the airplane somewhat like the tail wagging the dog. Moreover, when I ran it up to check the mags, it seemed to be smoother. Maybe it's just some lead fouling and I have leaned the mixture during the warm-up to take care of that possible issue.

Glider radio checked, we are ready to go and the wing runner starts giving his signal to take up the slack. After takeoff the engine is vibrating even more, and it seems like something wants to come apart – and it does as a fatigue crack six inches from the tip of the propeller is propagating chord-wise and flings off the tip of the prop in fractions of a second. The vibration is immense and I quickly close the throttle to ensure the vibration doesn't rip the engine off its mounts – that would be my death sentence as the remainder of the aircraft would become uncontrollable due to the cg change.

I rapidly lower the nose and give the release signal to Bill and after some hesitation and observation of the fact we are plunging downward, he releases. Unfortunately, the low altitude precludes much maneuvering and the best I can do is turn very slightly to put the fuselage between two tree tops thereby allowing the wings to self-destruct while

SOARING ASSOCIATION of CANADA

is a non-profit organization of enthusiasts who seek to foster and promote all phases of gliding and soaring on a national and international basis. The association is a member of the Aero Club of Canada (ACC), the Canadian national aero club representing Canada in the Fédération Aéronautique Internationale (FAI), the world sport aviation governing body composed of the national aero clubs. The ACC delegates to SAC the supervision of FAI-related soaring activities such as competition sanctions, processing FAI badge and record claims, and the selection of Canadian team pilots for world soaring championships.

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

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

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 communicate with their Zone Director.

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absorbing most of the impact forces. The towplane then tips backwards and strikes the ground tail first, destroying the empennage and crushing the aft fuselage.

Shutting off the switches to avoid fire and exiting through the window of the twisted fuselage are paramount. I am amazed I am not even scratched. Wow, I got off easily – unfortunately, the tug didn't do as well and is an obvious write-off as almost everything is twisted and broken. At this point, I see the missing portion of the prop tip and realize that luck was with me.

Hmmm, "with me" makes me think of the glider … walking out of the treeline on the airfield boundary, it is puzzling not to see the glider on the runway. All I can see is the retrieve cart flying down the strip at speed with half a dozen members rushing behind. They converge into the treeline where the glider crashed in a steep dive after Bill stalled trying to turn back towards the airfield at too low an altitude. When I get closer to the site I realize the impact forces are not survivable and run back up the runway to stop his wife from approaching.

A YEAR LATER… At this point I have long since ceased asking the many questions in my mind as to what could have been done differently. Now the questions centre on the legal discoveries by bands of lawyers who have "shotgunned" everyone by naming them in the ensuing lawsuits.

How did this happen amongst friends? Well, the insurance company walked away from the litigation and payment of claims for the tug, the glider, and the deceased because my well-meaning tow was done outside of their terms of coverage. Without the required currency flight(s) and annual flight check and naming on the insurance policy, I wasn't covered to fly the plane. So, now I have Bill's estate suing me for his loss, and the club is suing me for the destruction of two aircraft. I have a countersuit against the estate for Bill's handling after release and against the club for maintenance on the tug. The *only* people benefitting from all this are the law firms.

As this unfolds, it gets even worse legally and financially. The estate not only wants a sum for Bill's loss of life but also for the loss of his future earnings and support as a husband and father. Moreover, the club wants me to pay for the loss of the two aircraft *and* also the lost revenue on them until they are replaced. Even worse, they are petitioning the police to consider my unauthorized use of the tug as theft and are pursuing criminal charges. Additionally, countersuits are flying between the AME who signed off the tug, the club and the estate for the slow glider release and the subsequent stall that destroyed the glider.

You think this can't happen? I've seen many similar cases in my work – if something like this did happen, it would probably finish the club and the future pleasure and dreams of its members. For most of us, a case like this hypothetical example would result in bankruptcy and a massive change in our assumed plans for our "golden years".

While it's possible to go on about the other costs and hassles involved in a lawsuit, suffice it to say that one doesn't ever want to get involved in litigation – on either side! How does one avoid this? It's simple – follow the club rules. Very often they aren't created by the club but are stipulated requirements from the insurance company that are written into the club statutes and guidelines.

Sometimes it is difficult to ensure the club policies are followed because some members are not aware of all of the regulations that apply. One or two will consider themselves above the rules and consider the club dictates as simple guidelines for the masses. In the first case, perhaps we need to follow military procedure and have members sign a statement saying they are knowledgeable of all applicable regulations and will comply. Those who continue nonconforming to regulations need to be removed from the club. Does this seem harsh? When you consider the implications for the law-abiding members of the club and the hardships they will have to face due to the actions of miscreants there is really no choice. Frankly, if any of us see someone violating the rules or ethics of our association, it behooves us to take that person aside and have a serious discussion about their actions. If this doesn't bring about a change in behaviour, the club directors should expel them. It's the only way we can survive. ❖

ASSOCIATION CANADIENNE DE VOL À VOILE

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

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Les articles publiés dans *free flight* proviennent d'individus ou de groupes de vélivoles 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.

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One thing leads to another

Tim Wood, York Soaring

How we get to where we're at

One thing leads to another …

My wife persuaded me to buy my own glider back in 1994. It's true; she was tired of hearing me moaning for the previous twenty-five years or so about waiting in line for club ships. The freedom and improved performance of the LS-3a that I acquired then, compared to what I had been flying, caused me to rediscover the sport and opened the door for me to the joy of unrestricted cross-country flying.

My friend and fellow glider pilot Neil Greene planned my 300 km Gold badge flight for me. It was at Black Forest Gliderport in Colorado, and he flew with me part of the way. I was surprised and thrilled when I made it. That wasn't so hard – and I quickly moved on to attempt my Diamonds.

I really got stuck at the Diamond distance, and when we moved back to Ontario it got a lot harder. Southern Ontario really sorts the men from the boys when it comes to 500 km flights. The Y2K year of insanity led me to declare a personal Millennium Project. Rather than wait for the sky to fall in like Henny Penny, my project was to successfully fly an FAI 500 km in Canada. When 1 July 2000 arrived and I still had no 500 under my belt, I pulled out the stops and headed for Invermere. It was time to get serious.

I had passed through the Columbia Valley on business several years earlier and been wowed by what I saw there. I promised myself to return sometime in the future, and that time was now. I figured if I could do a 500 anywhere, that place was Invermere. I succeeded that summer under the coaching of Trevor Florence, Ernst Schneider and Hans Binder (what a team of experts to lean on!). I was also introduced to some important new developments in our sport: the GPS flight recorder, the On Line Contest, the possibilities for very long flights in the Columbia Valley, and the possibilities for setting new Canadian gliding records. Ernst in particular, a born coach, encouraged me to go after Canadian records.

Now that I am into it, I want to do as many good flights and grab as many records as I can each year. Why do climbers try to conquer Everest? – because it's there. For me it's the same in our sport with badges, diplomas, records, and trophies. I admit that I am a competitive person and this is one of the ways that keeps the sport enjoyable, interesting, and challenging for me. Of course, records are made to be broken and eventually a new generation of pilots will take them all just as I have taken some from earlier pilots.

A recent record attempt

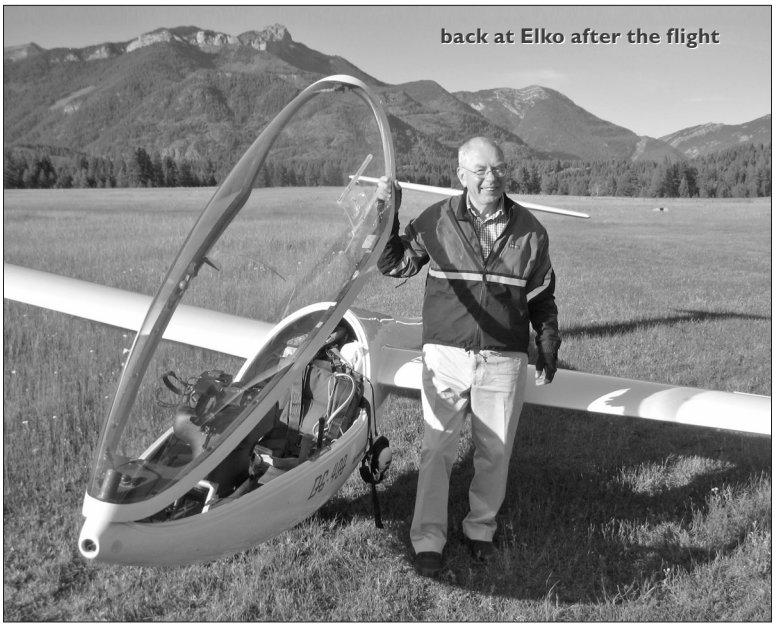
It occurred to me some time ago that almost the entire Canadian land mass is out of reach of the "pure glider". Tows are only available in a small number of places nationally and often only on specific days during the summer months. Even in the Columbia Valley, the optimum location for the start of out-and-return or straight-out flights are at either end of the flyable range like Valemont, Golden, or Elko where tows are not available.

This summer I wanted to attempt new Canadian out-and-return flight records from Elko with my well-seasoned DG-400 motorglider, recently acquired from Michael Gee in England. The current record of 652.3 km for the Open out-and-return distance was held by Tony Burton, flying his RS-15 from Black Diamond to Leader, SK and back in 1993. The Open free out-and-return distance record of 596.7 km was made by Ian Spence, flying his Ventus out of Invermere last year. Both previous Club records were also flown last year by Bruce Friesen – 608.3 km handicapped in his Standard Austria to Paynton, SK and back from Chipman, AB.

My choice of Elko as a launch point arose from the geographic reality that other recent out-and-return flights in these mountains were flown from Invermere. However, Invermere is in the centre of the safely flyable range in this valley, which is bounded by inaccessible Kinbasket Lake at the north end and the US border at the south. To do a long out-and-return flight by launching at Invermere entails flying to a remote start and then back from a remote finish. This adds 300-400 km to the distance flown, making it a highly formidable task. A start from Elko airstrip (which has no tows for pure gliders) removes this distance penalty at the start and finish ends of the task. Elko is quite close to the south end of the course. A self-launched glider has a short run of only 35 km to a border start/finish point. The airstrip has no power, water, or other services but it is a lovely grass runway pointing down hill to the west. Dick Mamini enjoyed this splendid location alone until my intrusion this July. He's stoical about the lack of power at Elko, *"warm beer is better than no beer"*, and he kindly agreed to share the available space with my DG.

The course I chose for my attempt on the out-and-return record distance was a start near the Roosville US border crossing, with a turnpoint at the north end of the course of Bush Arm, a point on the ridge overlooking the beautiful Kinbasket Lake, and return to start.

The Dr. Jack soaring forecast data promised a good day on 30 June, with a brisk westerly breeze and good convection. The mid-summer daylight was at its longest and


back at Elko after the flight

the sun power at its peak. Because of the remoteness of Elko, I had arranged with Trevor Florence at Invermere to act as my Official Observer while I was represented at Elko by witnesses for the takeoff, landing and flight data download. The flight recorder was attached to the airframe with wire and lead seals in a manner consistent with the FAI Sporting Code.

After self-launching, I headed to my start point near Roosville. After starting, conditions on the south part of the course were much to my liking – great ridge lift, clear and windy. With a wind speed as high as 42 knots in places, violent turbulence was present in all lee situations. Thermals were moderate, but further north at Golden the conditions were much less promising. Rain, snow and virga showers were crossing the valley ahead there, wind speed dropped to 20 knots from the west. Ridge lift weakened and then was overcome by sink from the showers all around.

Within 15 km of Bush Arm I got stuck on a rock slope below the peaks and was almost forced to abort the flight. I managed to work some isolated ridge lift to get back on top of the ridge. Above ridge-top, the violent lift threatened to suck me into cloud and I had to use spoilers to keep in the clear. Once this crisis passed I cleared the turnpoint and headed south. The run home to the US border was uneventful and quite fast, at around 106 km/h. South of Elko, there was a little help from the "Wonder Wind" – a wave-like condition over a barrier of convection. I cleared the border turnpoint without being shot down and returned the 35 km distance to Elko to be greeted by Dick Mamini and Bobby Cutts, the airport manager who observed my landing and flight download.

The flight took 6:35 hours to cover an out-and-return distance of 693 km (630.6 km handicapped) at an average speed of 105 km/h. I have claimed the Open and Club territorial records for both out-and-return and free out-and-return categories for this flight. See the OLC for the detailed flight track: *06UA10D2.igc*. On the right day this out-and-return course could easily be extended by a further 50 km to the north by crossing Bush Arm to a more northerly turnpoint without getting too far away from possible landout fields near Blaeberry bridge.

Flight declarations and the paperwork in general have bedevilled me in numerous FAI record claims and this flight was no exception. My declaration was not perfect, and I came uncomfortably close to US airspace before and after the start and finish. This cast my record claim in some doubt for a number of days. I repeated the flight on 8 July, just in case, this time with a flawless declaration and a start and finish a bit further inside Canadian territory and airspace.

Looking ahead

The DG-400 can fly in both 15m and 17m wing configurations. There are a number of new records within reach of my ship in both these wing configurations in the mountains. Great scope also exists over the prairies for big cross-country flights but I don't have many ideas yet on where to start from or when to go. However, these flights are very much secondary to my main objective: to do a 1250 km FAI Diploma flight inside Canadian territory. I don't think I could do an FAI flight of this length in the Columbia Valley. The best location by far would be in the long wavelength lee wave in Alberta – the Chinook Arch. If these kinds of flights are done in Argentina and New Zealand, why not in Canada?

Satellite pictures show that on occasion, lee waves of enormous length become established, stretching from the Canadian Yukon, through Alberta, into Montana and beyond. A portion of this length, say from the US border north about 400 km would be my first choice for a serious attempt at a 1250 km FAI flight, using 3 turnpoints, taking off and landing at Pincher Creek, with start and finish at, say, Lundbreck and turnpoints near Clearwater River to the north and Waterton Park in the south.

In a 1987 flight that was part of the Chinook Project, Tony flew the *Alcor* sailplane through this area out of Claresholm. Up close, he reported the Chinook Arch as an enormous structure extending upwards from around 19,500 feet and visible laterally over a great distance – from Montana to Rocky Mountain House – with a lift zone in front of the Arch about 15 km wide! This is described in a chapter of Ursula Wiese's excellent book, *Stalking the Mountain Wave*. The mountain feature kicking off the Chinook Arch appears to be the entire range of mountain tops that make up the Continental Divide. Smaller, less continuous lee waves that occur at lower altitudes below the Arch can be superimposed on it.

I believe that the Chinook Arch is the arena for really big Canadian flights at a high average speed. Cooperation from air traffic control authorities is a crucial prerequisite. Initial contacts that I made with NavCanada in October 2009 at Edmonton opened a dialogue and were very encouraging but the project is still in its early days. I have based my DG-400 at Pincher Creek right under the most frequent location of the Alberta lee waves, close to Cowley at the east end of the Crowsnest Pass. I hope to test the Alberta wave in shakedown flights beginning later this year. ❖

Logbook memories

Charles Yeates

TAKE-OFFS ARE OPTIONAL; landings are mandatory. This aviation aphorism is of particular interest to every cross-country soaring pilot, given that a landing can be in a strange place or lead to unexpected events. All my flights are logged, and this article describes memories triggered by some of these logbook entries. The memorable bits are sometimes from the flight and at other times from the events afterward. Here they are …

Texas, Grand Prairie, Aug '56, US Nationals
Flying a 1-23 on an O&R to Mineral Wells.

With enough height over Fort Worth for a final glide, I saw ahead and below a heavily laden B-36 crossing from left to right after takeoff. Its six pusher props and four wingtip jets were producing a laboured climb. A minute or so later the 1-23 was violently rolled almost inverted by the invisible wake turbulence from the heavy. Scrambling back upright and quite shaken, there was still enough altitude left for final glide to a comfortable landing. Wake turbulence can be serious.

Poland, Leszno, June '58, WGC
Flying a Breguet 901 on a straight out task.

Landed 400 km to the east near Radom, not too far from the Russian border. I was interviewed by a newspaper woman and her photographer husband.

"What do you do?"

"I am an engineer."

"What does your wife do?"

"She stays home and looks after the children."

After a long pause, the newswoman said,

"In Poland the man works and the family eats. The wife works and the family can buy clothes."

Post-war Poland was a difficult place to live. A Canadian Embassy military attaché appeared one afternoon and wondered what we might have seen. Well, there was that Russian base full of twin engine jet bombers in a spot that showed swamps on the Polish maps that were issued to us. The Cold War was still on. By the way, Hanna Reitsch was entered as a German competitor but the Polish government would not issue her a visa – no surprise, eh? Coincidentally, forty-one years later, four of us landed our PW-5 gliders at the end of a contest day on that same, now abandoned 8000 foot runway.

Saskatchewan, Regina, July '59
Flying our 1-23 the day after the Nationals.

I completed a record goal flight of 522 kilometres to Carrington, North Dakota. A 90 km long cloud street helped. Then, I passed between two storms just before they joined up to form a gust front that raised a multitude of small whirling dust devils from fallow fields, ensuring me of the goal. That day, before cell phones, crew and pilot used Julien Audette's phone as a communication link. A great competitor, Julien swore mightily when I told him the goal had been reached. Likely this spurred him to make even longer goal flights later.

West Texas, Odessa, Aug '60, US Nationals
Flying Paul Schweizer's 1-23H15, on a 545 km O&R task.

I landed late, 30 km short, in a cotton field alongside a large U-shaped institutional building. Walking carefully across the cotton rows (all competitors had been issued snake bite kits), I entered a side entrance and moved to the front where there was a nurse receptionist.

"Can I use your telephone?" I asked.

"Do you have permission?"

I was in the state asylum! There were hoots of laughter when I reported my location to the contest office. My crew suggested leaving me in what they felt was an appropriate spot.

The next afternoon, Dick Schreder finished with a fast low pass in his new HP-8. At the lowest and fastest point, there was a smoke-like puff of dislodged microballoons. Dick eased up rapidly, slowed and circled for a landing. The fuselage, just ahead of the tail, was three-quarters torn through from flutter. Overnight, Dick repaired and stiffened the fuselage to continue competing. The design was dropped soon after the competition.

Ontario, Brantford, June '61
Flying our 1-23H15. A 535 km goal flight to Marion, Indiana.

An extensive cloud street along the shore of Lake Erie led to crossing the Detroit River near the Willow Run airfield,

where Ford produced B-24s in WWII. Thermals towards the southwest were used to reach the goal – the home base of Dick Schreder. There was plenty of time to see their round house, their Bearcat fighter, and the HP kit production arrangements before the retrieve arrived. There was no Homeland Security then.

Argentina, Junin, Feb '63, WGC
Flying a Ka6. In retrospect, this was a "Grand Adventure".

Getting there Our team and the USA pilots met in New York to take an Aerolineas Argentinas Comet IV to Buenos Aires. We were bumped up into First as economy class was overbooked. Trinidad was our first refuelling stop where the runway seemed a bit short. Because we were in transit we were kept out of the terminal, but there was a rum bar set up near the refuelling point and so all were pretty relaxed for the takeoff to Sao Paulo. The aircraft lifted just as the numbers flashed by beneath the aircraft. Spontaneously we clapped loudly. Landing and take off at Sao Paulo were applauded too. Landing at Buenos Aires, we were tired and quiet while waiting for the door to open. Suddenly the curtain separating us from the cockpit opened with a flourish. The splendidly uniformed pilot doffed his hat, bowed, thanked us all for flying with him, and left the aircraft. We had arrived in Argentina.

The next day Jim Carpenter scandalized everyone by wearing shorts while walking along Avenue de Mayo. Stares of the locals were so noticeable we watched from the other side of the street. After transferring to an outlying military airfield, we boarded an old DC-3 for the trip to Junin, out on the pampas. Luggage was piled by the door in the passenger cabin with a crew member sprawled on top. Taxiing forward, the plane could not turn toward the runway. A quick exchange between crew members led to the baggage man jumping outside to return shortly with the rudder lock under his arm. The flight proceeded with the pilot holding the aircraft just under the cumulus cloud bases so we could feel how strong the thermals were. All this promised an unusual event.

Three days later Albie Pow developed severe stomach cramps with the common side effects. A doctor was called. The examination was straightforward even though neither spoke the other's language. The treatment proffered was a one inch diameter ball of activated charcoal. With a groan, Albie asked, "Which end do I put it in?"

Back to soaring There was a towplane for each of the 63 sailplanes. Most were Fleet Finch 10s built in the early 30s at Fort Erie, Ontario. There was a sprinkle of Stearmans. No road retrieves were allowed. Late each day, towplanes were sent out along the task lines. All glider pilots carried mirrors. Extend your arm and point your thumb toward a cruising towplane. Flash sunlight from the mirror over your thumb and presto the towplane would turn toward you and land alongside ready to tow you home. It worked!

A night aerotow A goal flight to Mercedes, a small airport, was set the first day because of forecast weak, late starting soaring conditions. Most pilots reached the goal by 5 pm and a cloud of towplanes followed. The narrow runways were in a "T" shape and the infield was full of six foot high sunflowers, so movement was restricted. This delayed tows back to Junin. Traffic was controlled by a flag man at the head of the "T". He turned to face the next towplane/glider set to launch, waved his flag and a takeoff began. Late in the game there was a moment of confusion. After a flag wave, towplanes began to roll toward each other from each end of the strip. The glider pilot from our end saw the risk of collision and released, turned, and disappeared into the sunflowers. His tow plane lifted off and banked right to clear. The tow continued normally from the other end. The remaining six glider pilots were then told they had an option – tow back to Junin and arrive after dark, or stay locally (in minimum facilities) and return to Junin after dawn tomorrow.

All except the glider pilot in the sunflowers elected to tow home immediately. I was number three in the last six. Enroute as the sun set, the towpilot flicked on his running lights. What was a white pin prick stern light in front of my nose grew steadily brighter. Glider instruments disappeared in the cockpit gloom. Luckily the air was smooth. After an hour, in the dark ahead could be seen two lines of flare pots marking the Junin grass strip. How to get down safely? I chose to release, open the air brakes and dive after the towplane. Landing behind the towplane worked and I turned off between two flares safely into the dark. Three more towplane/glider sets followed us down.

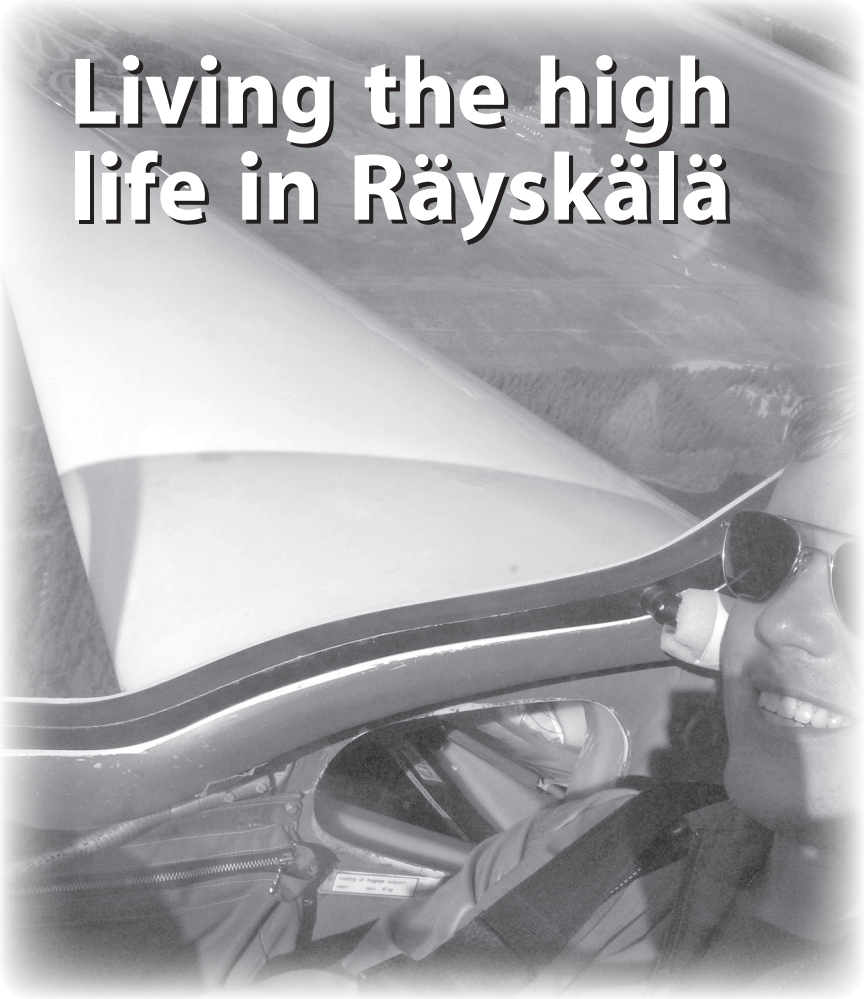
Helicopter aerotow The next competition day, a thunderstorm after the first turnpoint caused the German SB7 pilot and me to land alongside each other. Working the mirror produced a Finch in short order but it touched down in soft earth and flipped over onto its back. Its pilot hurt his shoulder on dropping out of his harness. He walked into the nearby village and reported to Junin by telephone and came back with his arm in a sling.

Soon a helicopter appeared and sat down ahead of us. I convinced Kuntz that he should accept the first tow. Helicopter and glider were attached; the Finch pilot joined the helicopter pilot on the bench seat; I held the glider wingtip and the helicopter lifted off to take up slack. All out! and the helicopter accelerated. Just as the glider reached takeoff speed, the helicopter pilot tried to accelerate forward more quickly by tilting the disc further. A blade touched the ground and things disintegrated rapidly. The broken helicopter flopped onto its side. All three in the helicopter were bruised but uninjured. The Finch pilot had just had his second crash experience in an afternoon.

The glider had insufficient airspeed to fly over the mess and was too low to turn away – so Kuntz pushed the nose into the ground where it stuck. The canopy opened by sliding forward so I had to dig the front clear so the glider tail would drop to the ground, leaving the canopy free to open. Later another Finch arrived, landed in the pasture on the other side of the dirt road. The group of gathered onlookers picked up the Ka6 and carried it over the road; we took off and returned to Junin.

⇨ **p30**

Living the high life in Räyskälä



a little more summer work …

Zach Marton, York

WALKING INTO A HANGAR FULL of the highest performance gliders, it isn't hard to believe I'm in the largest aviation centre north of the 60th parallel. Räyskälä, Finland boasts Scandinavia's largest gliding center, ten gliding clubs and many syndicates, two parachute clubs, an ultralight club and a general aviation club. I came here as a towpilot, but really I do a bit of everything: gliding, parachuting, towing and dropping. Every day from the early spring to the late fall, the airfield is alive with activity largely organized by the Räyskälä Foundation and the Finnish Air Sport Institute (SUIO).

Räyskälä, located about an hour north of Helsinki, was created in the Second World War and is still owned by the Defence Department today. The land is leased to the Räyskälä Foundation which provides towing services as well as lodging. *Café 26* is on the airfield, providing food services all summer long. Finally, the SUIO organizes many events and courses. They also rent a DuoDiscus for use around Finland during the summer. All the different clubs offer special qualities which provide quite a large range of flying and learning opportunities every given day.

On any of those days, you can find up to four towplanes running, 30+ gliders launching, ultralights and general aviation using a parallel runway, as well as two jump planes dropping up to 10 jumpers each. One jump plane is a Cessna 206, which I have the pleasure of flying. The other is a kit-built Comp Air 8, a yellow turbine wonder which makes a Cessna 208 look obsolete.

Getting back to gliding, there are just shy of 100 gliders on the field, ranging from the Ka6 to the ASG-29 and Nimbus 4DM. There is a range of Ventus, Discus, LS-8, ASG-29 and the like for normal everyday flying spread through the ten clubs and many other syndicates. For the new pilot, depending on the club, one may end up with a Club Astir, ASW-24, ASK-21, or SZD Junior to fly. Certain clubs fly more than others, and everyone has its special features, members, and aircraft. As well, club events are organized on a regular basis.

The sauna Every evening, club members go to sauna; it's important. Sauna is the culture in Finland. Much like its neighbouring countries, saunas are a regular part of summer life. Most of southern Finland has the joy of hundreds of small lakes allowing for thousands of cottages or "summer homes". Each lake around the airfield is dotted with summer homes, which does cause some noise restriction problems. Every Finn goes to sauna almost every night during the summer. As well, every house, summer house, apartment and condo comes with the essential sauna. Most people sauna in the evening up to 2+ hours. As has been told to me a few times, "you're born in sauna, you grow up in sauna, do business in sauna, tell stories/gossip in sauna, all problems are solved in sauna, people are healed in sauna, everything is revealed in sauna and all fights are fought behind sauna. Then, you die in sauna." This is pretty close to the truth, and by the way, sauna attendance is nude.

Following sauna, most nights include sitting around the club's campfire, roast sausages, and talk. This special area for campfires is called *notskii*. Each club has a separate notskii. The parachute clubs as well as the Räyskälä Foundation also have separate notskiis.

Flying in Räyskälä There's a lot of it, all summer long. I've towed with the two Piper Pawnees over 1500 tows myself this summer, flown 30 hours of jump runs with the Cessna 206, sat in the back of an ASK-21 on many evenings, and managed to slip into different gliders for

a quick cross-country or two. With so much flying, it's difficult to stop before the day is over, and during the summer the sun doesn't set or rise. The only thing that saves me from full day flying is the noise restriction policies. However, between 9 am and 9 pm, it's easy to find me above the airfield – not at it. I've flown almost 300 hours this summer in a variety of aircraft, powered and glider.

The aircraft and the people are some of the best in the world. Posting 17th on the OLC in kilometres last year, Räyskälä Airfield is one of the more active sites anywhere. Although the cu is not usually very strong, and can usually be found at 3600 feet (1100 metres), its more than enough for the pilots here to complete 500 kilometres in a day. In a country of 5 million people, over 2000 of those people are glider pilots. I've also visited Kymi, Vesivehmaa, Selanpaa, Hyvinkaa, Nummela, and Kiikala gliding airfields, and I haven't even got to the Lapland yet, the most northern province of Finland.

Since I've been here, Räyskälä has hosted five competitions, four of which were for soaring. First, the Finnish Nationals occurred for one week in June. It comprised of the Standard, 15m, and 18m classes. I was able to assist in ground crew operations at the time. Next was the national spot landing competition, with almost every gliding club in the country on hand. As well, there was a test Grand Prix, with 15 gliders competing. This Grand Prix was hosted by SUIO and was the first of its kind in Scandinavia. Next year there will be an official Grand Prix in Nummela.

The final soaring competition at Räyskälä this summer was the Jannen Kisat, or regional competition. I was fortunate enough to fly in this competition. The contest was light in nature and allowed local pilots their chance to fly against each other. However it still allowed very junior pilots, like me, the chance to compete for a first time. Tasks were up to 300 km. Every pilot except me had many years local experience. Unfortunately I was also flying the worst performing glider in the contest, a Grob CS-77 Astir. The contest was split between 18m/Open and 15m handicapped classes. I outlanded two days out of the five days I competed. Although my lack of local knowledge, my poor handicap, and the fact that I had not flown cross-country yet in this country, I was very pleased not to be in last place for the 15m class. Not bad for a seasonal towpilot in his first contest!

Overall, I've had an amazing experience. I've gained a wealth of knowledge from some very experienced people in many fields. I enjoy the people and the place quite much. I look forward to coming back and enjoying the long days of summer again soon. And of course, I'll be back for the flying. ❖

This was Part Two of a journey that began in Australia last autumn. See ff 2010/1

a World of experience

the 31st WGC, Szeged, Hungary

Jörg Stieber, Team Manager

Left to right: George Eckschmiedt, Jörg Stieber, Diane Timperley, Willem Langelaan, Dave Springford, Virginia Thompson, Jerzy Szemplinski, and Maria Szemplinska. photo: Art Grant

I WENT TO HUNGARY with the goal of providing whatever support and help I could in order to see a Canadian place among the top ten competitors in this World championship. The first ten places are usually packed with big names of current and former world champions. My secondary goal was to provide up-to-date coverage of the events in Szeged to our friends and supporters in Canada on the team blog.

The Team

15m Class:	Dave Springford –	ASW-27 "PS". Crew: Virginia Thompson
18m Class:	Jerzy Szemplinski –	ASG-29 "XG". Crew: Maria Szemplinska
Open Class:	Willem Langlaan –	Antares 18S "OX". Crew: Diane Timperley and Pim Romeijn, a friend from Holland.

In addition, George Eckschmiedt from Vancouver was our Hungarian voice and helped wherever help was needed. (George had to leave Hungary after the 1956 Revolution had been crushed by Soviet tanks.) One would think that five crew and a team manager would be plenty to support three pilots but at times, particularly on days when all our pilots landed out, we were stretched pretty thin. Fortunately, the Burany family, who are SOSA members and also 56ers who vacationed in the area, were quick to help out on retrieves when we were shorthanded.

Location Szeged, the "City of Sunshine" is located on the river Tisza in the southern plains of Hungary, near the borders of Serbia and Romania. With a population of 170,000 it is the third largest city in Hungary and is known as the home of paprika. After the city was wiped out by a flood in 1879, the Austrian Emperor promised to rebuild it more beautiful than before. The historic core of the city features beautiful buildings, wide boulevards, parks and green space, squares and monuments. The airfield is close to the city, only a 15 minute drive from the city centre. The field features a 4000 foot hard surface runway and several grass runways, providing ample space for a large contest. A patio type restaurant near the entrance served inexpensive meals and quickly became the gathering point for contestants and support personnel.

Willem adds: The contest area was shaped like a crescent. The central north area is limited by the restricted airspace of Budapest and a military base. The area to the east is flat and dominated by the Tisza River. The land is agricultural with very large parcels. It somewhat resembles the Canadian prairies. To the south are the borders of Serbia and Romania. On some contest days a task would have turnpoints in those countries. Immediately to the west the land is partially forested. Further west it is bordered by the Danube, a river which is not blue. (However, flying over the Danube flood plain would give us the blues with its weak conditions.) Beyond the Danube are the Szekszardi hills with their vineyards.

Tasking The major frustration was that the task setting was way more optimistic than the official forecasts. On some days it seemed that the task setter and the meteorologist weren't even talking to each other. Quite often it was already clear to the pilots at the start that they had no chance of finishing the task. On 1 August every glider in every class landed out. I believe this was a first for a Worlds. What made it worse was that 45 of the 49 gliders in the 15m class landed in Serbia – Dave among them *(read about this adventure on page 16)*. Dave landed out on four of the seven contest days and Jerzy on two.

Safety To put it bluntly, there were numerous safety failures, particularly at the beginning of the competition. One reason was lax enforcement of the existing rules. During training and early in the contest we saw a number of very low finishes (our antenna was in peril), even though there was a 10m minimum height for speed finishes and a 5m minimum over the fence for direct landings. Early in the contest, gliders were landing all over the field to taxi up to their trailers in between cars going out to retrieve their pilots. It took several days before warnings appeared on the score sheets.

On several days the launch commenced 3–5 minutes before the announced time, rushing pilots in their cockpit checks. The towpilots were pretty aggressive in their ground and air maneuvers. One day a bicycle left by one

of the line crew was picked up by a tow rope and hurled 150 feet. There was one incident where a towpilot on final did a 180 degree turn and flew against the stream of landing tugs.

Of course, launching 143 gliders into a hazy sky with weak thermals and a 2500 foot agl cloudbase leads to huge compressed gaggles which is a safety hazard in itself. Apparently there was also quite a bit of cloud flying. I believe without the use of the FLARM, the amazing collision warning system used by the vast majority of competitors, we would have likely seen one or more mid-airs.

Sadly, there was a bad accident on 29 July. Most of the finishers came in low and slow over the fence for rolling finishes. I was helping Diane and Pim hook up Willem's trailer when I heard this terrible, hollow sounding crunch. I saw an ASW-27 rotating in the air and then settling tail first between the concrete pillars of the fence. Everything on the glider was broken except the cockpit. I also saw a truck sitting crooked on the road just outside the fence. As it turned out, the pilot, Lars Zehnder from Australia was unhurt except for scrapes and bruises. However, the glider's wing had penetrated the truck's windshield and badly injured the driver. A sizeable amount of money was collected by the teams in order to help the family with bills until the insurance money kicks in. The accident overshadowed the rest of the Worlds. As a result of the accident, the finish line was changed to a finish cylinder with a 3 km radius and a 350 foot floor. After that change we didn't see any more hairy finishes.

Results Jerzy got into the top 10 early in the game and stayed there. On contest Day 5 he finished 30th for the day and we thought all was lost. When the scores came in we were overjoyed that despite the low placing for the day he had moved from sixth to fifth place overall. On the morning of the last day he was in sixth place again but fourth was within 40 points. Jerzy then had such a great flight, finishing third for the day, that he passed the two pilots ahead of him and came within 11 points of third place and a podium finish – the best result for Canada in the Worlds in 40 years. If Jerzy had managed to shave off just 50 seconds on any of the speed days or fly 4 km further on a landout day, he would have made the podium. That's how close he came!

Weather When we arrived on 18 July the heat was oppressive and stayed that way throughout the practice period. The location is so far east in Europe that the fronts of Atlantic weather systems don't reach the contest area. This provides hot and dry weather in the summer, hence the "City of Sunshine". This year, however, there was record rainfall with terrible flooding in spring and early summer all over eastern Europe. Even in the Szeged area, the rivers were high and the ground was wet.

On 24 July, the day of the official opening, a cold front passed through, wiping out the first four contest days, except that Open class went on a short task on Day 3 – only two pilots finished. 15m and 18m classes got their first day in at Day 5. The weather was marginal and stayed that way for the rest of the contest. It got hot again, but day after day the contestants had to deal with hazy conditions, cloudbases under 3000 feet agl and weak thermals. The official weather forecasts often called for stronger conditions than we saw when using *XC Skies*. The actual conditions were usually consistent with the *XC Skies* forecasts.

Jerzy's success was a bit bittersweet, on the one hand he had achieved more than we had hoped for in the morning before the flight, yet he missed the podium by a tiny bit. A closer look at the results reveals that the top ten in each class were dominated by pilots who team fly. In the 15m class, team flying Italians came first and third. In the 18m class Jerzy had to battle it out with the Polish and South African teams, followed by the Dutch team. In the Open class, a strong German team of three pilots helped Michael Sommer win his third consecutive gold. Jerzy was the highest scoring non-team-flying pilot in the 18m class. So in a sense, he really came first.

What happened to Willem? There were a number of factors contributing to Willem's disappointing finish. As in Lüsse, our country ranking on the IGC ranking list was so low that we could only count on one pilot per class. Therefore Willem had to compete with his 18m Antares in the Open class. As we saw in Lüsse, in strong conditions, an 18m glider can perform just as well as an Open ship. However, in the weak conditions in Szeged the extra 10 to 15 L/D points of the Open ships with their 29m spans made a big difference. In order to familiarize himself with the brand new Antares and the contest area, Willem competed in the Flatland Cup in Szeged just before the start of the Worlds. The weather was incredibly hot during that competition. Perhaps the Flatland Cup drained Willem of his energy and there was not enough time between the contests to recover.

What does it take to see a Canadian on the podium? In Canada we have a few strikes against us.

- We have a small pool of pilots to chose from.
- Our flying season is short, restricting our training opportunities.
- Even counting US Nationals, we have much fewer training opportunities in high level contests than the Europeans who can attend a dozen nationals within a two day drive and top it off with Continental championships.

Jerzy has shown that he has what it takes to be a world champion. Fully realizing his potential becomes now a question of resources. We would need to send and support a complete team of two pilots each in 15m, 18m and possibly Standard class to the Worlds. This team would need to have the best gliders and computer equipment. We would need the discipline in the team that the pilots who fall below place 15 or 20, give up on their own ambitions and devote themselves fully to supporting a pilot who is in the top ten. A top notch meteorologist would be part of the team. Before the team goes anywhere, it would need ample opportunities to train as a team. Team flying requires a lot of practice and not all pilots can team fly well. The entire team would need to regularly go to Europe to fly in National and European Championships.

This kind of preparation is possible but it would require a lot more resources than we have now.

In closing I want to thank all our friends and supporters, who through their donations and help made it possible for this team to compete in Hungary and achieve a remarkable success. ❖

Jerzy's tale

MY FIRST TIME IN SZEGED was 36 years ago when, as a junior pilot, I represented Poland in the Hungarian Nationals together with Janusz Centka, the multi-time world champion. The airfield hadn't changed much since then and the approach from the north over a tall cornfield is still there. The only difference was that the airfield had a new concrete runway and new hangar with new buildings and a 2m high wire fence around the airport.

After analyzing my previous results from the Worlds in Lüsse, Germany, I found out that in most cases the final results are influenced by weak days in tasks with massive landouts. My objective was to use those days to my advantage. I was well prepared and all technical issues were taken care of well in advance so my only assignment was to fly the contest.

Four weeks before the Worlds, I flew in the US 18m Nationals in Ohio, where high temperature and weak thermals turned out to be excellent preparation for the conditions here. My wife/crew Maria stated that Ohio was a forewarning of what she could expect in Szeged.

We had low cloudbases with weak thermals and very hot days with little wind in Szeged. Visibility was generally poor and with 143 gliders in the same area, it wasn't comfortable.

At the last minute I decided to buy a Flarm as I was not able to rent one. I found the Flarm very helpful – I noticed many times that without the Flarm warning I would never see the other glider so just counting on the other pilot to see me wasn't an option. At the beginning of the season, Willem arranged a *ClearNav* demo for my use, which in combination with Flarm was a very powerful instrument as I could "see" other gliders around and behind me.

On some tasks, we knew that it would be a distance day, so pilots with the most patience would win. In some cases, groups of several gliders were cooperating in finding lift at low altitude and then spreading out and merging again in the next very weak thermal, often less than a knot. Those who were able to stay at the top of the last thermal of the day had the longest distance. We had three weak days and on the other four days we had very challenging conditions. Our speeds were surprisingly high in some cases; 118 km/h in weak conditions, which shows how competitive the 18m class was.

With only one pilot in each class, our team's ability to cooperate in the air was very limited, but sometimes I was able to exchange weather information with Dave, especially on the last contest day as he was closer to Szeged and I had to make a decision which way to go towards the next turnpoint.

Missing third place by 11 points was disappointing, but at the same time it was my best result in the Worlds. The winners were excellent pilots and they deserved their positions. I think the 18m class is the most competitive class as top pilots from other classes have switched to it. Last year's champions in my class had a hard time in Szeged and they finished behind me; perhaps most of them expected strong conditions and maybe they were not prepared for the unusual weather which we had.

Our experience is growing and Canada is slowly getting back on the World competition soaring map. Flying in a Worlds is a very demanding task for pilot and crew. I believe my success would not have been possible without Maria and the help of Jörg, our professional team manager – his knowledge and Worlds experience was very important for our team. ❖

Dave's story

THE WEATHER FOR CONTESTS THIS SUMMER was not very good. I attended the US Nationals in Hobbs about two weeks before leaving for Szeged, but after sitting in rain for six days, I decided to head home to get ready for the Worlds. Having reviewed contest results for the past several years from Szeged, I was expecting good soaring conditions with average speeds in the 100 km/h range. Unfortunately, the weather was atypical during the contest and the weather threw some sort of challenge at us daily, be it thunderstorms, high cirrus, or low thermal tops.

Virginia and I left home late afternoon on 14 July and arrived in Frankfurt around noon on the 15th. The train station is in the basement of the airport terminal where we took a train to Fulda, arriving around 1530 local time and were met by Ulli Kremer. He is one of the owners and directors of Alexander Schleicher, who drove us to the factory in Poppenhausen. He also very kindly arranged for both the ASW-27 glider and car rental for me.

We spent a day in Poppenhausen going over the car, glider, and trailer, and getting ready to depart the next day to pick up Jörg at the Munich airport on our way to Hungary. That Saturday was the start of the national holidays in many parts of Europe and the autobahns south were jam-packed with cars and trailers. We quickly learned that the word *Stau* on the highway signs means traffic jam! We arrived in Munich a few hours late to pick up Jörg as our "3.5 hour" trip from Poppenhausen took closer to 6 hours. From Munich the roads were much less crowded as we were then eastbound while vacationers were southbound. Overnighting in Austria, we arrived at the contest site around 2 pm on Sunday, 18 July.

The first day in Szeged was occupied in getting the glider set up, an altimeter in feet and PDA installed, LX7000 turnpoints and airspace files uploaded and, most importantly, the pilot relief tube installed. We were assigned our trailer tie-down site, so the trailer was moved and our territory staked out around what would become *Canada Base* for the contest.

next page

I spent the next four practice days learning my way about the task area. As it turned out, these days provided some of the best soaring weather of the contest.

The third practice day was one of the best, right up until we met up with a wall of rain blocking the way to the last turnpoint. Jerzy, who was ahead of me, was able to sneak around the north end of the storm, but by the time I got there the storm extended from the restricted airspace in the north to the Romanian border in the south and there was no way to get past. I flew alongside the storm for about 30 minutes waiting to see if it would break while acting as a radio relay for Jerzy who was now low on the other side of it. In the end it never broke and Jerzy landed at a small airport while I returned to Szeged after reporting his position to Canada Base.

We started preparations for this Worlds soon after we arrived home from Lüsse in 2008 with our list of "lessons learned". One of the first things was to find a good radio so the pilots could communicate with ground throughout the majority of the task area. An Icom AC110 base station was purchased by Canadian Advanced Soaring for use by the team. Chris and Andy Gough took the base station with them to Finland for the World Juniors in 2009 and Andy donated a car mount antenna that was capable of transmitting out to most of the task area. This radio was a blessing in Szeged as we were able to talk with Base about 85 km out as low as 2000 agl.

We were also assisted by two local ham radio operators who built a new "Slim Jim" antenna for us that improved the Base reception significantly. These experts were located by George, who was a valuable team member and interpreter for us. Jörg is not to be forgotten; he looked after everything so the pilots did not have to worry about the administration and could instead focus on the flying aspects.

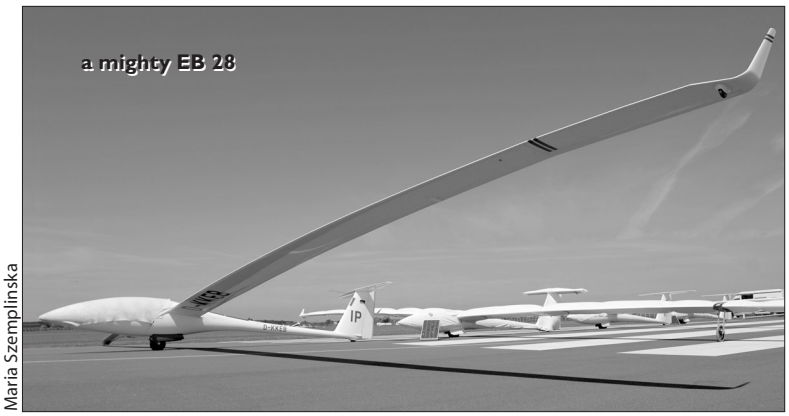
Fund-raising played a large role in our team preparations. Aeroplan had been approached in 2008 to establish a pooling program for the team, but the account was not set up in time for Lüsse. For 2010 I started earlier, with an account created in the summer of 2009. When flying with points, it is critical to book tickets long enough in advance to get the reduced rate and seats on the dates that you want. To this end, we initiated our Points drive in the Fall 2009 *free flight* with the goal of booking tickets in late October. Just under 240,000 points were collected, and with a small top-up using my points, we were able to book four return tickets to Europe – a saving of around $4000 in airfare for the team.

Other successful fund-raising events were two Team/CAS cross-country seminars in the winters of 2009 and 2010, and a membership raffle at SOSA where $50 tickets were sold for a chance to win a 2010 club membership or a 12 hour glider rental block. John Mulder was also able to get two *WestJet* passes for the team to raffle. ⇨ **p27**

Willem's account

HUNGARY, AS MOST OF EUROPE, had much rain this spring and summer. The Tisza River was unseasonably high. When we arrived in early July, the municipal campground was six feet under water. During the first week of the contest the land was still soaked and many fields had wet areas.

As a result of Canada's low IGC competition ranking, we were only allowed to enter one pilot per class. This put me in the Open class flying an Antares 18S, a pure glider, no engine. During the winter I studied previous contests in Szeged. All of them showed good thermals and high cloudbases. This would favour cruising with a high wing loading at 90 knots or more. I also looked at the factory polars of Open class gliders. Their 29m wingspan gives them an intimidating L/D in the order of 65.



Maria Szemplinska

The 18m span of my Antares has an L/D of "only" 53. But, if you look at the polars of both sailplanes and compare the sink rates at 90 knots, the much smaller wingspan of the Antares results in less drag and a better L/D than the Open class gliders at this speed. With the past meteorological conditions in my mind, I travelled with optimism to Szeged.

In my class there were many new Binder EB gliders. For example the EB 29 has an improbably high aspect ratio of 51 in conjunction with a very thin wing section. In a thermal, the wing bends like a hula hoop. Michael Sommer of Germany won for the third time the Open class, flying with the EB 29. There was also a new Schleicher ASH 31Mi. This 21m span glider was expertly flown to 18th place by Janusz Centka. Ron Tabery of the US team finished an excellent 7th place with an ASW 22 BL.

The contest organization was pleasantly low key and relaxed. The weather forecasts were mostly accurate. However, on many days the task setters appeared to ⇨ **p27**

the Serbian retrieve

Jörg Stieber

... see you in an hour!

IN COOPERATION WITH THE COMPETITION ORGANIZERS, the neighbouring countries of Serbia and Romania kindly opened their airspace for cross-border tasks. But, after the first outlandings in Serbia, we heard stories about cumbersome and time-consuming border procedures. It sounded like, although the airspace was open, somehow the possibility of competitors actually landing there and having to be retrieved by road had not been considered.

On 1 August Dave landed in Serbia along with pretty much the entire 15m class, a total of 45 gliders. We received the call with coordinates around 5 pm. As the crow flies, Dave's landing location was only a little more than 60 km away. He concluded the call with, "see you in an hour!" The first sign of trouble arose when the car's GPS refused to accept the coordinates because its database didn't include Serbia. We had hoped to get at least a bearing and distance to Dave's location from the GPS – database or not.

I joined Virginia in her preparations for Dave's retrieve. We had to make sure we had our passports since the Hungarian border with Serbia is also the outer border of the European Union. One of the contest rules was that outlandings had to be reported to contest office. Of course, the office was a zoo since 143 gliders had landed out! We also had to fill in a form with our passport details which was faxed to the Serbian border in advance of our arrival there to supposedly allow us swift passage.

It was a quick 15 minute drive to the border on the autobahn. Leaving Hungary was a breeze but soon after we found ourselves stuck with many other retrieve crews in a major traffic jam leading up to the Serbian side. Nothing moved. It took about an hour until things started moving slowly. Finally, at the border, they took the driver's passport and told us to pull over and wait. After what seemed like an eternity, the passport came back and we were cleared to go. In total it took us about two hours to cross the border. This sounds like a lot but I remember a two hour wait just to get into the USA from Canada.

On the Serbian side things got tricky because we only had the aviation map to navigate by and road signs are generally in Cyrillic with the subtitles in western alphabet, often spray painted over by nationalists – seems like not everyone in Serbia wants to join the EU. We made slow progress going from town to town on narrow roads. Sometimes we had to turn the rig around and backtrack. Quite often we saw other retrieve crews which is not surprising since 45 of them were driving around in this part of Serbia.

In one of the small towns we were flagged down by an armed police officer. He didn't speak English or German, but the only word I recognized in what was obviously a question, was "Kikinda", the name of a small city near Dave's position. Thinking he was asking if we were looking for the way to Kikinda, I said "yes". We were both a bit surprised when the officer hopped into the van with us and said "go!" It was a somewhat strange situation as we drove through the Serbian night with the police officer on board. I was beginning to think that perhaps the government had dispatched police officers to help us find our pilots. No such luck – when we finally arrived in Kikinda where we really needed local help, the officer said "thank-you" and jumped out of the car as we stopped at an intersection. We were on our own again.

A number of roads radiated out of Kikinda which is located close to the Romanian border. We knew Dave was near a road running in southwesterly direction to a little town called Novo Milosevo. The trick was to find the correct road leading out of the town. We stopped at a gas station where a group of young people with mopeds and scooters were standing around chatting. They understood enough English to figure out what I was asking but didn't speak enough to give me directions. Two of them hopped on their bikes and lead the way out of town where they waved us off. As we were driving along, we passed a large blue parking sign, just as Dave had described as being 200 metres from his location. We carried on for about a kilometre, but no Dave.

We figured we were on the wrong road after all, so we stopped to turn around. I finally got Dave on the line using my German Vodaphone. He said, looking back along the road to Kikinda, that he saw the moon bearing about 30 degrees to the right. The moon was still low in the sky and yes, it was on the same bearing at our location. I could also take a bearing off the North Star which confirmed that the direction of the road was southwest. We decided to drive on and it wasn't long until we saw Dave and a number of gliders in a field beside the road.

Negotiating the field with the trailer in tow was borderline for our VW van but we managed to get everything into position. It took only minutes to put the glider into the box while we were eaten alive by mosquitoes. By the time we were packed up and ready it was about midnight or seven hours after Dave had called. On the way back we tried a shortcut but had to turn around when the road just ended in a field.

When we finally drove up to the border at 1:30 am we were shocked to see pretty much all 45 glider trailers parked there. As it turned out, the Serbs wanted to see the registration documents for every glider we were taking out of the country. The progress was slow but steady and after an hour we were on our way again to Szeged. It was almost 4 am when we arrived in the hotel after parking the trailer at the airfield and the night clerk was just starting to prepare breakfast. The 15m class got the next day off to relax. For me there was just enough time for a power snooze before I had to get ready for the team managers meeting. ❖

in the beginning

Mike Frijters, a founding member and the first CFI of LSS

on the occasion of the 40th anniversary of the London Soaring Society

THE IDEA THAT THERE SHOULD BE SOARING in the London area had become firmly established in our minds. The above-mentioned minds belong to Willem Den Baars, Don McKay and yours truly.

In order to soar we decided there must be a number of things (such as a sailplane, a field, a towplane or winch, and a number of qualified people) to get us into the air. Having none of them, we really had a wide choice of where or with what to start, and with optimism we began to look around for what we needed. Don, a SAC member, had soaring magazines, and our interest shifted from the front to the back section and we scanned the "For Sale" ads for a worthy and noble machine with which to start soaring. A Laister-Kauffman was missed by one week, but the next issue offered a Pratt-Read for sale at an acceptable price, and the fact that it was a two-seater really enthused us, especially since we did not know yet what one looked like. We found out that the Pratt-Read was at Pendleton, and was a fantastic machine in great condition that could out-fly and out-train anything.

It had no trailer but with everything else going for it, that seemed a small detail. We decided to go ahead and take a look at such a bargain before it would surely be snapped up by a multitude of perspective buyers. We need not have worried since we were the only interested people.

The trip

Now, at the stage where the Pratt-Read was purchased, it was loaded on our makeshift trailer and it pointed towards London. It was 2 am and dark and cold when we set out from Pendleton on what we hoped to be a speedy trip back. Willem volunteered to do the first bit of driving to Cornwall for a bit of sleep at a motel, and we hoped to arrive there at about 3 am. I was getting a head start on the sleeping part in the back seat and so was spared the discovery that we were not going to go all that fast. Willem found that the top speed, the absolute never-to-exceed speed, was 29 miles per hour. Even a half a mile over this and the car and trailer would sway wildly. At that speed it would take all day to get to London, so forget a motel, we would just stop for food.

The first food stop was in Cornwall, and it was just getting light with a dull overcast sky. We had breakfast and felt much better, even after calculating how long the trip would take at 29 miles per hour. Underway again, we found out that the wind was now blowing directly across the road. This had quite an effect on the big wings tied to the A-frames. Everything shook and swayed wildly and we had visions of all the nails coming out of the trailer, which was all that held it together. We had no option but to slow down from our already crawling pace. The crown in the road did not help matters and neither did the fact that the trailer leaned a bit to the wrong side all by itself to start with. The wind, the road and the lean of the trailer all combined to make the Pratt-Read look as if it were centered in a good thermal with a narrow core.

We didn't like the view out the back window, and at one point the trailer just went along on its right wheel for short durations. At times we only made 10 to 15 miles per hour. Around Kingston we entertained the idea of leaving the trailer and going back for it some other day, but that wouldn't improve the trailer, and the ultimate trip would still be slow and the wind could then be blowing again, so we carried on. We stopped at each gas station for food and perhaps to convince ourselves that

Mike's account above of the trip home with the Pratt-Read is faulty in its vast understatement. I would have thought to transport the one with the other for 400 miles was simply and totally impossible. Not Mike! Picture if you will a small (4' x 8'), two-wheel flat-bed utility trailer, together with the great bulk of the Pratt-Read. The latter is difficult if you have never seen one. It was built for the US Navy to train WWII troop-glider pilots. Built, as you might expect, like a battleship. In assembly, lifting one wing panel required at least four very strong men. He had brought two lengths of 2x8 plus miscellaneous lumber and nails, and he and Willem, working in freezing drizzle in the light of the car's headlights, managed to disassemble the beast, extend the trailer bed, construct cradles for the fuselage and get everything more or less mobile. The overhang to the rear made the tongue of the tiny trailer go up in the air, and it took Willem's 200 pounds plus to bring it down to the hitch on the car. The end result resembled a large elephant on roller skates.

Like the Pratt-Read itself, the trip itself is truly difficult to visualize without having been there. I don't normally believe in miracles but the end result, whereby aircraft, car, trailer, and personnel all arrived in London safely, without disaster or incarceration in jail or mental institution, comes close.

Don McKay

ZAN on final

the wind was dying and we would soon be able to resume what was now considered a fast 29 miles per hour.

The day and the miles dragged on, and we all took turns at driving and trying to sleep a bit in the back seat. Mid-afternoon, Don was the lucky one to drive us through the Toronto area, which was interesting. At one point we had an escort of a DoT highway truck and that perhaps kept us from being hauled off the road as dangerous or for obstructing traffic. We were still only doing 29 mi/hr at best but the wind was down somewhat. We felt we were almost home with the successful crossing through Toronto but it meant two more stops and five more hours at best.

The last stop was near Woodstock. Once underway it began to rain and then became a downpour which lasted all the way into London. But now at least everyone was going slow and it no longer seemed as if we were standing still. It was very windy again, but it was a headwind and the trailer behaved like a big weathervane. The Wellington Road overpass came into view and except for some bad moments when we were across the wind on the cloverleaf we were home, in London with a sailplane, as we had set out to do. We arrived at Don's home shortly – it was 10 pm when we congratulated ourselves with achieving our first objective without mishap.

Getting ready to fly

The next day, after a good night's sleep we drove the Pratt-Read to the London Flying Club for winter storage and then went home to enjoy Thanksgiving with our families.

With the P-R safely stored in the LFC hangar for the winter one would have thought that our problems were over. This however was not the case, we still had to find a place to fly from as well as a method of getting into the air. We tried such places as Centralia and Aylmer with no success, and we were even considering car tows as a means that was at least financially feasible. Don found both answers to our quest simultaneously by finding the Dodson Aviation airfield as well as Dodson and getting him to agree to let us fly there. At the same place there was a likeable character by the name of Skip Metro who just happened to have a Stinson and who also agreed to try and tow our glider into the air. It must be remembered that at this point Skip had never seen a P-R and Don, even if he had tried, could not have conveyed its size adequately.

Willem and I were busy then constructing a trailer for the P-R. This was done in Willem's garage during the cold winter months and it took all winter to cut and fit all the pieces of tubing that went into that aircraft carrier. Actually it only had to live up to three tasks: be wide enough, long enough and, above all, strong enough to carry our bird safely. At that time we had ideas of going cross-country with our glider, but that was long before we ever assembled it.

With the trailer now roadworthy, we set out in the early spring to take the fuselage to Don's garage for minor items such a vario, a new pitot tube and some new tubing, etc. All that remained was wait for the mud on the runway to dry, for Skip to put a towhook on his plane, and for good weather.

On the first day of June 1968 we drove the fuselage to the field and Don and Willem went to London Airport to get the wings so we could assemble and fly. I took the time to try and show Skip some simulated aerotows as he had never even seen one. The wings arrived and with the help of many friends we put our machine together and did the checkout of all things vital. If the size of the P-R gave Skip any second thoughts at this moment, he never said so.

We were ready to go, to bring gliding back to London and to fly like one should, in tune with nature and to share our joy as well as our labours with all who would care to. With Don and me strapped in, the towrope connected, wingmen checked out and with Skip in the Stinson, it was time for one last check and then the thumbs up signal was given for a momentous flight.

First flight

Slowly the P-R began to move for its first takeoff in the London area. A lot had passed to get to the point we were at now, a lot of problems were overcome and a lot of energy had gone into the entire undertaking. There was no time to reflect upon that however, as we were busy trying to lift the P-R into the air. It seemed to take a long time but after a few bounces onto the tailskid it stayed in the air. The towplane took a while longer to become airborne, but it was evident that we would at least clear the fence. So we decided that we would stay on tow and see what would happen. One thing that was happening was that the airspeed indicator had decided not to function but otherwise all else seemed okay.

Soon we released and were on our own. No thoughts of soaring were present as the sky had become quite dark and it just then started to rain. Also there was no horizon and it was interesting to find the right attitude to fly since the airspeed had not fixed itself. To say that we flew somewhat fast would be correct and as a result the flight did not last too long and soon we found ourselves faced with landing a strange bird without the benefit of knowing how fast one is going.

With a decent landing we congratulated one another in the few seconds before our friends caught up with us and everyone was talking at once and asking questions, etc. It was raining much harder by now, and the field was slowly turning to mud. It was our cue to pack things up for the day and the P-R was duly moved to a parking spot. Being a believer that one can never secure an airplane too well and since this was also the first time that we tied it down, it took a long time. It also took a lot of rope and anchors, etc. and by the time we were done we were soaking wet. Ask us if we cared at that point! It would take us some time yet to come down to earth. Skip's only comment after the flight was that he thought we had tied the towrope around a post and he was only stretching the rope. He did a fine job for his first ever tow. We had it made! We had our own glider, a place to fly from and someone willing to tow us up when we wanted to go flying.

The first summer

After getting used to the glider with some short flights it was time to start soaring. It became obvious that the P-R liked to soar and that it really had honest performance. On the second or third day out we made it to over 5000 feet – very close to seventh heaven.

Our flights were becoming longer and this created cases of acute boredom in our towpilot Skip and also with whoever was out at the field to help us. So once in a while we had to go down and land just to keep the action going. It was beautiful that summer, but we felt rather lonesome having the only glider in the area and we were hoping that some other enterprising individuals with their own glider would join us to share the soaring and help to keep our towpilot busier, but nobody came.

One day we saw two other gliders from Dresden on a cross-country flight and it seemed to give the P-R as well as us some added lift. Then some weeks later we saw it, a red and white V-tailed glider streaked by (PHH – an Austria SH-1) and we looked at it until it was out of sight. That did not take very long but the thing that impressed us most was that not once did it circle. Oh, to some day own a bird like that!

The summer went by quickly and altogether we made well over a hundred flights but the time came when we dismantled our bird for winter storage. I would spend the winter working in Jamaica while Don kept an eye on our bird and made a start on a hangar so that the glider would be out of the sun and rain during the next flying season.

Second year

Our second year of operation in 1969 began well: we had an early spring and our hangar was taking shape. The P-R was assembled and at the end of the day we moved our bird into the new home it was to occupy for some years.

Don, Willem and I had some good flights, and we had it made. We flew only on the good days and would go to the field at about noon and we were always number one on the list. Then in June, Skip crashed during a let-down from towing and would spend many months in hospital and in fact never fully recovered. It stopped us for some weeks and although a new towplane and pilot were found it did not seem to be the same. Skip had spoiled us by being there to tow when we asked him and this was not to be found in our new towpilot.

Some fine soaring days were going to waste, and the season ended all too soon but by now the P-R had a home for the winter and dismantling was a thing of the past. At the close of the season we were approached by interested people about forming a soaring club and to this end some meetings were held with any interested parties we could find. Many discussions about the prospects and possible future of such a venture were had and it was decided to give it a try.

Don and I as soaring individuals would now be absorbed into a club, the P-R would become its first trainer and the hangar was sold at this time to the newly-formed London Soaring Society. There were mixed emotions on our part: we would gain in the availability of a towplane and there would now be more interested people out on the weekends, but gone would be the days of always being number one on the list and of simply going home after putting away one glider at the end of the lift.

The work and responsibilities would increase many times in the years ahead but all we could do at this point was hope that we had made the right decision and that others might enjoy our wonderful sport as much as we had done. The years since then have told their own story, but that was how it was "in the beginning." ❖

Additional comments from Don McKay

Prior to 1967 at least two attempts had been made by others to start a gliding club in London. The second, by Al Pow, a noted Canadian sailplane pilot, operated briefly as a separate London section using the facilities of the Southern Ontario Soaring Association (SOSA), then located at Brantford Airport. However, this attempt did not survive for long.

LSS owes much to Mike. I have never met so outstanding a natural leader, with the ability to analyze and devise solutions to problems. Mike's narrative gives no dates or specifics. That first flight of CF-ZAN was made 1 May 1968 and lasted 15 minutes. Our best flight that season was 4 hours 11 minutes. We used to split the time as pilot-in-command. The Pratt-Read – once you got used to her – was a glorious bird. Skip Metro, our engaging towpilot, crashed 29 June 1969. He never regained the use of his legs, but never lost his sense of humour or inventiveness. He is now a prosperous manufacturer of appliances for the handicapped. LSS was officially formed 18 March 1970. The initial membership was ten confirmed members with another ten "interested".

During the first year 488 flights were made with the P-R and an L-Spatz for a total time of 205 hours, 50 minutes. Green air to all!

Instructing women in gliding

personality traits and learning preferences of the sexes matter

Hugh Turner, *Soaring NZ*

MALES OVERWHELMINGLY OUTNUMBER females in aviation. This is often remarked upon by visitors to our airfields. Yet there are noticeably talented women in all spheres of aviation: practical, instructive, and administrative. At my airfield there are currently four highly talented professional women immersed in aviation. Their skills and dedication measurably eclipse those of most of the many more men also present.

Perhaps we should think less about gender, and more about the personality traits and learning preferences of people who become attracted to aviation. These traits in themselves become the filter of who will or will not find motivation, stimulation and satisfaction in pursuing aviation as a career or recreational pursuit.

Even uncomplicated aircraft flown VFR still require a surprisingly broad range of analytical, academic and practical skills. An attraction to and success in aviation requires a personal preference and aptitude in understanding several sciences (meteorology, engineering, design, aerodynamics and navigation), technology (modern equipment and materials, instrumentation, computer literacy) as well as the finesse and undefinable artistic qualities related to aircraft handling, refined situational awareness, and the ability to multi-task and make quality decisions while constantly on the go. This is a broad range of skills to expect any individual to embrace successfully, skills that will not be learned without significant investment in money, time and effort. Having a weakness in any of these disciplines may at best impair satisfying progress to aspiring aviators and at worst leave them dangerously exposed in a 3D environment not natural to our species.

It may be that aviation is less appealing to women not because they cannot embrace this broad range of skills, but are unwilling to embrace them all at the same time.

The recreational gliding instructor is tasked with producing safe pilots by encouraging and nurturing knowledge and skills while inspiring confidence and ambition. Our students will have an age from early teens into the '60s – occasionally even older. What are the most appropriate learning methods to deliver to this disparate group of enthusiasts? I find myself asking unanswered questions, but I have some observations to offer.

Comparison with other activities
Is aviation in general (and gliding in particular) attracting similar numbers, more, or less women than other activities comparable in perceived reward, risk, expense, adventure with uncertainty of outcome and accessibility? It seems to me women are well represented in many alternative activities; however, none would seem to require the same broad skill base required by aviation.

Financial priorities In general, do women prioritize financial matters differently than men? Are they more or less sensible or responsible about the prospect of committing significant financial resources away from domestic necessity to arguably flippant recreational use? Do men and women in general place different values on exploration and adventure and the cost of obtaining those experiences? Career and earning opportunities are still weighted in favour of men. Does a lower earning potential affect a woman's financial priorities? Is it more important to her to invest in home renovations than in private aircraft ownership?

Club culture Recreational sporting club culture seems to be dominated by male drive and ego. Is this culture in itself a barrier to female participation? Have men created 'boys clubs' they wish to keep exclusive to themselves from an innate need to be a part of what they subconsciously see as a male domain? Do clubs function better with or without the inclusion of both sexes? Do the participants behave better or measurably achieve better results in mixed or single company? If men have created clubs for themselves, why have women not done the same thing? Do women find the current teaching environment through clubs and flight schools acceptable or can they offer alternative ways to maximize their experiences and make best use of their time?

Commitment Do men and women have different priorities with long-term commitment to recreational activity? Aviating cannot be done well without significant long term dedication and regular time from one's weekly schedule. Is being immersed to this degree a barrier to female participation levels? If women elect to raise children this becomes a 20-year full time commitment. Yet their spouses are often happy to manage a dedicated recreational pursuit during this same period of family commitment, so the answer is not clear. While women may delay serious commitment to recreational or athletic pursuit, interestingly it would seem that many women athletes achieve their personal bests after pregnancy and as mothers. Raising children, managing a household, coupled often these days with working at the same time, teaches women significant skills in multi-tasking, time and stress management that may exceed the abilities of their men folk and could prepare them well for flight management.

Perception of risk and risk management
Boys and girls don't get equal exposure to risk activity and its management. Has evolution included the development of an 'adventure gene' that is active in most men, inactive in most women? If it exists, is the relative activity of an adventure gene related to the level of exposure to risk activity during childhood? How much personal risk will women accept in comparison to their male counterparts and how much risk management practice needs to be in place to make an activity more or less acceptable to either party?

Learning methods What general differences can be identified in the way each sex prefers to learn, be taught, receive and process information in terms of accepting or rejecting teaching methods that have been devised and delivered by their own or the other sex? Can we adapt our learning preferences to accept alternative methods or will this inevitably compromise our learning ability or confidence? How well do women thrive when being taught by men in a man's world?

Some (major) generalizations
In working as a gliding instructor I find I make some generalizations on first being introduced to new trainees or aspiring aviators; then I have to consciously work hard to dismantle my own preconceptions to give them fair treatment. My generalizations are:

- Men tend to be overconfident, women underconfident in practical application. Men also tend to consider their skills are better than their instructors give them credit for and that they are ready to take on increased res-

ponsibility earlier than their instructors will release it to them. Women tend to be slower to each goal along the learning path and are often apologetic for being careful or having a perceived lack of skill. Instructors find themselves looking for ways to suppress the assertive momentum of the men while encouraging the women to take earlier responsibility.

• Men tend to accept lower standards of accuracy and have less tolerance of repetition to gain skill and understanding. Women tend to display greater desire to get it right, are more self-critical and inspired to do the task well. They are more prepared to repeat exercises as often as necessary to achieve this.

• Men have a tendency to trust they can extract themselves from unidentified difficulties, will face them if needed and in fact may welcome or invite challenges from the unknown. Women tend to need to identify all threats and have answers to them before getting surprised by them. Men tend to have an inherent trust in their instructors and the equipment. Women tend to ask questions about both before committing themselves to the unknown (air) yet will often place absolute trust in their male companion's (instructor's) ability and decision-making.

• Men tend to have a preference to learn their skills practically while flying and accept a level of clumsiness along the way as part of the process. Women tend to have a preference to know the theory before they go flying and expect to handle the aircraft well from an earlier time.

• Male instructors may have an instructional technique based on greater or lesser degrees of intimidation and criticism that may be effective in teaching men. Women can be less accepting of this style. They are more likely to shop around for an instructor to whom they relate well then be insistent on doing the bulk of their training with that instructor.

• Men tend to need to be in constant control. This can result in early difficulties with aircraft handling as it is unnecessary to be always doing something with the controls as the aircraft is inherently stable. This results in over controlling and disharmony. Women tend to have a more sensitive instinctive feel for the controls from an early time as they are less inclined to control.

• Men are usually willing to make an instinctive or opportunistic decision and live with the result regardless of its quality. If they subsequently are shown to be wrong they just take another decision to mitigate the results of the original decision. Women can sometimes do nothing when some action is needed thereby leaving them 'behind the game'. Instructors may interpret this as being unresponsive or indecisive rather than recognizing she has not been prepared for the situation and is unwilling to make a decision or respond from zero point knowledge.

• Men tend to be more adventurous and are undoubtedly so in marginal conditions (have greater risk acceptance) than women who tend to be distinctly risk averse.

• Men tend to be more gung-ho or cavalier in their total approach to training and flight progress. Certainly the bar talk at the end of the day revolves around these attitudes. Undoubtedly we see more competitiveness within groups of men who fly than we do when groups of women fly. I suspect women are more interested in helping each other get around a difficult sky while men take adverse pleasure in smugly abandoning their colleagues to their fate of a landout in the same situation.

• The endurance of men in the cockpit would appear to be greater than women both in terms of attention span and a desire to stay airborne or go long distances. Gliding women may be flying for reasons of personal achievement rather than the 'go further faster' ambition of men. Attention span is related to and may be extended by experience. If a trainee's flight experiences always end after an hour we should not be surprised if that pilot 'switches off' after an hour despite being still airborne.

I also learned early in my instructing days the need for sensitivity to the sanitation needs of women after a female pilot I had been flying with told me after four hours during a remarkable cross-country flight while we were still some distance from home that she wanted to land and she wanted to land *now*. For her, the flight had become less than enjoyable despite the extraordinary flight we had been experiencing. Until sanitation arrangements in aircraft are better resolved for women, they will inevitably either curtail extended flight experiences or subject themselves to discomfort, dehydration and embarrassment beyond the male ability and willingness to relieve themselves.

If we group the generalized tendencies of men and women we find a thread of overconfidence and assertiveness on the male side, with greater care, diligence and willingness to embrace a safety ethos on the female side. Professional airline pilots are now expected to embrace the concepts of total CRM (cockpit resource management) that includes all the skills and welcomes the input of all the participants as opposed to the earlier inherited military aviation convention of senior pilot domination in the cockpit. In discussing the contents of this article with some of these professional pilots it is apparent the crews and the airlines appreciate and prefer the female ethos of care; it seems the women may be better at practising the concepts of CRM. Apparently most airlines' HR and disciplinary procedures include having what is effectively a Bad Boys list of transgressions – the women pilots don't feature on it.

Teaching methodology The skilled instructor will recognize learning styles and adapt teaching methods to suit. It seems there is acceptance within academic teaching professionals that while both sexes benefit socially and behaviourally within a coeducational environment, paradoxically both sexes also learn better with segregation at lesson time.

Do women pilots want to be taught/considered in the same way as the men through aviation teaching processes? In speaking with several professional air women it is apparent they are rightly of the opinion they should not be treated in any separate way to the men, suggesting coeducational teaching is appropriate. They want to be measured by the same scales and follow the same syllabi of training schedules and certainly do not want or expect either leniency or more exacting standards at testing time. However, they may learn more confidently and achieve better results if their instructional program is devised, delivered and measured by professional women who they regard well.

Questions, answers & observations

As with any other activity, significant application is necessary to gain 'professional' instructing skills. Many gliding instructors have been 'captured' by clubs desperate to swell the ranks of a diminishing and ageing instructor pool. Some may offer their services as a way to obtain free air time rather than by any significant demonstrated skill in imparting knowledge. There is no doubt the general standard of volunteer instruction within aviation circles is more often than not less than adequate, yet men thrive within it. This culture does not seem to suit women trainees who are noticeably more demanding about quality, and critical when quality is absent.

Effective aviation teaching requires developing skills in inventive ways to explain and demonstrate tasks. This needs to be done in a way meaningful to the individual rather than by textbook rote. Instructors who find

ways to relate theory and practical application to other experiences outside aviation will prove more effective than those who confine the teaching process to a purely aviation context. If trainees already have significant skills in riding horses, sailing, skiing, engineering, driving or any number of other activities, finding parallels and relating aviation skills to these activities may achieve better and earlier long lasting results than adhering strictly to teaching off an aviation syllabus.

I have had the immense privilege of being associated with many women pilots whose skills, tenacity and dedication to achieving their goals often eclipse men of similar ambitions. They have succeeded despite the barriers imposed by men in what is effectively still a male domain.

Who can argue against the need to bolster declining participation in all facets of aviation? If women are alienated from aviation at the outset because of male organizational bias, we have immediately excluded 50% of the potential from participation. Finding ways to improve and retain the intake of women within aviation is a challenge offering big rewards for the whole industry. It is just as much a challenge for our sport. ❖

should intros wear chutes?

This question came up at Cu Nim this spring and it generated a lot of group discussion. The statistics on surviving a bailout are in the 50% range based on an article I saw a few years ago in a European soaring journal. A major factor was the old stall/spin where the pilot was too low to jump anyway.

Protecting our intros' lives is much more in safe operational rules like "instructor-only-and-named-others" than in any chute. Once you actually *do* have to bail out, the stats say it's pretty much in God's hands, especially for an intro who has never had a chute on in their life.

The most important point is to act first on the greatest risk to achieve the highest benefit – to keep the intro's life in y*our* hands. That is handled for the intro (or anyone) by flying "professionally". Establishing a rule that the intro must wear a chute is more an image fix than a real one. Our public duty of care is to fly professionally. That is the required attitude – the *"fence at the top of the cliff rather than the ambulance at the bottom"*.

Tony Burton

So how do you, as an "amateur" glider pilot, fly professionally? Read on:

THE PROFESSIONAL APPROACH TO FLYING

adapted from an idea in the USAF "Aerospace Safety"

from 1981/5 *free flight*

All forms of aviation require a professional approach but the most demanding discipline in this field of endeavour is flying itself. Many of us lack the spare time required to mull over regulations, manuals, emergency procedures, etc. Furthermore, some of us may not even think about flying during the normal routine of our jobs. Nonetheless, we as part-time pilots must fly to the same set of standards and under the same rules and regulations as our full-time counterparts.

To do all of this safely requires us to take a full-time professional approach to our part-time activity. As a consequence, it is important that we set aside periods of time between flights to re-acquaint ourselves with the various types of aircraft that we fly and what their limitations are. Even more important, we should take the time to evaluate ourselves. How do we approach each flight? Are we conversant enough with the prevailing weather conditions? Are there other factors we should be aware of?

In effect, all of us should be able to recognize an area in our personal state of readiness which necessitates that little bit of extra attention. The place to find this out is on the ground – not in the air.

A professional approach is not something that can be turned on just as you start to secure your safety belt. It should start long before that and it means making a conscientious and concerted effort to start thinking about flying as soon as you know that you are next on the flight line. Maybe we only fly part-time but we should be thinking professionally full-time.

Let me emphasize that professionalism begins with the recognition that your licence carries with it not only the freedom to perform acts not given to mere mortals, but the responsibility to be good at those acts – that means *knowledge and judgement*. As a pilot, you are responsible for knowing your aircraft's limitations and your own, and as such you are responsible for ensuring that neither are exceeded. Demanding more than you or the aircraft are designed for will inevitably result in an accident. Sad as it may seem, accidents are not the mark of a good pilot. While a crash may be a spectacular ending to a flight, the impression it leaves on your peers is not what you had in mind when you took off that day. Good pilots are decisive individuals who know when to quit or can refuse the continuing temptation to show just how good they are.

On the subject of accidents, it is important to remember that no pilot expects to have an accident when he takes off on a flight. But, it is equally important to note that the common thread in most accidents is failure of the pilot to exercise basic common sense. Many of us are guilty of having violated good judgement at one time or another. It's amazing how often you get away with these violations but it eventually catches up with you. Consequently, many mishaps are avoidable if a pilot exercises reasonable caution. This caution is a characteristic you are assumed to possess when you are awarded your licence and is something that is supposed to go beyond the letter of legislation or regulation.

Air discipline begins with thorough knowledge of the rules and regulations (club and Transport Canada) and full acceptance that they were written or formulated for your benefit and safety. Having a "Mr. Gotcha" in the club, whose pleasure it is going to be to keep you from having fun in your aircraft, is not an answer to preventing accidents. Instituting additional compulsory checks is not going to solve the problem either. The problem is the pilot. If he is incapable of selfdiscipline and doesn't know when to cry "uncle", then no amount of close supervision on our part is going to keep that pilot from doing something stupid at one time or another.

It is more important to impress upon pilots that rules and regulations are written to ensure, insofar as possible, safe and enjoyable flying. A pilot's failure to know the rules is no less dangerous than failure to follow them. The result is the same. Let me close by saying that, as pilots, we have the responsibility of trying to become the best possible aviators. This means not only having highly skilled hands and feet but developing *professional* attitudes and practising air discipline. In effect, the name of the game is *fly smart!* ❖

winch accident stats

According to statistics compiled by the BGA, the average frequency of their winch accidents is 1 in 13,000 launches. The winching accident rate is twice that of aerotowing, and the fatal/serious injury rate is eight times higher. An Australian once said about aborting a winch launch, "it's straight ahead to the hospital, or left or right to the cemetery." Keep that thought in mind on a low break!

from *Gliding International*

miscellany

I'm a believer

(apologies to Neil Diamond) the 'Bald Eagle'

I thought love was only true in fairy tales
Meant for someone else but not for me.
Love was out to get me
That's the way it seemed.
Disappointment haunted all my dreams.

Then I saw her face, now I'm a believer
Not a trace of doubt in my mind.
I'm in love, I'm a believer!
I couldn't leave her if I tried.

I thought love was more or less a given thing,
Seems the more I gave the less I got.
What's the use in tryin'?
All you get is pain.
When I needed sunshine I got rain.

Then I saw her face, now I'm a believer
Not a trace of doubt in my mind.
I'm in love, I'm a believer!
I couldn't leave her if I tried.

I thought lift was only true in fairy tales
Saving someone else but not poor me.
Sink was out to get me
That's the way it seemed.
Landing out was spoiling all my dreams.

Then I hit six knots, now I'm a believer!
No more 'down' on my trace.
I'm in lift! I'm a believer!
I couldn't land out if I tried.

I thought lift was more or less a fleeting thing,
Seems the more I looked the more I sank.
What's the use in circling?
When you end up in a mess.
When I needed more height I got less.

Then I hit six knots, now I'm a believer!
I couldn't land out if I tried.
I'm in lift! I'm a believer!
I'm now high on the final glide!

---

changes to the World Championships structure

Changes to the World Gliding Championships structure have been proposed by the IGC Competition Structure Working Group chaired by Eric Mozer (USA). The recommendations have been accepted by the IGC Bureau and will be voted on at the IGC delegates plenary meeting in 2011. The World competition calendar will be:

- 15m, 18m, and Open classes held on even years – no change.
- Standard, Club, and a new 20m two-seater class held on even years beginning in 2012. This two-seater class will replace the World class which will be deleted.
- A new 13.5m class will have is own championships held on odd years, to be held for the first time in 2015 (though a "trial" 13.5m event could be held in 2013). This championship class will consist of all gliders and motorgliders having a wingspan of less than 13.5m.

The 20m two-seat class was a class proposed by Norway, and accepted at the 2010 plenary meeting. The 13.5m class was proposed by the IGC Light-End Working Group, established to recommend a class to replace the PW-5 World class glider after it loses its competition "licence".

from letter to IGC delegates

laughter that silvers the wings

Don Kuehn asked, "Are we allowed to have this much fun?" He was referring to a day of flights up through the blue holes among the clouds with 1500 foot bases. I was flying kids from *Camp Quality*, a camp associated with Sick Kids Hospital, for children with cancer, in the Twin Acro at York. I had asked for those who love roller coasters to put their hands up; almost every one of them did. The caregivers helped select the passengers to experience the 'roller coaster in the sky' that I told them I owned.

They laughed, they giggled, and one girl screamed with delight as she threw her arms up over her head in approved roller-coaster style, putting fingerprints all over the inside of her canopy, but she was having so much fun I couldn't bring myself to ask her to stop. Then there was the young lady – perhaps 90 pounds of her, with frozen joints, who told me that she used to dream of walking, but would now dream of flying.

We are fortunate to have our health, and doubly fortunate to have keys to the sky.

Think about it, and then read *High Flight* again.

Charles Petersen

Perlan 2 update

Nearly a decade after he became the first private citizen to fly in space, Dennis Tito is looking to go back to the upper stratosphere – this time in a glider. On 9 August, he committed to fund the ongoing construction of the Perlan 2 high-altitude research sailplane. Tito, a soaring enthusiast, will also train to be among the pilot teams for the aircraft.

The Perlan 2 is a pressurized sailplane that has been designed to fly at an altitude of 90,000 feet. The project has three goals: meteorological research, greater understanding of aerodynamics of near space flight, and inspiring children to go into careers in math and science.

A mock-up of the fuselage was a last-minute addition to *AirVenture 2010* in Oshkosh.

Perlan 2 designer and builder Greg Cole, EAA 1012774, of Windward Performance in Bend, Oregon, was at Oshkosh this year – he and his family camped for the first time – and was encouraged by attendee response to the Perlan 2 mock-up.

"I was really surprised at how well received it was," Cole said, "but that's Oshkosh. Everyone is interested and educated about the project. We hope to fly to 90,000 feet with no motor on piloting skills."

Retired NASA test pilot Einar Enevoldson started the Perlan Project in 1996 and set the glider altitude record of 50,722 feet in 2006 with Steve Fossett. Since Fossett's death in 2007, the project had been funded by Australian glider pilot, Morgan Sandercock.

Enevoldson discovered data that suggested it might be possible to fly a sailplane to 100,000 feet by riding an atmospheric wave created by a weather phenomenon known as the Polar Vortex – a ring of high-speed, high altitude winds circling the globe at polar latitudes.

Tito flew to the International Space Station in 2001 in a Russian Soyuz capsule, where he spent eight days in orbit. Before founding his financial business, he worked on orbital mechanics as an engineer at NASA's Jet Propulsion Laboratory. He flies his own glider in California.

The first flight tests for Perlan 2 are scheduled for spring 2012 in the Sierras, Cole said. If all goes well, the team will head to Argentina for a first record attempt launch in August or September.

from EAA news release

Single-place

22	ASW-20	2	Duster
20	Jantar	2	HP-11
18	PIK-20	2	LS-3A
16	SGS 1-26	2	Mosquito
13	SZD-55-1	2	Nimbus 2
11	L-33 Solo	2	Pioneer II
11	Libelle 201	2	Salto
11	PW-5	2	SF-27A
11	Ventus	2	SGS 1-23
9	DG-400	2	Std. Cirrus 75
9	G-102 Astir	2	Tern
9	Ka6CR	1	AFH-3
8	LS-4	1	Air 100
7	ASW-15	1	American Spirit
7	ASW-19	1	AMT 200
7	HP-18	1	Apis MCs
7	Std. Cirrus	1	ASH-26E
6	Discus	1	ASK-14
5	HP-14	1	ASW-29
5	LS-8/18	1	Centrair 101AP
5	RS-15	1	Cherokee II
5	SGS 1-35	1	Club Libelle
4	ASW-24	1	Dana
4	ASW-27	1	DBW 2
4	IS-28B2 Lark	1	DG-303
4	Kestrel	1	DG-500
4	Monerai	1	DG-800S
4	Open Cirrus	1	Egret
4	Phoebus B1	1	Elfe S4 A
4	Pilatus B4	1	Hornet 206
4	SGS 1-34	1	HP-16
3	Apis MC	1	K8B
3	DG-200	1	LAK-12
3	DG-300	1	LAK-17A
3	DG-800	1	LK-10A
3	DG-808	1	LS-10A
3	Genesis 2	1	LS-1C
3	Glasflügel 304	1	SGS 1-36
3	Libelle H 301	1	SHK-1
3	LS-6B	1	Silent 2 Targa
3	Mini Nimbus	1	Skylark 3
3	Russia	1	Slingsby Dart
3	Skylark 4	1	Std. Austria
3	Junior	1	SZD Pirat
2	ASW-17	1	SZD Cobra
2	Austria SH-1	1	SZD Acro
2	Diamant	1	VES-1
2	DG-600	1	Zephyr
2	Discus 2cT	1	Zugvogel

Two-place

78	SGS 2-33	2	Blanik Vivat
16	L-13 Blanik	2	IS-29D2 Lark
10	Twin Astir	2	PW-6
9	L-23 Blanik	2	Taurus
8	SGU 2-22	1	Bergfalke III
6	Puchacz	1	Diamond
5	K7	1	IS-32 Lark
5	Krosno	1	Janus-CM
4	ASK-21	1	Ogar
3	Duo Discus	1	RHJ-8
3	Grob 109	1	SF-28B
2	ASK-13	1	Stemme

gliders in Canada

The box opposite lists the gliders currently active in Canada, sorted by single or two-place and the number flying. The number of each glider type includes all marks. Most of the 2-33s belong to the Air Cadets. There are a surprising number of one-offs in our fleet.

the evolution of the state of the art in glider design

The early SOARING magazines, right through to the split-off of *Technical Soaring*, were an education in aeronautical design and engineering, with pages of formulae and discussion of trade-offs and new ideas. I have been trawling through the back issues from 1937 to 1967 (and can't wait till the scanning project gets through the remaining years or at least the end of the 70s, which was the most technically interesting time in my view). We owe big thanks to Kathleen Taylor for her monumental task of scanning and collating the immense volume of material involved.

You can trace the actual present state of the art and fundamental "taken for granted" features back to specific articles and the thoughts of the likes of Gus Raspet in particular, together with Paul MacCready and Dick Johnston, Bruce Carmichael, and the other greats of US soaring. Such articles predicted the use of fibreglass as the ideal material for sailplane construction in the 40s, sandwich foam core construction, the V-tail, powered gliders, variable geometry, flaps, cross-country optimum speeds, etc. etc. – even articles on canard sailplanes, boundary layer control, and remote thermal detection.

Articles on other ideas are only now being realized, for example, a few little throw away lines by Raspet about "pilot-powered boundary layer control" along with the calculations to back up its feasibility. I am looking at using the pedals in my Velopter (a flying recumbent bicycle) to do just that to allow for an airfoil having a very low Reynolds number avoid airflow separation.

These are game-changing ideas – the HP-15 might have been saved by such techniques. Raspet also did a three page article on using models "flown" underwater in a bath or swimming pool to easily check out stability and performance matters. Paul MacCready put that idea to use decades later when developing the first successful man-powered aircraft, the *Gossamer Condor* – which has led to the vast array of ultra-efficient solar powered aircraft and unmanned drones that now find use in everything from atmospheric monitoring to military attack.

The first solar powered vehicles were aircraft (virtually sailplanes), not cars, although MacCready went on to win the Australian *Solar Challenge* competition for cars and then to develop the *GM Impact* electric car that spawned the current wave of electric vehicle design.

What other sporting activity involves so much science and technology and has contributed so much to the wider world? It's like doing a patent search and coming across *the* patent that revolutionized some particular field – taken for granted now but only existing because of the formation of a single concept or technology. Both give a fresh perspective and make engrossing reading.

One of the most amazing sailplanes from the dim past was the Swiss *Elfe 2* – flown in 1949! (SOARING, Aug 1949) which would not look out of place on a competition grid today – the work of Pfenninger who also proposed a feasible sailplane of L/D of 100 in *Technical Soaring* papers in the 1990s. There is still much work left to do in improving sailplanes, and the experimental field is the ideal home for such progress.

Ross Nolan
hp-gliders group

oops!

In the previous issue of *free flight* the article by Myles Hynde, "Microlift Sailplanes", was incorrectly attributed to *Gliding NZ* magazine. It actually appeared in *Gliding International*. The error was a real mix-up since the other magazine published in New Zealand is *Soaring NZ!* The archive copy of *free flight* has been corrected.

some Centre Peak cairn reconstruction needed

A small group of four pilots from the Cowley Summer Camp and two local climbers made the all-day ascent to the summit of 8364 foot Centre Peak to see the cairn that is dedicated to mountain wave soaring.

The route was up the steeper but more accessible east face of the Livingstone Range. The first camp-organized climb was made in 1990. How and why this cairn was constructed by Steve Weinhold is given in his story, *The Quest*, found at <*http://www.soaring.ab.ca/quest.html*>. It was also printed in the 1989/5 issue of *free flight*.

The climbers are watching a high glider out of the shot. When the photos of the climb arrived, it was clear that the forces of nature had, in the intervening twenty years, collasped the cairn to about two-thirds of its original height, as seen when comparing it to the lower photo – the stone holding the soaring plaque is now resting upright on the ground. Plans are afoot to restore the cairn.

The climbers were awed by the violent swirling of the clouds right in the lee of the ridge. This was a very visible demonstration of the forces pilots could have to deal with flying close to any peak.

Tony Burton

Carol Mulder earns WSPA Ann Morrow Lindbergh Trophy

Congratulations go to Carol Mulder of the Central Alberta Gliding Club. The following [edited] e-mail was sent to SAC from the Women Soaring Pilots Association in the USA.

The 2009 *Ann Morrow Lindbergh Trophy* is being awarded to Carol Mulder of Alberta, Canada. After careful review of her paperwork we are pleased to make this announcement. This trophy is awarded for completed badge flights, handicapped by glider and by pilot experience based on the level of FAI badge attained prior to application.

We apologize for the delay, as Carol's application did not come through at first due to the closing down of the former WSPA web site. It was discovered at the Women Soaring Seminar in Reno, where Carol (and Valerie Deschamps, also of CAGC) participated.

We send our best wishes to Carol and are very pleased that during the Annual Meeting at the 2010 Seminar and due to her efforts, Canada was joined to our US Regions. Henceforth the regions will be called the North American Regions: Western, Central and Eastern. Our fourth region is the European Region.

All Canadian pilots can join and membership is only $15 annually. The WSPA has several scholarships available also. For details, go to <*www.womensoaring.org*>.

things you didn't know about corrosion

The possibility of corrosion exists when you have ambient air being taken below the dew point – thus condensing any moisture held in it. This normally occurs only when the overnight temperature drops sufficiently.

The local humidity where you happen to have the glider parked (or in its trailer) will determine how much water appears each time – this assumes that essentially only the 'trapped air' inside the wing or spar is involved – there have to be 'breather' holes and drain holes, so this assumption is not strictly true; there is an exchange of air taking place. Also the structure will hold a fair bit of heat and 'cold', so that it will be at a different temperature than the surrounding air for some time – hotter at the start of the night and colder in the morning until warming up. You can clearly see the spar outlined in dew on the wings, the thermal lag effect of the mass of the spar. For an operating sailplane you artificially re-produce the diurnal heating cycle virtually every time you do a climb-glide cycle and the varying air pressure means you take in and expel air as well and provide a fresh supply of moisture.

My point is that corrosion in metal aircraft is 99% of the time due to non-waterballast carriage (only gliders and firebombers carry water on purpose). pH testing ballast water and neutralizing it would be a good start to reduce any potential corrosion problem.

With glass gliders you are warned not to use silicone polishes because it makes any subsequent repairing so much more difficult with respect to bond integrity – the microcracks that develop in some gel coats allow the silicon to migrate down to the glass and then wick along the fibres. Water does the same thing – there is an AD applying to Libelles that arose from water travelling down the spar rovings by capillary action and corroding the steel root fittings under the glass covering, so not just metal airframes are susceptible to corrosion.

Wherever steel and aluminium contact, or any two metals, you should suspect corrosion; the aileron motion isolator in the HP-18 side stick is an example – a poor design to this set-up, but we had to find ways to shoehorn everything in while working to the usual deadlines, etc. – some sort of rubber bellows was intended to enclose the slider.

The use of bolts as pivots was another feature of Dick Schreder's work and the non-use of ball bearings in general. Being unable to

relubricate buried ball bearings is not so good and they are also susceptible to corrosion. Having had to replace quite a few collapsed or grit-destroyed open ball races in German gliders, I think perhaps that it was not so bad an idea. The 'attraction' of dust to oily or greasy areas is probably as bad as leaving them alone with respect to wear – like the question of oiling or not of a bicycle chain.

Corrosion probably makes up half of regular airline airframe maintenance – the pressurization cycles and the exhaled carbon dioxide (carbonic acid) together with the spillage from galleys and toilets, etc. add more problems along with accelerated electrolysis from stray currents and even lightning.

By the way, do NOT use 'lead' pencils to mark anything on metal structures because it can, and has, resulted in corrosion eating right through a skin from the battery effect (graphite electrode and metal anode).

Ross Nolan
hp-gliders group

another 40th anniversary event

29 August 2010 was a special day. Yvonne Foster, the first female pilot ever to solo at the Toronto Soaring Club, was preparing to come to one of our famous pot-luck dinners and something twigged in her memories.

Yvonne and her late husband Alex are lifetime members of TSC and have seen the club through its various forms over the years. Alex was president for fifteen of those years and the whole family was instrumental in keeping things running smoothly. Yvonne continues to stay involved with club activities as does her son, Steve.

In 2009, TSC acquired the ASK-13 C-FYEQ on the dissolution of Air Sailing. Yvonne realized that she had an entry in her gliding logbook recording that she had soloed in YEQ on 29 August 1970, 40 years earlier! With friends and family watching from the ground and the air, on the 40th anniversary of that day, she flew YEQ once again. On landing Yvonne remarked, "That was lovely, I'll be high for a week!" Derek Mackie was her lucky passenger on this momentous occasion, saying, "I'm so happy that I was able to be part of your day." Yvonne's son, Steve, in typical understatement said, "A great day, eh!" A great day indeed!

Derek Mackie

SAC Youth Bursary awardees for 2010

The following SAC Youth members have each been funded $499 from the program to support their flying activities:

Simon-Pierre Dupont, 24	AVV Champlain
Ryan MacNeil, 16	Gatineau GC
Nicolas Ingold, 16	Gatineau GC
Emma Walker, 16	Gatineau GC
Neil Wilson, 18	SOSA
Rhys Juergensen, 15	SOSA
George Holt, 16	SOSA
Andrew Lampert, 17	York Soaring
Robin Claus, 23	Prince Albert GC
Rae Given, 15	Prince Albert GC
Wyatt Given, 13	Prince Albert GC
Chris Hildebrandt, 18	Canadian Rockies
Chantal Fortier, 17	Canadian Rockies
Darcy Foo, 15	Canadian Rockies
Patrick Crawford, 18	Canadian Rockies
Sean Kitts, 24	Vancouver SA
Colby Timm, 17	Vancouver SA
Jessica Holman, 20	Vancouver SA

how to go fast

It was a little while back that I realized that speed in soaring contests mostly has to do with the pilot's ability to estimate probabilities. How fast or slow you fly in cruise matters little within a broad range. How well you thermal matters only a bit. The thing that takes you to the next level is being able to answer a simple question over and over again: "if I fly straight ahead on course right now instead of circling, will I find a better thermal before I get desperate?" The great pilots know when to press on and when to stop and climb.

from *rec.aviation.soaring*

Willem's account

from page 15

be unaware of the forecast and would send us into the area where rain, overcast, or thunderstorms were expected.

Unfortunately none of the contest days had a blue sky and good looking cu with strong thermals. Many days had high level overcasts, none of the days had consistently good thermals. The weather that I needed for a fair chance against the big wings never happened. The Open class tasks were always very ambitious with the longest distances to fly by far. On many days only a few gliders would complete the task.

Another distinct advantage of the Open class gliders was an engine. They could go on until running out of height, start the engine and be home for dinner. I did not have this luxury. On many days during midafternoon it would become obvious that an outlanding was a certainty. What to do? Land out 100 km from Szeged at around 6 pm and return home by 10 pm or later – or abandon the task and try to fly home.

I always chose the latter option, which was based on two considerations. First, safety. You never know what to encounter in an off-field landing and often there was a threat of a thunderstorm. Second, staying in good physical condition for the next day – returning to Szeged by 10 pm, putting the glider away, driving back to the hotel and having a dinner would result in bedtime around midnight. This is not a good preparation for getting up early the next day, cleaning the glider and flying another huge task.

Unfortunately the weather did not improve and I was confronted many times with the unpleasant decision to abandon the task much sooner than if I had an engine. On our last contest day I was 1500 feet below final glide while still in Serbian airspace. Fortunately I could just make it back across the border into Hungary, otherwise I would still be writing this at the Serbian border crossing.

Our Canadian team collectively had a good time. Despite the less than optimal weather we all enjoyed the contest, the Baroque downtown area of Szeged and the hearty and copious Hungarian food, particularly the local catfish soup.

Daily, we were inspired by Jerzy's excellent flying. Jörg's good team and information management, together with the good care that we received from our crews, allowed us to fully concentrate on the flying. Thank you Jörg, thank you Diane and Pim! ❖

Dave's story

from page 15

This was a successful campaign – tickets were sold across Canada at many SAC/ASC/CAS events through the season. Many thanks to John for securing the passes and being the primary salesman in western Canada, and to *WestJet* for providing the passes.

The flying weather was some of the most challenging that I have flown. Once again I had to relearn the lesson that one cannot fly as an individual in these contests and that you must try to fly with the pack.

In Canada there are not enough competitors in contests to really gaggle fly as is done in Europe. Even in the US Nationals where there are more pilots, it is still difficult to gaggle fly since gaggles are usually slower than the skilled individual. In the Worlds this is not the case and, particularly in the weak conditions in which we flew most of the time, the gaggle was the place to be.

My best placing came on the day everyone landed in Serbia where I was able to catch up to the gaggle, climb to the top and then stay there. Without the mutual assistance of the other thirty gliders, we all would have landed much sooner. Unfortunately, it seems that the only way to practise this type of flying is to fly more contests in Europe and this is not financially possible.

The contest was not as expensive to attend as in 2008. First, the Euro exchange rate dropped from 1.70 in 2008 to 1.35 in 2010 resulting in savings of about $3000. Second, the cost of living in Hungary is substantially cheaper than in Germany. A dinner at the airport cost $10 per person and at restaurants was about $15 compared to $25-$30 in Germany. As a result, my total expenses for the contest came in at $10,100, down from just over $15,000 in 2008.

My stated goals before I left for Szeged were to fly the contest with no penalties and to do better than I had done in 2008. The first goal was met, but due to the crowded airspace in Hungary, it was only accomplished by generating a new airspace file each day and uploading it to the computer and PDA. This ensured that all active airspace for that day, from the 75 zones in the flying area, was the only airspace displayed.

It took a few days to understand the airspace system and for the organizers to use a consistent naming convention. For example, on one of the practice days, we were told the *Ferihegy* airspace was closed, but there was no Ferihegy in the database. After the pilot meeting, I asked one of the organizers who told me this was Budapest. My response was, how are we supposed to know that? From that point onwards they used the same names as in the file in the daily briefing package.

My second goal of a better performance than in 2008 was met in terms of my overall placing in my class (34 of 49), but I don't personally feel that I flew as well as I did in 2008. As I said previously, this contest was a challenge and it really showed that you need to practise in the low and weak conditions too!

I would like to express my thanks to everyone who helped the team through our various fund raisers and special thanks to Martin and Christina who looked after our dog during our long absence, and lastly to my spouse and crew Virginia who drove more miles in Hungary and Serbia, and dragged me out of more fields than any crew should have to. ❖

FAI records

Roger Hildesheim

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The following records have been approved:

Pilot	**Adam Zieba**
Date/Place	9 May 2010, Mifflin, PA, USA
Record type	Free O&R Distance, Open, 15m, Club (all citizen)
FAI Category	3.1.4b
Sailplane	SZD 55-1 C-FPOM
Task	Tussey, Tazewell, return
Distance	1016.4 km Open & 15m, 956.4 km Club
Previous records	750.2 km Open, 633.2 km Club Tracie Wark, 2003

Pilot	**Adam Zieba**
Date/Place	9 May 2010, Mifflin, PA, USA
Record type	Free 3TP Distance, Open, 15m, Club (all citizen)
FAI Category	3.1.4c
Sailplane	SZD 55-1 C-FPOM
Task	S-Tussey, Tazewell, Williamsport, Quarry, F-Mifflin
Distance	1474.1 km Open & 15m, 1387.1 km Club
Previous records	1394.0 km, Open, Brian Milner, 1993 unclaimed in 15m 947.6 km, Club, Jerzy Szemplinski, 2006

Pilot	**Adam Zieba**
Date/Place	9 May 2010, Mifflin, PA, USA
Record type	3TP Distance, Open, 15m, Club (all citizen)
FAI Category	3.1.4f
Sailplane	SZD 55-1 C-FPOM
Task	S-Tussey, Tazewell, Williamsport, Quarry, F-Mifflin
Distance	1474.1 km Open & 15m, 1387.1 km Club
Previous records	760.0 km Open & 15m, 715.2 km Club Jerzy Szemplinski, 2006

Pilot	**Adam Zieba**
Date/Place	9 May 2010, Mifflin, PA, USA
Record type	Distance to Goal, Club (citizen)
FAI Category	3.1.4e
Sailplane	SZD 55-1 C-FPOM
Task	Tazewell to Williamsport
Distance	557.7 km
Previous record	unclaimed

Pilot	**Adam Zieba**
Date/Place	9 May 2010, Mifflin, PA, USA
Record type	500 km Speed to Goal: Open, 15m, Club (all citizen)
FAI Category	SAC
Sailplane	SZD 55-1 C-FPOM
Task	Tazewell to Williamsport
Speed	151.7 km/h Open & 15m, 142.5 km/h Club
Previous Records	138.4 km/h Open, Walter Weir, 1993 unclaimed in 15m & Club

Pilot	**Tim Wood**
Date/Place	30 June 2010, Elko, BC
Record type	Free O&R Distance: Open & Club (territorial)
FAI Category	3.1.4b
Sailplane	DG-400 (17m) C-GETW
Task	US border start, Bush Arm, return
Distance	690.2 km Open, 628.1 km Club
Previous records	596.7 km, Open, Ian Spence, 2009 608.3 km, Club, Bruce Friesen, 2009

Pilot	**Tim Wood**
Date/Place	30 June 2010, Elko, BC
Record type	O&R Distance, Open & Club (territorial)
FAI Category	3.1.4g
Sailplane	DG-400 (17m) C-GETW
Task	US border start, Bush Arm, return
Distance	690.2 km Open, 628.1 km Club
Previous records	652.3 km, Open, Tony Burton, 1993 608.3 km, Club, Bruce Friesen, 2009

Pilot	**Nick Bonnière**
Date/Place	6 July 2010, Invermere, BC
Record type	3TP Distance, Open & Club (territorial)
FAI Category	3.1.4f
Sailplane	LAK-17A-18 C-GKST
Task	Invermere, Bush Arm, Bull R, Moberly, return
Distance	818.1 km Open, 719.9 km Club
Previous records	642.7 km Open, 565.6 km Club, Tim Wood, 2007

Pilot	**Nick Bonnière**
Date/Place	6 July 2010, Invermere, BC
Record type	200 km Speed to Goal, Open & Club (territorial)
FAI Category	SAC
Sailplane	LAK-17A-18 C-GKST
Task	Bush Arm to Bull River
Speed	131.2 km/h Open, 115.4 km/h Club
Previous records	128.2 km/h, Open, Tim Wood, 2008 113.2 km/h, Club, Tony Burton, 2002

Pilot	**Tim Wood**
Date/Place	8 July 2010, Elko, BC
Record type	Distance to Goal, Club (territorial)
FAI Category	3.1.4e
Sailplane	DG-400 (17m) C-GETW
Task	US border start to GPS goal
Distance	412.8 km
Previous records	307.0 km, Tony Burton, 2010

Pilot	**Tim Wood**
Date/Place	8 July 2010, Elko, BC
Record type	400 km Speed to Goal, Open (territorial)
FAI Category	SAC
Sailplane	DG-400 (17m) C-GETW
Task	US border start to GPS goal
Speed	92.7 km/h
Previous records	81.5 km/h, Tony Burton, 1990

Pilot	**Tim Wood**
Date/Place	15 July 2010, Invermere, BC
Record type	300 km Out and Return Speed, Open (territorial)
FAI Category	SAC
Sailplane	DG-400 (17m) C-GETW
Task	Fairmont TP, Blaeberry bridge, return
Speed	124.8 km/h
Previous records	115.2 km/h, Hal Werneburg, 1983

Pilot	**Tim Wood**
Date/Place	17 July 2010, Invermere, BC
Record type	500 km Triangle Speed, Club (territorial)
FAI Category	3.1.4j
Sailplane	DG-400 (17m) C-GETW
Task	Swansea, Spillimacheen, Crawford, 1000TP, return
Speed	78.6 km/h
Previous records	unclaimed

FAI badges

Walter Weir

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

These Badges and Badge legs were recorded in the Canadian Soaring Register during the period 25 June to 12 September 2010.

750 km Diploma

8	Nick Bonnière	Gatineau	818.2	LAK-17A	Invermere, BC

GOLD BADGE

329	Zach Marton	York

SILVER BADGE

1044	Daniel Houde	Montreal	1047	Ken Armstrong	Vancouver
1045	Yannick Burgevin	Champlain	1048	Allan White	Montreal
1046	Réjean Giasson	Quebec			

***DIAMOND DISTANCE** (500 km goal flight)*

	Douglas Smith	Vancouver	506.1	ASW-19	Invermere, BC
	Herman ten Cate	SOSA	502.8	Std. Jantar	Rockton, ON

DIAMOND GOAL** (300 km goal flight) with **GOLD DISTANCE

	Zach Marton	York	304.6	LS-4a	Tocumwal, Aust.
	Derek Mackie	Toronto	311.5	LAK-17A	Conn, ON

***GOLD DISTANCE** (300 km flight)*

Emmanuel Cadieux	Montreal	309.6	ASW-20BL	Hawkesbury, ON
Pierre Gavillet	Montreal	308.8	ASW-24	Hawkesbury, ON

***GOLD ALTITUDE** (3000 m height gain)*

Zach Marton	York	3420	LS4a	Tocumwal, Aust.
Ken Armstrong	Vancouver	3370	Dimona	Hope, BC

***SILVER DISTANCE** (50 km flight)*

Daniel Houde	Montreal	58.9	DG-303	Hawkesbury, ON
Yannick Burgevin	Champlain	58.7	Std. Jantar	Hawkesbury, ON
Réjean Giasson	Quebec	58.3	Ventus CM	St. Raymond, QC
Ken Armstrong	Vancouver	72.3	Dimona	Hope, BC
Allan White	Montreal	59.6	PIK-20B	Hawkesbury, ON

***SILVER ALTITUDE** (1000 m gain)*

Phillipe Javaux	Quebec	1090	Grob 102	St. Raymond, QC
Yannick Burgevin	Champlain	1215	Std. Jantar	Hawkesbury, ON

***SILVER/GOLD DURATION** (5 hour flight)*

Yannick Burgevin	Champlain	6:13	LS-4	St. Dominique, QC
James Neff	Cu Nim	5:05	L-33	Blk. Diamond, AB
Allan White	Montreal	5:14	PIK-20B	Hawkesbury, ON
Patrick Kessler	Quebec	5:25	LS-4	St. Raymond, QC

***C BADGE** (1 hour flight)*

2930	Phillipe Javaux	Quebec	3:21	Grob 102	St. Raymond, QC
2931	Yannik Burgevin	Champlain	See Silver dist.		Hawkesbury, ON
2932	James Neff	Cu Nim	5:05	L-33	Blk. Diamond, AB

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a note from your Records Chairman

This has been a very busy year for Canadian soaring records. Some amazing flights completed from some amazing locations. Well done!

However, part of the "due diligence" involved with certifying a record requires complete claims paperwork and validation of flight files and claims by OOs. For the most part, the record claims that have been submitted in the past are complete and detailed. A hearty *thank you* goes to those pilots and OOs who have taken the time to make this happen. However, this year was unusual in the number of claims submitted with incomplete/erroneous claims paperwork and/or incomplete flight data file validation. In almost every case where this occurred, it was obvious that the OO had not tested for data file integrity, or even verified what the pilot wanted to claim. This was evident by the number of Free Distance record claims (where no pre-flight declaration is required and the claimed distance can be optimized after the flight) which did not have a distance claimed on the submitted paperwork.

I would just like to politely reiterate that it is up to the individual pilot (and OO) to present exactly what they are claiming – it's not my job to do the optimization. So please, if you are claiming a record, take the time with your OO to plan/validate the flight (and flight data file), verify the completeness of your claims paperwork, and accurately define exactly what you are claiming. This will avoid processing delays.

If any of these "problem claim" flights had been for a world record, I would have had to throw them out without second consideration. In the words of Jerry Maguire, "Help me, help you". *Cheers, Roger*

logbook memories

from page 9

The last day A Dutch Skylark III and I in the Ka6 were diving toward the start line. We had to cross the line at under 1000m and all had been asked to wave wings to indicate a clear intent to start. The Skylark was a few hundred feet ahead and slightly below, moving at near Vne, when he moved the ailerons a large amount. The right outer wing panel broke off and a spin developed immediately. This sight from close behind was so surprising that I slowed and turned to keep the action in view. The pilot jettisoned the canopy, removed his straps and tried to bail out over the high side twice. Each time the glider nose rose and smacked him in the ribs. The third time he dove to the inside of the turn and cleared the glider. His chute opened at about 600 feet. The glider, sponsored and painted with BOLS logos, spun rapidly, clearly showing its advertising to everyone on the airport until the glider crashed into splinters next to the runway. I went back, climbed and restarted the task. Quite incredible experiences along with the good soaring.

England, South Cerney, June '65, WGC
Flying a Skylark IV.

At the end of a day, a gentleman in jodhpurs, riding boots and tweed jacket arrived from refereeing a chucker of polo. He invited the Canadian team home for Tea. I rode with this transplanted Canadian in his Morris Minor with the rest of the team following. Outside the nearby town of Cirencester, our host turned uphill through a pine forest. At the top we stopped in front of a very old manor house. One wing of the manor was full of original Louis IV furniture which included a beautiful inlaid spinnet that a visitor was playing. We were told the original manor had been used as a honeymoon site by Henry VIII and Anne Boleyn. This operating 3000 acre estate had its own village of staff nearby. The estate was held together financially by support from the HD & WO Wills Tobacco Co. The wife was a Wills. Their holdings included a profitable hotel in Scotland alongside a famous trout stream.

At tea, we heard that our host originally came from a farm near Iroquois, Ontario, which had been flooded out by construction of the Saint Lawrence Seaway. Our host had been in the RCAF during WWII, had met and become close friends with the first husband. He was killed and our Canadian gentleman ultimately married the widow.

Plattsburg, New York, June '67, Canadian Nationals

I crossed the border and landed my Austria on the Strategic Air Command Base at Plattsville – touching down on a taxiway, then rolled under the wing and engines of a B-52 as I turned down the ramp, and stopped between facing rows of B-52s and KC-135 tankers. I only had time to get out of the cockpit before armed guards rushed up in a pickup truck. I was transported in the back on knees and knuckles to the guardhouse where I was stood facing the wall, hands high, feet well back, while being interrogated by #2 to the Base Commander.

He was formal but interested and sympathetic because the previous week, on a training flight to England, he had had his first glider flight. Separating the hangar line from the ramp was a suspended yellow rope. "See that", he said, "there are 6000 people on this base and 4000 of them cannot cross that line – and you landed there." This meant that selected Air Force personnel had to derig and trailer the glider.

At the Officers' Mess, he explained that they treated me strictly by the book because we might be a plant to test their security. An Inspecting General was expected the next day. We were escorted by the military all the way to the Canada/USA border to make sure we crossed.

… Has some of the adventure been lost? Today, most soaring flights end back where they began. Turbos and launch-capable motors are becoming common – all to guarantee a soaring pilot can be home in time for tea.

So there you are! Why don't you share *your* logbook-triggered memories? ❖

magazines

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

SAILPLANE & GLIDING — the bimonthly journal of the BGA. Overseas airmail £39/yr. <*www.sailplaneandgliding.co.uk/subscribe*>.

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 AUSTRALIA — monthly joint journal of the Gliding Federation of Australia and the Hang Gliding Federation of Australia. <*www.soaring.com.au*>.

SOARING NZ — Editor, Jill McCaw. Personal cheque or credit cards accepted, NZ$122. McCaw Media Ltd., 430 Halswell Rd, Christchurch, NZ <*j.mccaw@xtra.co.nz*>.

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www.gatineauglidingclub.ca

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NW of Tottenham, ON
www.greatlakesgliding.com

LONDON SOARING CLUB
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RIDEAU VALLEY SOARING
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Alberta Zone

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www.silverstarsoaring.org/

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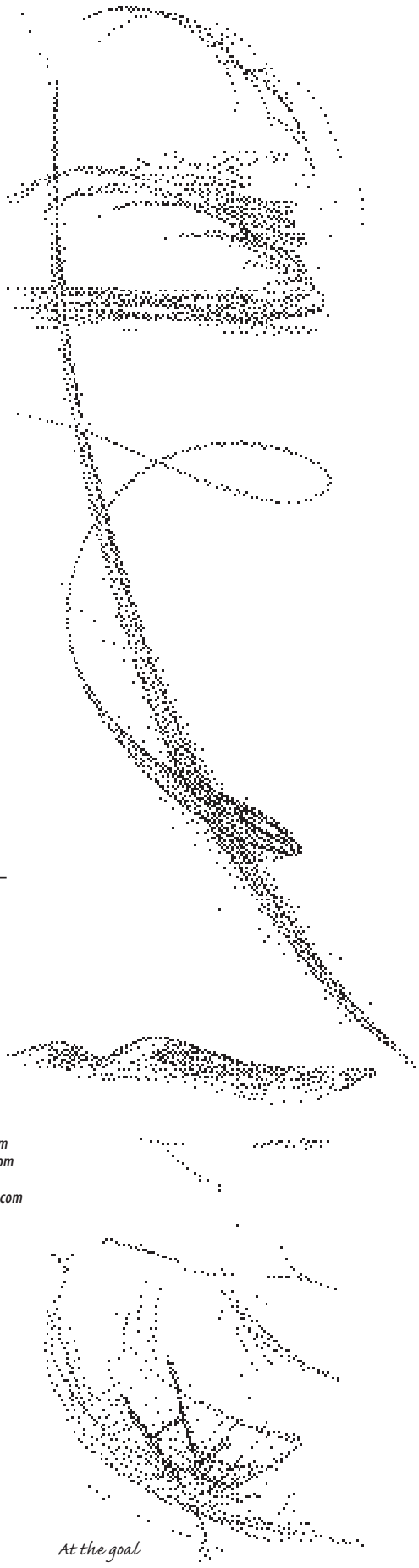
hope.gliding@yahoo.com



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