4/07
Aug/Sep

free flight • vol libre

Priorities

Sylvain Bourque VP et directeur de l'Est

Nous sommes présentement à mi saison et je voudrais profiter de ces lignes pour vous donner des nouvelles de notre conseil d'administration. Nous avons deux nouveaux directeurs sur le conseil de l'ACVV 2007: Eric Gillespie pour la région de l'Ontario et David Collard pour la région du Pacifique. Je profite de l'occasion pour vous les présenter, ainsi que les autres membres du conseil:

David Collard, nouveau directeur de la zone du Pacifique, a été initié au planeur dans les années 50 à Gatineau. Il est entré dans la GRC en 1957 et a joint un peu plus tard la division aérienne, et ce pour une durée de 17 ans. Il est devenu un membre actif du club de Régina comme pilote de planeur et remorqueur. Il possède aussi une licence de pilot professionnel (CPL) et son insigne OR avec deux Diamants. Il a eu la chance de faire parti de l'équipe au sol d'Ulli Werneburg lors des championnats du monde à Paderborn en Allemagne.

John Mulder, directeur de la zone d'Alberta, a débuté en planeur avec les cadets en 1983. Il est instructeur de planeur, pilote de ligne, TEA et inspecteur en construction amateur. Il a occupé un grand nombre de positions importantes auprès de lignes aériennes en Alberta en tant que chef pilote ou chef mécanicien. Il est présentement commandant de bord pour WestJet. John partage un Jantar Standard avec son épouse Carol, un Duster avec quatre autres membres, et un avion remorqueur Citabria.

John Toles, président et directeur de la zone des Prairies, a commencé à voler dans les années 60 avec quelques clubs de planeur de Moose Jaw et de Regina. Il pilote les planeurs du club de Saskatoon où il est instructeur et pilote remorqueur. Il est très impliqué localement dans le vol à voile, provincialement et nationalement. Semi retraité en tant qu'orienteur, il est instructeur à temps partiel du programme de formation de pilote professionnel au SIAST (Saskatoon Institute of Applied Science and Technology).

Eric Gillespie, nouveau directeur de la zone Ontario, a débuté à planer en 1998. Il a piloté et possédé une grande variété de planeurs. Il est une membre et instructeur actif à SOSA. Il a obtenu son insigne de diamant dans ses 3 premières années de pilote. Lorsqu'Eric ne vole pas, il pratique le droit.

Sylvain Bourque, VP et directeur de la zone Est, pilote de planeur depuis 1994 est un membre très impliqué de Champlain dans la formation et la comptabilité du club. Il est aussi instructeur de Classe 1 ainsi que pilote professionnel. Depuis 1995, il organise la formation théorique hivernale en français pour les différents clubs de la région de Montréal. Il est examinateur radio aviation ainsi que personne autorisée pour les licences de planeur. Sylvain est cameraman instructeur/chef technicien pour Radio-Canada à Montréal.

Je suis donc fier de faire parti de ce conseil qui a des compétences multiples ainsi qu'une grande implication dans la communauté canadienne du vol à voile. Nous avons plusieurs comités qui travaillent fort pour nous. Voici les objectifs prioritaires actuels de nos comités pour 2007:

Ralentir de l'expansion des zones contrôlées des aéroports majeurs et la possibilité d'utilisation de transpondeur de faible consommation pour les planeurs dans ces zones terminales; révision des documents du SMS afin de répondre aux commentaires pertinents provenant de différents clubs; amélioration de la sécurité en planeur au Canada et par le fait même, diminution des réclamations d'assurance et des primes d'assurance; amélioration des communications et de la compréhension du plan d'assurance offert par l'ACVV; modernisation du site Internet de l'ACVV-SAC <*www.sac.ca*>.

Si nous voulons garder la communication francophone active à l'intérieur de l'ACVV, il faut continuer de publier des articles en français dans le *free flight* et sur le Roundtable. Mettez-vous à vos crayons et envoyez vos articles et vos photos à Tony Burton.

Now at mid-season, let me take this opportunity to talk to you about our board of directors. Let's welcome Eric Gillespie who is the new director for the Ontario zone, and David Collard the new director for the Pacific zone. Let's take this opportunity to learn about them and the other members of our board:

David Collard, the new Pacific Zone director, was first exposed to gliding in the 50s at the Gatineau Gliding Club. He joined the RCMP in 1957, and soon after its Air Division with whom he flew for 17 years. While in Regina, Dave became active with the Regina Gliding and Soaring Club as a glider and towpilot. He also has his CPL. He has earned a Gold Badge with 2 Diamonds.

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

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Promoting the sport

… WITH PROMOTION IN MIND, I recently had the chance to put 2T in a static display at the Half Moon Bay 'Dream Machines' air show at a San Francisco Bay area airport not too far from where I live.

From a demographics perspective, most interest was from power pilots looking to convert, and modeling folks thinking about trying the real thing. Some people had taken three or four rides in gliders and still hadn't taken the plunge (I worked hard on them in particular — talk about low hanging fruit!). The biggest crowd gathered while we put 2T back in the box. An amazing amount of curiosity — getting excitable young boys to help out by passing dolly straps through the fuselage, etc. was a lot of fun. We've got to hook the toddlers …

At a local contest I saw a very good 'public awareness' DVD the club had put together focusing on training, and on kids in particular — with a big focus on Harold Gallagher teaching a 14 year old to fly, with clips of his first solo flights. This was very, very cool to watch …

As I was watching it, it occurred to me that in our attempts to make our sport look as dramatic as possible to maximize the 'coolness' factor (New Zealand Grand Prix, dramatic mountain flying, high skill level rock polishing, racing around in expensive cool-looking gliders), we have set the perception of "derring-do" that may actually work against us — most of the folks I talked to at the Dream Machines aviation show needed help daring to do something they'd dreamed about for years — these folks (especially spouses or parents) need to know that the risk in flying is well-managed and the training is safe enough that they wouldn't have to worry about their life partner or offspring (centre of every parent's entire existence) doing something that will leave them bereft in short order. One fellow had taken *four* rides already and hadn't taken a lesson yet. His wife was the one who needed persuading that it wasn't insanely dangerous, not him.

If you can imagine the leap of courage it takes to go cross-country the first time and then extrapolate back to believing you could actually *fly* an airplane to start with, I think the message we need to send starts to change a little. I was reminded of me when I was 16, flying model airplanes next to the local RAF gliding club, old creaky open cockpit tandem Slingsby gliders groaning up the winch; my thought was — "wow, they're brave — wonder if I'll ever be able to do that?" It was far outside the sense I had for my own capabilities. I had no clue what I was even capable of, and neither do many of the people who we are promoting soaring to.

We need to encourage people to fly — making it look too dramatic will keep many on the ground. *Seeing soaring not only as a thrilling experience but as an affirming growth experience for all* is something we haven't directly articulated and I feel we need to work on this. If our job is to help the sport grow we need to focus on the joy of flying and how we can get people in the air as cheaply and safely as possible. Low cost, benign aircraft for training, focus on the process of learning to fly, set in the context of higher performance as a destination.

Peter Deane
from the Pacific Soaring Council *WestWind*

The
SOARING ASSOCIATION of CANADA

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

free flight is the official journal of SAC.

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

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

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

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

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

Deadline for contributions:

5 **January, March**
May, July
September, November

L'ASSOCIATION CANADIENNE DE VOL À VOILE

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

vol libre est le journal officiel de l'ACVV.

Les articles publiés dans *vol libre* 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.

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

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

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Date limite:

5 **janvier, mars**
mai, juillet
septembre, novembre

Some items discussed

at SAC Board meeting – 23 Mar 07

- Financial results for 2006 were reviewed (there was a surplus arising from committee efficiencies). The budget, fee schedule and housekeeping motions concerning the financial status were reviewed.

- Ian Oldaker presented the *Association Safety Management Program Manual* for review by the board. Discussion concerning reward to clubs for participation in the program using stars as each step is completed. Discussion of insurance rebates to participating clubs was discussed but tabled for a time as the program matures.

  Eric Gillespie recommended that the document be reviewed by legal counsel to ensure that the board and/or SAC more generally are not inadvertently exposing themselves to an undue level of potential liability. He also offered to review the other SMS documents. Title changes were reviewed: John Toles now Safety Program Director and Dan Cook now Deputy Safety Program Director if the documents are accepted after review by counsel.

- Insurance claims record reviewed. Process for insurance quotes was presented by Keith Hay: several companies were willing to quote on our group. There was a discussion concerning how to assess premiums for new members who come to the organization with an accident history. It was felt that they should be assessed in the same manner as current members with a similar accident record. Keith is working on an insurance FAQ.

- Committee report regarding COPA recommendations accepted.

- Promotion of soaring – budget, planning. Options were discussed. It was decided that SAC will produce a sample package of promotional materials for clubs to use. Budget of $3000 was allocated. Any additional funds would need to be approved by the board.

- Policy and Procedures Manual and Bylaws. The bylaws are a greater priority now and will be the focus. They will be prepared for review at the November board meeting.

- Idea to combine the SAC AGM with the CAS spring seminar. Eric and Sylvain will coordinate this idea with CAS for 2008.

- Website committee was reviewed. SAC website needs to include a FAQ.

- The SAC lifetime membership cost needs to be evaluated concerning the minimum donation level.

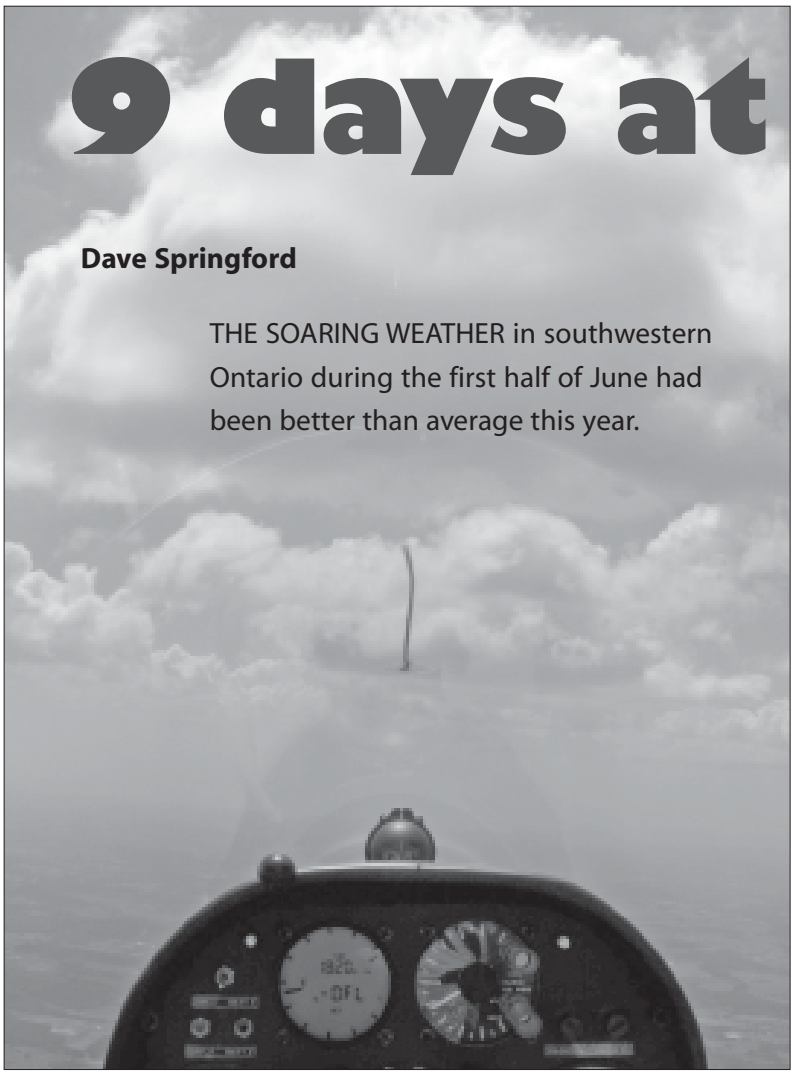
- The $10,000 funding to the FT&SC for safety program was discussed. It was again reinforced that this is not a rebate but funding towards safety. This practice mirrors what happens at several levels of aviation insurance and is not unique to SAC. Keith will present continued information for the website.

- Status of the Roundtable and the fact that it is an unmoderated discussion. What would it take to make it moderated, and who would be the moderator? Additional info concerning the website under committee discussion. ❖

9 days at SOSA

Dave Springford

THE SOARING WEATHER in southwestern Ontario during the first half of June had been better than average this year.



Between Saturday 9 June and Sunday 17 June, I flew 24 hours and about 1500 kilometres. Many days, Dr. Jack indicated that we should see 5–6 knots and the tephi showed a 6–7000 feet asl cloudbase. Of course, not every day lived up to its forecast.

Saturday, 9 June The forecast was for blue conditions with 4-5 knots to 5500 feet. I launched at 1245 and soon found a 3 knot climb to about 4700 feet (heights all asl). I headed south from SOSA towards Hagersville. A few other gliders were in the air ahead of me, but they were turning back to the field after flying through smooth air for about 10 kilometres. I pushed a little further and found another climb that took me back to about 4000. I moved ahead a little more conservatively as the lift is weaker and hard to find in the blue. After another weak climb east of Brantford I decide to turn at Ohsweken instead of continuing another 20 kilometres to Hagersville. From there I headed west to Tillsonburg. The lift is not strong, but I find what I need every 10 kilometres and manage to keep moving.

On this leg I discovered a wind shear at 4000 feet that moved the thermal about one diameter downwind. Sometimes I could pick up the displaced thermal and continue the climb to about 4700, other times I would just move on. From Tillsonburg, I headed for the quarries at Ingersoll where I found myself about 2000 and, as expected, a reasonable thermal took me back above 4000 and on to the London Gliding Club at Embro where I climbed with their Astir. The radio was now coming to life with chatter around York and Great Lakes, so I headed north to Belwood Lake, passing the Guelph club at Elmira where I climbed with the Elfe S4 from Toronto Soaring. At Elora, I found myself rather low after flying through some heavy sink, but eventually found the best climb of the day over the south edge of town and took that up to 5200 feet. After turning Belwood, I headed for home and topped up the final glide over Guelph. Distance for the day was 247 kilometres at a speed of 65 km/h, with most of the day spent below 3000 agl and with an average lift of 2 knots. It was a challenging day and certainly weaker and lower than forecast.

Sunday 10 June The forecast called for 5–6 knots to 6500 feet. I was the first to launch at 1230, and immediately climbed in 3 knots to 5500, so I headed south for Hagersville with the intent of flying a 500 km FAI triangle. There were a few wisps enroute, but the lift was not as strong or as high as the first climb over SOSA. There were some good-looking clouds over Hagersville, so I pushed on and connected with them. From there I turned southwest towards Thamesville, following more wisps along the shore of Lake Erie. Progress was consistent, but not as fast as I had hoped.

As I approached Thamesville, I could hear reports from some of the guys who had launched from SOSA and headed north; it sounded like conditions were great to the north. Since I was flying close to Lake Huron on this leg, I had to steer inland to avoid the clearly visible lake effect. For the entire leg north, it was blue to the left and cu to the right.

As I approached Palmerston, I could see a large area of lake air from Georgian Bay directly enroute to Flesherton, so again I headed to the right and steered off course towards Luther Lake and some good looking clouds. The clouds were not working as well as I had hoped, and it was 1730, so I turned for home at 4300 feet. At York, I climbed with a Blanik until I had final glide for SOSA and then headed south along a cloud street.

Over Guelph with 1000 feet to spare, I saw another great cloud street about 10 kilometres to the west that looked like it went all the way to Lake Erie. Forgetting my earlier worries about how late it was I connected with the

street and followed it south climbing to about 5700. As I neared the end of the cloud street around 1830, I could see three cu over Hagersville about 10 kilometres to the southeast. Thinking that it would be nice to visit Hagersville twice in the day, I headed over to them only to find nothing. It was now 1838, I was 43 kilometres from home, 1200 feet below glideslope, and the cloud street was starting to die. Flying best L/D and trying all the clouds all I found was smooth air. I kept going hoping to find something, but the clouds had spread out and there was very little sun on the ground. Now it was too late in the day. I ended up landing 10 kilometres short of home after covering 554 kilometres at 91 km/h. If only I had turned home sooner!

Thermal average for the day was 3 knots, but I was able to fly many cloud streets and achieved an L/D on the day of 60.7! The thermals don't need to be strong to fly fast, there just has to be lots of them close together. The weather was certainly better than forecast.

Monday 11 June I had to go to the office for a meeting and arrived at SOSA around 1530 to meet a student. The sky was full of cu and I knew I had missed a good day. Jerzy Szemplinski flew 448 kilometres at 94 km/h. My student, Ned, and I launched in the Puchacz at 1615 and soon climbed above 5000. We headed west towards Ayr and climbed again to almost 8000. We continued west from Ayr, then turned south to Brantford, after that north to Kitchener and then east to Guelph followed by a final glide back to SOSA. We landed at 1845 after covering 126 kilometres — he was happy with his second cross-country dual (we landed out in the Puch on the first one earlier in the year).

Tuesday 12 June The forecast looked very good again; 5–6 knots to 7000 feet. I filled the LS-8 with water and towed it to the flightline around noon expecting another early start. The grid formed as a few more people towed their gliders out, but the sky did not look promising.

Greg Finlay arrives at the line with his DG-800M, so we motion him to the front of the grid with a smile and instructions to report back. Off tow Greg finds 4 knots, so we all launch shortly after 1 pm. I have trouble at first and am searching at 2100 feet and find 2.7 knots to 5700 feet under a newly forming cu. I wait a little while longer and head out on course at 6300 feet for Waterford. The cu are building, and a sea breeze looks to be forming along the shore of Lake Erie. My plan is to fly as far west along the sea breeze as possible. Around St. Thomas, I find myself down to 3500 feet. It takes me 17 minutes to find and centre a climb back up to 6700, and Jerzy and Greg catch up to me in this climb.

I continue west along the sea breeze, but I can see much lower cloudbase to the west. Jerzy turns at Melbourne and heads back east. I reach the lower clouds and continue about 10 kilometres under them and find weak lift and 1500 foot lower clouds. I think the lower base is a result of excess moisture as I am now at the narrowest part of the land mass between Lakes Erie and Huron. I turn east and continue to get lower. At 2900 feet west of London, I start dumping my water and spend 38 minutes trying to find a thermal and climb. I work several weak bubbles and eventually make my way to 4500 and move under a better looking cloud where I find 5.7 knot average to 8800. From here I continue east to Hamilton and then final glide back to SOSA. I cover 378 kilometres on the day at 72 km/h. It should have been a faster day, but the two low points really hurt the average speed.

Wednesday 13 June Back to the office for the day, the weather does not look promising, but Charles Petersen flies 530 kilometres from York. I head to SOSA after work to continue my aerobatic instructor training and work on rolls and hammerheads in the DG-505. If you can't soar, you might as well fly around upside-down.

Thursday 14 June The forecast is not great, and we discover a broken engine mount on one of the Pawnees. I spend the morning assisting the AME in removing the engine so we can get the mount in for repair. We also discover a bad magneto on the other Pawnee and the Citabria has only two hours left to inspection. With a lot of scrambling, we get the Pawnee over to maintenance to repair the mag, and the Citabria tows all evening for student training.

Friday 15 June Wake-up at 0700 to make sure the Citabria is wheels up at 0730 for its inspection, then off to work. Back to SOSA in the afternoon to meet a student. I take his daughter flying in the Puchacz for 1:30 and fly SOSA, Brantford, Guelph, Kitchener, SOSA. We cover about 90 kilometres with good lift and cloudbase around 6000 feet. Charles Petersen flies another nice flight of 426 kilometres from York.

Saturday 16 June It's a busy day at the flightline, so I tow. The clouds are really building and it is grey to the north. A few rig and head south under 6000 foot cu and good lift, but the sky is becoming overcast and rain threatens from the north. I fly a passenger in the DG-505 for an hour and we cover about 80 kilometres from Brantford to Kitchener and Ayr.

Sunday 17 June The forecast is good once more — 4–6 knots and 6000 feet. I rig and take my time since it doesn't look as good as it should. A few of the early starts re-light, so I throw in the towel and de-rig. Adam Zieba connects in the blue and works his way north where the cu are forming north of Belwood Lake. Late in the day the cu make it to SOSA and I fly an instructional flight in the 505 and we soar for an hour from 1700–1800. The 505 and Puchacz launch again and fly until just after 1900. Maybe I should have launched.

Besides the great weather in southwestern Ontario, the US Sports Class Nationals in Ohio is also having a great contest in this airmass, as are the folks up at Pendleton and Hawkesbury.

This is what soaring is all about! ❖

the 2007 Nats at MSC

Bob Katz, contest manager

CONTEST FLYING has seen a few changes in the recent years. The popularity of the Online Contest and our Decentralized Nationals has grown in popularity, seemingly while "wing-to-wing" competition flying (as coined by Ulli Werneburg) has been declining. The OLC has been a great boon for our sport, nurturing and encouraging cross-country flying and friendly competition. In satiating our desires to measure our skills against our colleagues, and on a schedule that leaves summer vacation free to score points with spouses, the Canadian National Championships may have been dinged in the process … or has it?

Discussions regarding this can of worms won't be debated here. What will be highlighted for your reading pleasure is one man's perspective of what turned out to be a great soaring event, pitting our top pilots one against the other. This year was the Montreal Soaring Council's turn at bat, as defined by Dave Springford's round robin protocol set up about five years ago. Everyone in the world, or at least this part of it, is familiar with MSC's long history in hosting fine National Championships, and tarnishing the old reputation wasn't on the menu in organizing this event.

Jörg Stieber's Sporting committee got the rules sorted out to ensure no issues would mar this go-round. This was a key point of what was being planned to be a safe and above all, fun, event. The MSC members rolled out the red carpet for its guests. As the anticipated event approached, the 30 to 40 competition pilots we were used to seeing in year's past didn't show up, but a dozen of *la crème de la crème* did. Only hours before the competition, Ed Hollestelle was faced with solving an untrivial problem: be the first person in Canada to certify a new LS-10. He managed to pull a rabbit out of his hat in his dealings with the representative of the Minister of Transport. Within no time, the papers were served and Ed even managed to get a short practice flight in.

Roger "Record Rubber-Stamper" Hildesheim was almost as lucky. Sadly he reported waiting for AOG parts to arrive. Grounded is not where a keen comp pilot wants to be. The parts sent weren't exactly what his chariot needed so solving the problem of installation took the practice session and even part of the competition. Luckily for Roger, he moonlights as The Big Engineering Cheese in a major aerospace firm. Acting as his own pit crew and wielding a micrometer, he eventually got his ship to the grid. Efforts which attest to his perseverance and sportsmanship-like approach.

After the second practice day, a wine and cheese party was hosted by MSC to permit everyone to rub elbows, and as it happens, inhale cheese.

The Day 1 task consisted of a 3:30 hour Turn Area Task (TAT) to Morrisburg – Cornwall – Chénéville and return. Dave Springford blazed around the course followed closely by Jerzy Szemplinski for first and second respectfully. Third place was a surprise however. Chris Gough, a junior from SOSA, lit the rocket on his Jantar and pulled off a superb performance. Seems like he might follow his dad, Andy. Everyone was very pleased with the weather on the first day. It was go time, and the rest of the week didn't look too shabby either.

The task committee consisted of Denis (CD) Trudel, Ed, Nick Bonnière, and the all-important weatherman, Bernie Palfreeman. For Day 2 they laid out a 2:30 hour TAT consisting of Wendover – Cornwall – Iroquois then home. Willem Langelaan, flying his 18m DG-800S, got into his stride and flew a great day ending up in first place for the day and now first overall over Dave by three small points. As it happens, this was a sign of things to come. In fact, Willem was the only one to make it around the course and back in time for the opening of the beer fridge, an important moment in any pilot's day. His long glides all came together. Each critical glide took him to about 1200 feet where he managed, unlike all others, to find lift, time and time again. But crews and retrieve ops were busy as all others needed a retrieve from various points on course. Jerzy locked into second for the day with Dave third for the day and second overall.

While the pilots were dealing with their own problems, the club's resident chef and DG pilot Hampa Roth was toiling in the kitchen preparing his Veal Extravaganza, much to the pleasure of the crowd. Hampa was a consistent purveyor of fine cuisine during the event. After all, his cooking was the main reason, I have been lead to believe, that Walter Weir would invariably show up to an MSC event in year's past.

Monday the 25th was Day 3 of the competition. The day started with strato-cu up to 7/8th – it wasn't looking good. The task was Pendleton – Apple Hill and then up to eleven turnpoints thereafter. Well, forget up to eleven turnpoints thereafter – in the end the task was scrubbed due to lack of thermal activity.

The next task was off to Pendleton – with TP2 the close-by Casselman, followed by pilot's choice. After many re-lights, the task was scrubbed at 2:45 due to high thermal shear with winds up to 25 knots at altitude. The day was a complete write-off except for Hampa's steak dinner.

Prior arrangements were made for the Discovery Channel to drop in for a shoot. As we are involved in the greatest untold story in sport, it was time to tell the story. We managed to get some air-to-air footage, in-cockpit play-by-play, and a number of interviews. The shooting went so well that the head office decided to send another crew out Thursday for more action and maybe even a race.

At this time it was becoming apparent that Jay Allardyce and Chris Gough were developing a following. Not of gliding disciples, but of groupies — too many young female admirers to count. It was kind of refreshing as it

was a departure from the standard soaring pilot demographic: male, 65, with a list of endocrine and muscular skeletal ail-ments, failing vision and hearing, etc. We're familiar with that picture, even though the memory is a little sketchy too. I would only say that we would be well advised to nurture more of what Jay and Chris represent.

Now Wednesday the 27th was a washout. Thunderstorms lurked and finally hit the area early afternoon. The windsock didn't survive. Thankfully that was the only fatality of the event not including a potential non-human sacrifice Bernie may have made to the weather gods. I did make the suggestion to Bernie, but he will neither confirm nor deny if any such activity took place, save for admitting the only thing he did swing above his head was his wet/dry bulb thermometers and not any chickens. The rain had almost floated our tent city into the Ottawa River. As Hawkesbury doesn't have any 4 or 5 star hotels, the invitees elected to pitch their numerous tents in front of the clubhouse. High ground would have been preferable.

Thursday was a go. The task was Pendleton – Casselman and then pilot selected turnpoints. In descending order the winners were Willem, Jerzy, Jim Oke with the point spread in the totals ascending in their value. Once again, a crew from the Discovery Channel dropped in for more info gathering. Hours of shooting later it was confirmed that it was in the can. The Roundtable will post dates the show will air.

To throw a curve into the food festivities, an East Indian feast was put together by Arvind Jain for the folks. Nothing like a little curry chicken for that little extra boost the next flying day if down low. It's no wonder all glider pilots present expressed their appreciation for the choice of fare.

Friday June 29 was officially Day 4, now rendered official with the minimum number of scoring days being met. Denis Trudel was a very happy CD. We had a legal championships, not an obvious get when you are flying in the east. The task was a 3:30 hour TAT consisting of Iroquois – Cornwall – Chénéville and back. Willem and Jerzy kept up their first and second place finishes respectfully and Nick levitated to third for the day.

On all race days you could find a crowd glued to the computer monitor in the clubhouse where Frank Vaughan and Nick had set up their pilot tracking system. A large antenna on the roof of the clubhouse picked up the signal from small Bonnière type boxes in the gliders. Position, height, speed and lots of other interesting bits of info were presented up on the screen. America's Cup yacht racing has nothing on this system of virtual viewing. When pilots were low and close to the weeds, it was interesting to see them get back up. General course line strategies were apparent as well as other strategic decisions by way of simple comparison. We should be seeing more of this in contests to come.


the Champion

Saturday June 30th was another good flying day. The TAT task comprised of Pendleton – Cornwall – Montebello – Newington and back to Hawkesbury. Skirting localized showers was an additional problem for the pilots on course as the cu built up. Dave took the day followed by Willem second and Ed third.

Sunday July 1 was the day that did not happen. André Pepin, the official sniffer, encountered difficult soft cu just off tow. The ceilings were low but there was lift. André managed to actually fly the course. Still, the task committee and the CD waited for better, but better never came and things dragged on to the point of calling the day. As soon as the day was called things got better as Murphy's Law dictates. Tim Tuck was up and stayed up until past 6 o'clock, stating that he just had one of the most beautiful flights of his career. Cloud formations were spectacular with lift permitting him to skirt the cloud bases and rise above them. Anyhow, getting seven contest days in would have broken the mold of what eastern contests typically look like – no point in making the westerners jealous.

Monday, July 2, proved to be a challenging day. The task was a 4 hour Modified Assigned Task with a Morrisburg – Apple Hill – Montebello and what turnpoints you could get in thereafter. A dark line of clouds formed over the mountains where Montebello was and started to rain. The clouds drifted southeast through the course line. The only choice was to fly through it. Some ducked through relatively small gaps to limit wing wetting and other had to grin and bear it. Surprisingly that wasn't as bad as it seemed. Jim plowed right into the wet wall and found strong lift, enabling him to grab the turnpoint and then run out back south for more distance. In the end Jim took the day, followed by Nick who was back to his usual form and Willem was in for third.

The award ceremonies followed that evening at La Cité Golf Club. The evening was highlighted by well over a 100 thank-you's to all. Top place went to Willem who seemed to experience a metamorphosis in his flying at the Nationals. Second went to Jerzy who flew consistently throughout the contest. Third presented an interesting story – Nick had climbed up the list throughout the competition to actually tie Dave, each with 3872 points. Incredible. Flying that extra turn in any given thermal, or saving that extra turn, brought them together in the standings. Jim Oke got a "Trans-Canada Highway" award for travelling the farthest to be here.

The most important goal of the contest was achieved. Every pilot drove away with a smile. The smaller group permitted a great deal of camaraderie to be built and enjoyed between the competitors as well as the hosts. The MSC members pulled together to give much time and energy to support this key facet of the sport. Wing-to-wing competition is alive and well. ❖

The Winners

Willem Langelaan

Dave Springford
(Dow Trophy – best flight)

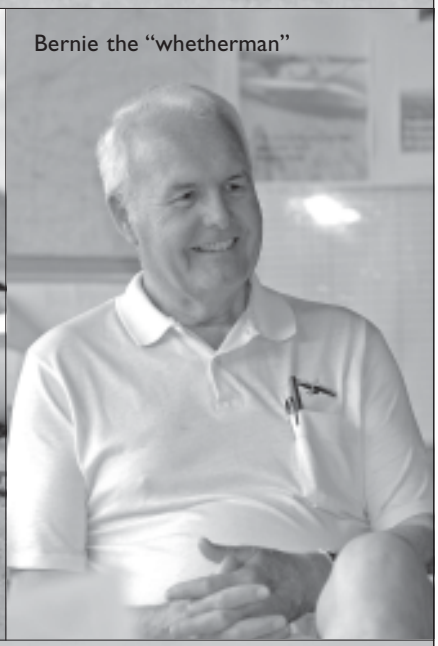
Chris Gough &
Jay Allardyce
(Carling Trophy – team)

Tim Tuck
(SOSA Trophy – novice)

all photos: Maria Szemplinska

Chris (left) & Jay – "hot" young pilots

Nick is pulled to the launchpoint



Bernie the "whetherman"

So, what's the plan?

The windsock didn't survive the storm

The Tracking System

Nick Bonnière

AFTER ITS INTRODUCTION at the 2004 Nationals and use at last year's Nats at SOSA, the GPS tracking system was deployed again in Hawkesbury. This year we had two more tracking units for a total of 10. Some improvements were made for greater reliability and to provide more glider racing type of information for spectators. For improved tracking, the transmitters now transmit twice in a row on different frequencies and carry redundant information. The display software was enhanced to provide information such as current thermal averages and glide ratios achieved as well as overall glide ratios, thermal strength, distances, and cross-country speeds. A wind strength and direction indicator was also added. This provides a great means of showing how each pilot is doing relative to other competitors.

We determined at the last minute that a wireless internet connection was available at the Nationals site. This allowed for live tracking in the clubhouse for crews and gliding fans as well as on the Internet. The system was operated by Frank Vaughan. He came up with the concept five years ago and designed the radio system. The microprocessor software for the transmitter and receiver, and the Windows viewer software were designed by Nick Bonnière. The system was set up the weekend before the contest. There were a few problems. The receiver was damaged by an electrical surge during a violent thunderstorm. It only became obvious that something was wrong the next day. The defective component was eventually replaced but two days of tracking were lost (on subsequent days we disconnected the receiver's antenna every evening). The tracking range to the southwest was limited to 90 km by a ridge, and tracking was lost when the flight path dropped below line-of-sight behind this ridge. On the last day, the server used for live tracking on the internet wouldn't respond. A last minute effort was made to attempt to set up a different server. During the period between gridding and take-off, an alternate viewer program was also generated and posted for download. Initial tests were okay, but it was time to fly and there was no time for final testing. Unfortunately, the alternate set-up was unsuccessful so glider tracking was only available locally in the clubhouse.

There were many spectators looking at the monitor in the clubhouse, and quite a few viewers on the Internet. Even Montreal/Ottawa ATC was watching… There were anxious moments for some crews when their pilot got lower and lower and disappeared off the screen. There was great relief to see pilots find thermals at circuit height to enable them to continue on course. It was quite interesting to watch the path pilots took on course and showed that decision making is the key element for efficient cross-country flying. The Windows viewer software is at <*http://www.vif.com/users/varicalc/nats2007*> When there is no live action, the viewer can still be used to watch a replay. Try it. ❖

2007 CANADIAN NATIONAL SOARING CHAMPIONSHIPS

	name	sailplane		hand.	Day 1 - 23 June			Day 2 - 24 June			Day 3 - 28 June			Day 4 - 29 June			Day 5 - 30 June			Day 6 - 2 Jul			total score
					pos	km/h	pts	pos	km/h	pts	pos	km/h	pts	pos	km/h	pts	pos	km/h	pts	pos	km/h	pts	
					3.5 hour TAT			**2.5 hour TAT**			**2.5 hour MAT**			**3.5 hour TAT**			**3 hour TAT**			**4 hour MAT**			
1	Willem Langelaan	DG-800S	OX	0.89	5	70.68	894	1	59.43	303	1	73.06	870	1	74.39	817	2	78.10	851	3	68.52	703	4438
2	Jerzy Szemplinski	SZD-55	XG	0.94	2	78.39	992	4	*83.4	110	2	65.68	800	2	65.37	718	7	62.87	685	5	64.80	665	3970
3	Nick Bonnière	LAK-17a	ST	0.86	4	71.98	911	3	*86.0	113	5	56.11	683	3	60.54	665	5	67.99	741	2	73.99	759	3872
3	Dave Springford	LS-8	F1	0.93	1	79.03	1000	5	*71.2	94	4	56.12	684	5	56.17	617	1	78.84	859	8	60.26	618	3872
5	Ed Hollestelle	LS-10	10	0.86	7	66.78	845	7	*70.8	93	7	52.89	644	10	*175.7	277	3	77.04	839	7	60.52	621	3319
6	Jim Oke	ASW-20	77	0.90	9	50.12	634	2	*95.5	126	3	58.52	713	8	*223.6	352	8	57.24	624	1	74.44	764	3213
7	Alain Orfila	Ventus b	RS	0.88	8	58.6	741	5	*71.4	94	9	43.71	532	5	56.22	617	4	68.11	742	10	*145.3	190	2916
8	Kerry Kirby	Jantar	69	0.97	6	70.40	891	11	*48.3	64	8	50.45	615	9	*183.7	289	9	*198.3	347	9	*164.4	215	2421
9	Tim Tuck	ASW-20	S1	0.90	10	*185.4	299	8	*54.8	72	10	0	0	4	60.05	659	12	*155.9	273	6	64.67	663	1966
10	Gough/Allardyce	Jantar	MF	0.97	3	72.64	919	12	*24.2	32	10	0	0	12	*151.9	239	6	64.92	707	12	dnc	0	1897
11	Roger Hildesheim	SZD-55	AT	0.94	12	dnc	0	10	*52.6	69	6	54.67	666	7	47.15	518	10	*174.3	305	11	*140.4	184	1742
12	Derek Mackie	Mosquito	TT	0.97	11	*155.1	250	9	*54.3	71	10	0	0	11	*167.6	264	11	*161.5	283	4	65.06	667	1535

* values preceded by an asterisk are distances in kilometres if pilot landed away from base. The speed given is the handicapped value.

Do you know what you know?

a model of how human beings learn

Don Puttock, *Sailplane & Gliding*

WHEN YOU WERE LEARNING TO FLY, did you ever wonder why you felt you were taking three steps forward and two back? If you are an instructor you may have been occasionally surprised to see your star pupil in a depressed state, and asking if he will ever get the hang of some particular aspect of his training. Have you ever been frustrated because you seem to be unable to explain how you do something? This article presents a useful model for both pupils and instructors. It can also provide insights into why some more experienced pilots have accidents.

Why do expert pilots sometimes make basic errors with very serious consequences?

The consciously competent model This model is often used by professional trainers to explain the frustrations inherent in the learning process. The model's creator is unknown, but the model is in regular use. It describes four distinct stages of learning. Imagine you have just started to learn to drive a car:

1. Initially we may underestimate the difficulties we will encounter; perhaps our friends have already learned and we see ourselves as equally competent. This phase is described as "unconsciously incompetent" – *we don't know what we don't know.*

2. As we crunch the gears we begin to realize there is a little more skill required than originally envisaged. This phase is described as "consciously incompetent" – *we know what we don't know.*

3. Eventually we master the individual skill of "changing gear" but it requires all of our attention if we are to consistently do it well (listening to engine note, watching speed, timing our actions). This phase is described as "consciously competent" – *we know what we know.*

4. After a time we apply this skill without thinking, and we begin the more detailed actions required, as we internalize the new abilities. At this point in the learning continuum, the individual will be unable to explain to a beginner how to complete the task. This phase is described as "unconsciously competent" – *we don't know what we know.*

The use of the word "incompetent" is not derogatory; it merely defines the state of knowledge acquisition. Here are the four stages summarized:

1. Unconscious incompetence (hasn't realized there is something to learn),

2. Conscious incompetence (becomes aware of the requirement to learn),

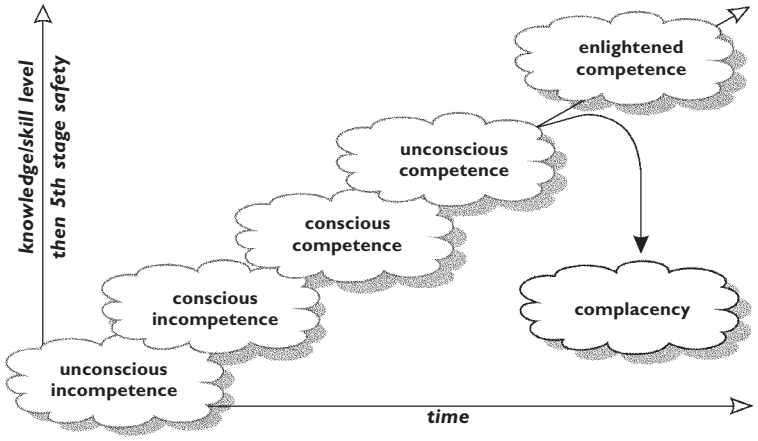
3. Conscious competence (acutely aware of the newfound skill or knowledge),

4. Unconscious competence (forgets he knows as the skills become internalized).

By the time we have the competence in gliding that is required to become an instructor, we will normally have become unconsciously competent. This means we will *not* make a good instructor until we are able to return to the consciously competent condition. Much instructor training is directed at getting new instructors back to being consciously competent again.

We might consider how we change gears in a car. An experienced driver will probably have to consider long and hard before he can teach someone else. At the same time, the would-be driver has not quite realized how difficult it is. The instructor-pupil relationship can be-

Unconscious incompetence	**Conscious incompetence**	**Conscious competence**	**Unconscious competence**
We don't know what we don't know	We know we don't know	We know we know	We forget we know
We see our pals learning to fly, and want to join them (social needs)	We realize there is more to it (aileron and rudder coordination), and become frustrated and concerned that our pals will assume we are not capable (ego needs)	We have just acquired our new skill knowledge, and are able to explain in fine detail (assists socializing, reinforcement and meets ego needs)	The skill or knowledge becomes second nature. We no longer need to think about it. It is too easy to imagine we have some natural talent (ego threat)
The instructor raises awareness by introducing the new subject area	The instructor is needed for moral support. You can do it, look what you have achieved already, everyone goes through this stage	The instructor will do well to stand back and allow (under gentle guidance) the pupil to explain to the rest of the group	The instructor *must* look closely at how he achieves various tasks, and *force himself* to become consciously competent
Student not ready to learn	Student ready to learn	Student ready to teach, instructor ready to teach	Instructor not ready to teach



The original model of **conscious competence** envisages four states of knowledge or skill level. **Enlightened competence** is a state where the individual has developed a heightened understanding of the particular skill, and is able to express it to others. **Complacency** is a state where no further learning takes place beyond unconscious incompetence.

come frustrating because the instructor considers the skill to be obvious and natural, and the student has not yet realized it is more difficult than he imagined.

This principle works in flight training. The instructor must be aware of his own internalized skills, and accept the stages the student will go through. Students sometimes describe their progress as two steps forward and one back. This normally happens as the student realizes there is yet another skill to be acquired on his training road.

If we have several trainees learning as a group, a very interesting situation can occur. The first student to grasp the new skill (consciously competent) is able to explain to his fellow trainees how he achieves it. Often the instructor can facilitate the trainee discussion and speed up the learning process for the remainder of the group.

The table opposite attempts to identify the four stages. Remember, for effective learning to take place, the instructor must be consciously competent and the pupil must be consciously incompetent.

Part of the instructor's role is to ensure he is familiar with how a task is performed, and create the environment for his pupil to learn. This often means the instructor spends hours trying to understand exactly how a task is completed, so that he can become an effective teacher. It is too easy, and unforgivable, for an instructor to assume his skill is some inherent talent that he was born with and cannot be taught. The warning signs are not being able to answer questions like: how did you know...? Or how do you...? If the instructor cannot answer the question, he is probably unconsciously competent, and has some thinking to do.

Sometimes the pupil will appear to stop learning for a time. This often happens to more mature students because they assume they know what they need to do and temporarily stop listening to the instructor. This is an example of unconscious incompetence, and the instructor needs to be patient as the pupil comes to terms with the situation.

The fifth stage Academics are realizing that the four-stage model can be developed further. This new thinking can provide an interesting new perspective on accidents and complacency.

With high skill levels, we would normally expect a particular activity to become inherently safer. This isn't always the case: relatively straightforward tasks (turning final, or recovery from a winch launch failure) can be undertaken incorrectly by fully-trained and experienced pilots. Academics argue convincingly that stage five is either a state of "enlightened competence" or "complacency" – a kind of fork in the road.

Enlightened competence is a state where the individual has developed a heightened understanding of the particular skill, and is able to express it to others.

Complacency is a state where no further learning takes place beyond unconscious incompetence.

These ideas can be applied to flight training and "primacy". Take, for example, recovery from cable breaks. We are taught to follow a procedure: lower nose, regain approach speed and check ASI, decide if landing ahead is a safe option, etc.

I believe that experienced pilots add to this by further learning; they learn how an aircraft feels when it is in normal flight (kinaesthetic learning). Unfortunately this additional learning is sometimes flawed. Seasoned instructors (enlightened competent) know that airspeeds can be dangerously low during the pushover after a launch failure and yet the aircraft will appear to respond normally to control inputs as the stall speeds are temporarily reduced by significant margins because g loads are below the normal 1g level. The complacent pilot will interpret this normal feeling as the aircraft is not stalled.

I believe what happens is that pilots allow their own new learning to override the taught procedure. The consequences are serious, and may explain why experts get it wrong. Check flights are important because they ensure the pilot is following the procedure and not his senses.

Another example: failure to release when a wing goes down during the aerotow ground run. We normally learn to aerotow using two-seat trainers and a nose hook. We are taught to release immediately if a wing goes down despite the use of aileron. We soon also learn unconsciously that steerage is provided by the pull of the tug, and this opposes the tendency to groundloop. Other learning adds to a developing belief that the wing can always be picked up (eventually) with aileron. We see people take off with wings on the ground, we watch people successfully pick up a wing during take-off. This additional learning is flawed because the pilot fails to understand how differing conditions affect aircraft handling. Hook position, wind conditions, surfaces, aircraft type, will all affect the ability of the pilot to pick up the wing. Pilot skill is not normally a factor. The situation becomes dangerous when something fundamental occurs. The pilot transfers to an aircraft with a belly hook, and takes all his experience into a new situation that he does not fully understand. This time a wing goes down and a crosswind and aft hook position conspire to catch him out. In this case the pilot has allowed his experience to persuade him that he can handle any situation, and he then overrides his basic training. ❖

"Blink"

a book report

Dan Cook, Chairman FT&S committee

HOW CAN UNCONSCIOUS THINKING, in the "blink of an eye", have an impact on our decision-making process. *"Blink"*, by Malcolm Gladwell, explains this phenomenon. It shows why some people make brilliant snap decisions, while others make less successful ones. The author explains the physiology of acute stress and how it effects our decision-making.

The book is recommended reading for pilots if they want to help themselves understand Human Factors in how we make decisions under pressure — this review is directed towards that audience. I wish to focus comments about the content on decision-making that can affect flight safety.

The author writes about the "adaptive unconscious" decision-making and states, "We make very quick judgements based on very little information. The adaptive unconscious does an excellent job of sizing up the world, warning people of danger, setting goals, and initiating action in a sophisticated and efficient manner". In flight, we use the brain's frontal lobe to analyze and make decisions, but often we are making many more rapid decisions that we are not consciously aware of. Gladwell states, "Our unconscious is a powerful force. But it is fallible. It's not a case that our internal computer always shines through, instantly decoding the truth of a situation." He explains that it is possible to learn when we can use this ability and when we should be careful.

Gladwell points out that we use a process called "thin-slicing" that is in our adaptive unconscious to make snap decisions accurately. He gives examples of many experts in their field who can look at certain criteria and make these accurate, fast decisions. They may not be consciously aware how they came to the decision but they are no less accurate had they made a detailed analysis. He points out that often the quick decision is more accurate, given that a detailed study often leads to other factors or doubts clouding the issue. He states, "thin-slicing refers to the ability of our unconscious to find patterns in situations and behaviour based on very narrow slices of experience" and "the truth is that our unconscious is really good at this, to the point where thin-slicing often delivers a better answer than more deliberate and exhaustive ways of thinking." Much of his book deals with thin-slicing and how it affects interpersonal relationships and how we live our lives.

Gladwell states that if we are to learn to improve the quality of the decisions we make, we need to accept the mysterious nature of snap judgements … to respect the fact that it is possible to know without knowing why we know and to accept that. He explains that we often function (most of the time for some) on a kind of autopilot. We believe we are making rational decisions but we are often using thin slicing and the previous associations we have made. He points out that there is "a significant advantage to how secretly the unconscious does its work."

How might Gladwell's observations apply to flying activity? "Poor decision-making" is often identified as a human factor in an aviation accident. Why do pilots sometimes make poor decisions? We could make an analogy with driving a car. Most of us make the thousands of decisions necessary to drive safely without thinking deliberately about it. We are thin-slicing situations and using our adaptive unconscious to react. Experience and practice have led us to make relatively good judgements and decisions. Now take the case of a new driver with no experience in winter driving (before antilock brakes). Often the first time they apply the brakes on ice trying to avoid an accident they might lose control and freeze. Their unconscious thin-slicing process has no criteria to make an evaluation successfully in this case. The result is their car may slide helplessly into other vehicles ahead. Another more experienced winter driver has different criteria to make the assessments for a snap decision and the outcome would likely be different and a collision avoided.

We can see that in flying there are many similar situations. What makes one pilot safer than another? Is it knowledge and experience or the quality of our decision criteria for thin-slicing? Note that it is sometimes experienced pilots who make poor decisions! Why?

Gladwell later discusses a certain type of brain injury to make a point. "People with damage to their ventromedial area are perfectly rational. They can be highly intelligent and functional, but lack judgement." He is referring to damage in the "ventromedial prefrontal cortex" which is behind the nose. He states, "damage here causes a disconnect between what you know and what you do". In other words, the patients would have difficulty making quick decisions using thin-slicing. They would suffer from the paralysis of analysis. They are not capable of making a quick assessment as too much of their thinking is at a conscious level. His point is that we need to use this part of the brain to take timely action. This example becomes more important later in the book when the author addresses acute stress reaction.

He discusses the issues of training for development of the cognitive sub-conscious for decision-making. He states: "I think two important lessons are here. The first is that truly successful decision-making relies on a balance between deliberate and instinctive thinking…Deliberate thinking is a wonderful tool when we have the luxury of time, and the fruits of that type of analysis can set the stage for rapid cognition. The second lesson is that in good decision-making, frugality matters". Gladwell explains that "the most complicated problems have identifiable underlying patterns, and when identifying these patterns, less is more… To succeed as a decision-maker, we have to edit". This editing would have to be done unconsciously for thin-slicing, decision-making. ⇨ **p21**

Notes on hypoglycemia

Dr. Richard Lewanczuk, SAC Medical committee chairman

THERE ARE CERTAIN physiological requirements for safe flight. While adequate oxygen, hydration and rest are obvious, the need for suitable nutrition is perhaps less clear. After all, if people can survive for days without food, why is adequate nutrition so important prior to flight? The following article discusses the phenomenon known as "hypoglycemia" and its potential effect on the glider pilot. Hypoglycemia is both misunderstood and over-diagnosed, particularly by amateur physicians. The term "hypoglycemia" refers to a blood glucose (sugar) level that is insufficient to maintain normal body functions. While severe hypoglycemia is rare, more mild forms of hypoglycemia are of relevance in aviation.

The brain consumes about two-thirds of the body's blood glucose (sugar). So it requires a steady, on-going supply of glucose via the blood. In an adult, an average of 180g of glucose are required per day; about 120g of this is used by the brain and 60g for other tissues. An awake brain uses about 5g/h. A decrease in blood glucose below 3.6 mmol/L can limit glucose metabolism in the brain and cause symptoms of hypoglycemia. The brain is the first organ affected by decreased blood sugar. Symptoms of true hypoglycemia (where the blood sugar is measureably reduced) include fatigue, impaired judgement, confusion and even loss of consiousness – clearly symptoms that a glider pilot would want to avoid!

Fortunately, the body has a number of mechanisms to prevent true hypoglycemia. The liver maintains stores of glucose in a form known as glycogen. These stores are normally sufficient to maintain blood glucose levels for up to 12 hours of fasting. However, in some circumstances, these glycogen stores are reduced. People with pre-diabetes often have reduced glycogen stores. Similarly, excessive alcohol intake can impair the formation and storage of glycogen. In these circumstances, glycogen can run out sooner than 12 hours. At this stage, the liver tries to maintain the body's glucose levels by actually synthesizing glucose from precursors such as protein from the breakdown of muscle. However, this synthetic process can take a while to become established, and in the interim, a pilot may be susceptible to hypoglycemia. This, in the circumstances listed above, hypoglycemia could occur after even 8–9 hours of not eating (see why your mother told you to always eat breakfast!)

Another form of hypoglycemia is known as "reactive hypoglycemia". This is not true hypoglycemia, as the blood sugar does not actually fall to levels that impair the brain. However, in this form of hypoglycemia, blood glucose levels will fall rapidly and trigger a hormonal response that can be unpleasant and distressing. Hormones such as adrenaline are released in this circumstance and can give symptoms such as intense hunger, sweating, and anxiety.

Reactive hypoglycemia can be brought on by improper eating. Foods from which the glucose is rapidly absorbed, known as high glycemic index foods – result in a rapid increase in blood glucose. In order to compensate, the body secretes large amounts of insulin to keep the blood sugars from rising excessively. In some circumstances, the insulin response "overshoots" what is required and then there is this rapid drop in blood glucose, triggering the symptoms listed above.

People particularly susceptible to this phenomenon are type 2 (non-insulin dependent) diabetics, pre-diabetics, and older, stouter individuals, where there is incoordination between caloric absorption and insulin secretion. In addition, exercise (such as rigging a glider or being particularly active on the field) can facilitate reactive hypoglycemia through muscle utilization of existing glucose reserves.

High glycemic index foods are not necessarily intuitively recognized but as a general rule, sweet foods with simple carbohydrates generally have a high glycemic index – a doughnut has a higher glycemic index than a granola bar. But raw carrots have an unexpectedly high value. To solve this food selection problem without resorting to a personal dietician, eat a well-balanced meal prior to flight – but an ordinary sandwich is often a good choice with its mix of fat, protein, and complex carbohydrates.

What does this mean for the glider pilot? Well, first of all, we should all eat a good breakfast which incorporates a source of complex carbohydrate (ie. low glycemic index) to allow the liver to maintain its glycogen stores. Prior to flying, we should also make sure that we have eaten within the previous two or three hours, again having consumed some source of complex carbohydrate. On a long cross-country flight, a further source of complex carbohydrate such as a granola bar should be available. Additionally, alcohol intake the night before flying ought to be minimal.

What one does *not* want to do is party the night before, get up and skip breakfast, rig a glider, down a Coke and chocolate bar, and then set out on a long cross-country flight. Just like maintaining adequate hydration, maintaining proper nutrition is also important in the world of soaring. For more details on carbohydrate/energy content of various foods check out the following websites:

<*http://fnic.nal.usda.gov/nal_display/index.php?info_center=4&tax_level=1*>

<*http://www.dietandfitnesstoday.com/carbohydrate.php*>

Safety & Training

Getting the backwards ... frontwards

This article appeared in free flight 25 years ago and is no less relevant today. Dan Cook

Pilots who have accidents share the common characteristic of being profoundly unimaginative. I say this because in reading acres of accident reports, power and glider, nowhere is the dullness relieved by any spark of originality. Increasing aircraft sophistication has in no way diminished the crudity of a pile of accident junk. The Wright brothers could have crashed just as effectively as we do – AND FOR MUCH THE SAME REASONS. We don't learn.

One of our main problems seems to be that of always looking at accidents from the wrong end – backwards into the past after the accident has happened! We are great investigators and confirm with monotonous regularity that the cause of any given accident is one of a standard handful. It was so in the past, it is so in the present, and it will be so in the future unless we do something to break the dismal chain.

We are all capable of getting into situations which we don't expect or understand; we share the human trait of forgetfulness. Ignorance and forgetfulness together are probably the root cause of the largest proportion of glider accidents and if that is so we are dealing with accident causes which can be removed *before* an accident happens. The antidote to ignorance must surely be education; a steady persistent attempt to supply missing information. The antidote to forgetfulness must surely be reminders; steady and persistent.

We have difficulty with the steady and persistent part in the press of other time-demands, and we tend not to plan ahead very effectively unless forced into a position where it cannot be avoided. So that we can develop rational safety programs perhaps we should build in 'anti-backsliding' devices such as club requirements to have a Safety Officer appointed annually, before the season begins, and require him to come up with a comprehensive plan of safety action *before* the season begins.

Knowing the common accident causes, particular local conditions which create hazards and the club history of accidents and incidents, it should be possible to devise a useful prevention scheme that orders the priorities, identifies the means by which the messages are going to be delivered, and as far as possible identifies who will be involved and when. It is vital that the Safety Officer becomes an effective coordinator as he will likely lack the ability to carry out the entire safety program, but it is also extremely important to get as many people as possible involved so that they too will have a personal stake in the success of the program.

A wise and experienced old teacher giving advice on how to teach said, "First you tell them what you are going to tell them, then you tell them, and then you tell them what you have told them." Modern TV commercials do the same thing and if it works for them perhaps it will work for our safety program. How many ways can you get your message across? Films, articles, notices, cartoons, discussions, lectures – if you can imagine it and can do it or, better, bully someone else into doing it for you, every little bit will help. But above all get a plan of action, concentrate on highly probable accident causes, and persist. Look ahead also – the time for getting out information on wave flying is in the spring – not two weeks before you head for the hills.

I may be wrong, but experience leads me to think that the Club Safety Officer is often unknown to most club members, has a great facility in blending into the scenery, and does not become active until after something has gone wrong. He should be the best known club member, should be highly visible and should be active in promoting a program which will prevent things from going wrong.

If you have details of safety programs that have worked for you please share your ideas with us. We can all learn from each other.

Eric Newsome, 1982 SAC Safety Chairman

Battery fire destroys glider & trailer

Recently, a pilot was bringing his Discus out to the airfield and as he got close, he noticed what he thought was dust rising from the trailer – he was on dusty back roads. When he arrived, he realized the trailer was on fire! He quickly unhooked from the trailer and in a few minutes the trailer was engulfed. The fire was so intense that the aluminum top of the trailer disappeared and puddles of aluminum formed on the ground. Nothing is left of the glider except some twisted metal fittings and some carbon fibre strands.

It is believed that a glider battery stored in the trailer was shorted out when a polishing can fell onto it and shorted out the terminals. Other combustible materials in the trailer (polishing rags, polish, and spare tire) quickly ignited and fueled the intense fire.

Even though the batteries had a wiring harness soldered to the leads and the terminals were covered with electrical tape, it was still possible for the tape to wear away from handling, thus exposing the terminals. Most glider batteries use this set-up and it is generally felt that the leads are spaced far enough apart that no further precautions are required. It is widely believed that the low current and relatively low voltage of the 12V dry cells are not enough to ignite or sustain a fire. This is *not true* – the current that can be generated by any battery is extremely high when it is shorted, so a fire can be started very quickly. To help prevent this type of accident, store batteries separately and transport them in their own enclosed non-conductive container (plastic box). Where do you (or your club) store or charge batteries? Is it possible for other conductive items to fall on them by accident?

Dan Cook, SAC Safety Officer

Trylan Erra —

Safety is such an unhumorous subject these days — now it's formalized as a "Management System". Decades ago various flying organizations, the military included, often had as a part of their safety awareness programs, a "doofus" that did everything wrong. The RAF had a "Pilot Officer Percy Peach", if memory serves.

Even our soaring association had such a character back in the 1960s, compliments of a poetic as well as artistic Gil Parcell. He invented Trylan Erra, a very unimpressive young man and a bright, shining example of what not to do …

Drifting from the aerodrome
At quite a rapid pace,
We find our thermal-working friend,
The dauntless soaring ace.

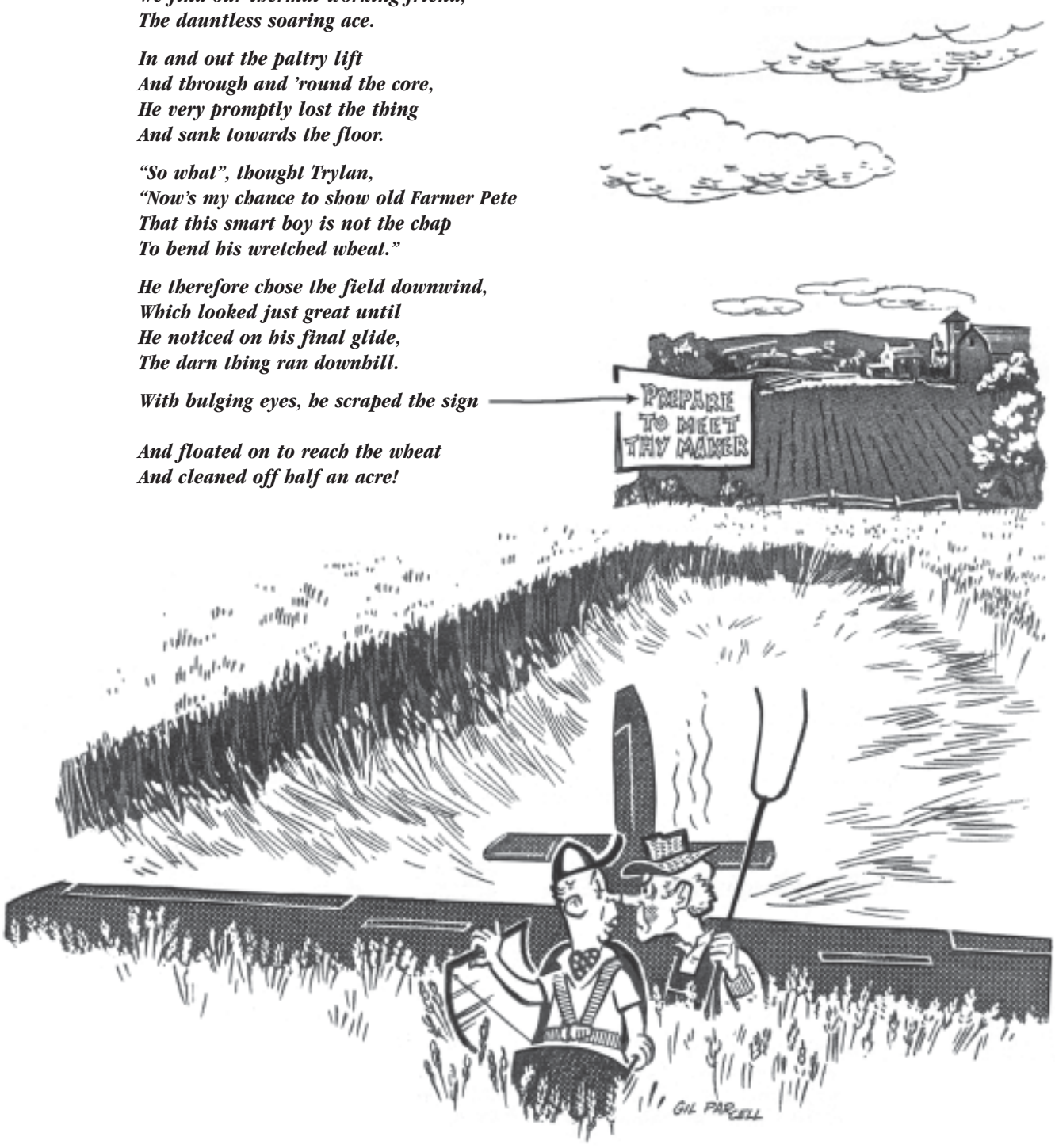
In and out the paltry lift
And through and 'round the core,
He very promptly lost the thing
And sank towards the floor.

"So what", thought Trylan,
"Now's my chance to show old Farmer Pete
That this smart boy is not the chap
To bend his wretched wheat."

He therefore chose the field downwind,
Which looked just great until
He noticed on his final glide,
The darn thing ran downhill.

With bulging eyes, he scraped the sign

And floated on to reach the wheat
And cleaned off half an acre!



Miscellany

Cudworth, SK scene of Western Contest

A small but very successful friendly competition was held June 14–17 at the Cudworth airport, home of the Saskatoon Soaring Club. The event was jointly organized and sponsored by the Alberta Soaring Council and the Soaring Association of Saskatchewan. It was going to be held at North Battleford, a more central location for everyone, but the number of pilots committed to attend this year was not high enough to justify the organizational effort to do it there and bring in the second towplane from ASC.

Ten gliders took part, including an L-13 and a Ka-7 representing multiplace club gliders. Pilots from Alberta and Saskatchewan enjoyed two good soaring days, then an excellent one, but the fourth day was rained out.

Visiting pilots began arriving Wednesday June 13 and continued over the next couple of days. Five pilots competed on Day 1, growing to nine on Day 3. Tasks were pilot-selected from a list of 20 turnpoints with distances varying 25–100 km from the airport. Pilot Selected Tasks of 2 hours, 1.5 hours, and 3 hours were set for the three flying days. Pilots were allowed to launch and start at will. All competed as Club Class, with a subclass for novice pilots to encourage the beginners.

Cudworth was fortunate with the weather this weekend. There was overcast and wet weather all across the prairies both to the north and the south. Saskatoon Soaring Club gave everyone the only place to soar, and I thank all the club members who came out to help them do so.

Thursday, Day 1 provided low bases that rose slowly to 6000 feet (4000 agl) with 5 knot thermals. Day 2 was weak, with lower cloud and weaker thermals, and significant wind and no one could stay up until late afternoon. Then four competitors launched and flew far enough to score; Phil Stade still being the leader. This day was Orlan Dowdeswell's turn in the DG-400 but he wrenched his back and spent most of the contest lying flat on a picnic table, so his partner Mark did all the flying.

Day 3 was the best, with bases to 7500 feet and thermals of 6 knots, although there was significant overdevelopment for a time to the north and there were some low saves over shaded ground. All competitors completed their flights (there were no landouts over the three days). Phil's flight was over 400 km and six hours (though just 190 km were "scorable" for the set three hour task time), and Roy Eichendorf flew over 300 km in five hours. Tony Burton won the day though, with a 222 km flight that was significantly faster than the others. Team DG-400 had more bad luck when Mark inhaled a cookie that he was eating in flight and was badly in need of the Heimlich Maneuver. He survived but had to cut the flight short and return.

There were significant achievements that Saturday besides contest results. Guy Blood, from Edmonton, achieved a 5 hour duration flight in his Libelle to complete his Silver Badge. A local pilot and our scorer, Hank Hees, accompanied by John Toles, flew a two turnpoint flight of 75 kilometres in the club Blanik, his intro to cross-country flight and completion of his Bronze Badge requirements.

There was some concern that morning when the towplane and club gliders were held hostage by the power company. As a result of an electrical outage in the area, the hangar door could not be raised. After some brainstorming, the plan was to use Phil's Canadian Tire inverter wired directly from his car to the door motor, helped by about a dozen pilots and crew lined up, bent over, and ready to add lifting power at the bottom of the door to assist the motor. Picture that Kodak moment! Right about the time the test was to begin to see if the inverter would fry, the power returned and normal operation resumed. That evening, the Saskatoon club hosted a burger BBQ at the airport with 27 pilots, members, and guests participating.

The Sunday forecast was for real rain so most everyone derigged the previous day. Sure enough, it was heavy and trailers quickly disappeared for their trips home.

Ryszard Gatkiewicz is back on the soaring scene. Pilots may recall that he won the Club Class at the Canadian Nationals in Red Deer flying Cold Lake's Twin Astir. With the Cold Lake club in hibernation and Ryszard living in Meadow Lake SK, he hasn't flown for several years. Ryszard recently bought an LS-8 and brought it back from California. Here at Cudworth he spent Day 1 getting check rides in the Blanik and then flying his ship for the first time. He'll be parking the ship at the Prince Albert club at Birch Hills and making 3+ hour drives to fly, and he said we will be seeing a lot more of him at competitions.

Pilot	*Glider*	*Handi. (OLC)*	*Total Pts*
Phil Stade	RS-15	0.95	464
Tony Burton	Russia	0.84	392
Roy Eichendorf	O. Cirrus	1.01	297
Ryszard Gatkiewicz	LS-8	1.08	260
John Toles	L-33 Solo	0.79	259
Mark Westphal	DG-400	1.10	231
Guy Blood	Libelle	0.99	218
Kobus Steyn	Phoebus	0.98	131
Hank Hees	Blanik	0.68	108

Scoring distance = pilot's actual task speed times the day's minimum time. Daily points = the scoring distance divided by the sailplane handicap.

When the points were tallied, winner of the Club Class was Phil flying an RS-15 followed by Tony in his Russia AC-4C and Roy flying an Open Cirrus. Guy Blood took home the plaque as winner of the Novice Class flying a Libelle, followed by Hank Hees in the L-13 Blanik.

The event was designed to encourage a level of serious competition mixed with participation by pilots new to competitive flying. If the event can involve more competitors next year, the plan is to hold it at the North Battleford Airport, an excellent venue for a future National event. Hopefully the success this year will encourage more participants from Alberta, as well as representatives from Manitoba and British Columbia.

John Toles

Pilots at contests

Our pilots have been busy at US contests this year, often attending more than one. Below is the data I have been able to gather:

Standard Class Nats, Hobbs, NM, 17-27 Jul
Going – Andy Gough, Ryszard Gatkiewicz
Dave Springford, Jerzy Szemplinski

Region 8, Ephrata, WA, 2-7 July

Mike Thompson, Ventus 2CM, 15m,	4th of 9
Martin Dennis, DG-202, Sports	2nd of 16
Tony Burton, Russia, Sports	4th
Dave Burgess, ASW-19, Sports	7th
Dennis Vreeken, SZD-55, Sports	10th
Lothar Schaubs, Ka6E, Sports	13th

15m Nats, Mifflin, PA, 15-24 May

Brian Milner, Ventus 2BX	19th of 41
Jerzy Szemplinski, SZD-55-1	28th
Willem Langelaan, DG-800	30th

Region 5 South, Cordele, GA, 12-19 May

Dave Springford, LS-8, Standard	1st of 8
Andy Gough, LS-8, Standard	3rd
Steve Newfield, LS-6B, 15m	11th of 11
Ed Hollestelle, AFH-3, 18m	4th of 6

Region 5 North, Perry, SC, 16-21 Apr

Jerzy Szemplinski, SZD-55-1, Std	13th of 13
Brian Milner, Ventus 2BX, 15m	4th of 18
Ed Hollestelle, LS-10, 18m	5th of 12
Wilf Krueger, DG-808B, 18m	6th

Seniors, Seminole Lake, FL, 11-17 Mar

Andy Gough, LS-8	6th of 58
Walter Weir, ASW-27B	7th
Ed Hollestelle, LS-10	8th
Wilf Krueger, DG-808B	12th
Brian Milner, Ventus 2BX	22nd
Udo Rumpf, ASW-24	41st

† Kerry Bissell, 1924-2007

Kerry died 15 June after extended ill health. Kerry practised architecture in Red Deer, then administered school facilities in the Northwest Territories and the County of Parkland. His last position was as an instructor in the Department of Architecture at the Northern Alberta Institute of Technology.

He was passionate about all aviation. As a boy he made model planes; as soon as he was able he flew sailplanes and power aircraft. His life long contributions to soaring in Alberta were broad and deep. The Edmonton Soaring Club celebrated 50 years of flying on the July long weekend, and graciously took the opportunity to mark his life at that time.

Kerry was a founding member of the Alberta Soaring Council, organized in 1966 to "put the air in Air Cadets" – the origin of the great flying program the cadets now have.

The *Viking*, built in 1962, was the first all-composite sailplane built in Canada. Kerry flew it regularly from 1966 to 1973, after which it passed through other owners then disappeared. Kerry tracked it down in Olds, AB where it had been abandoned and, with other members of the club, restored it to display condition and it is in the Reynolds Alberta (Aviation) Museum in Wetaskiwin.

For years Kerry flew a Libelle and tried to finish off his Diamond badge with the 500 many times without success. Ursula's favourite story is about the time he finally did it. It was the famous day in 1986 during the cross-country training week at ESC. The weather forecast was so good that John Firth, the course director, let everyone do their own thing. Both Kerry and Ursula did Downwind Dashes deep into Saskatchewan with Ursula flying 607.0 kilometres in her Ka6 and Kerry flying 607.5 (!) in the Libelle.

John Broomhall has his favourite Kerry story: "It was probably about 20 years ago. I was a relatively newly licensed glider pilot having a spring check flight. Kerry was in the back seat of the 2-33 with me. After we had completed the required maneuvers, Kerry suggested we grab a thermal and see if we could climb back up a bit. Enthusiastically, I found what turned out to be a good one and continued to work it. After a few years in the club, I was used to Kerry and his quiet manner – he said nothing as we continued to climb. Now, as most of us know, the 2-33 is a noisy aircraft – but the rattling sound that started to come from the back seat was unknown to me. I asked Kerry to see if he could find it.

No response. I looked over my shoulder at Kerry to see him shivering in the back seat, the rattling noise was coming from his teeth. He was probably well-dressed for a warm day on the ground, but his T-shirt was not adequate for the back seat of a drafty 2-33 at 11,000 feet! This told me a lot about Kerry's personality: that he wouldn't let the beginnings of hypothermia get in the way of my good climb! I'm sure we were all saddened to see the onset of Kerry's infirmities slowly deprive him of what he loved most. I guess we can take some solace in Kerry now being free to soar from his mortal constraints. His ashes were released over the ESC field from a glider on 1 July."

Tony Burton

ESC celebrated 50 years on 1 July

I think of myself as a morning person, but it was still a shock to my system to be woken from a deep sleep to the sound of the Pawnee taking off. Sure that I hadn't slept in, I checked my watch – it was 4:33 am! Throwing on my clothes, a breath of sanity returned. Right – I was at the Chipman gliderport and it was the 'challenge' day of the 50th Anniversary celebrations. A group did promise to start flying at the earliest possible opportunity. Little did I know that it was at the earliest legal time rather than the more normal 'early' of about 10 am – after a leisurely breakfast. With a target of 100 rides (but we all knew that anything over our anniversary number of 50 would be great) and flights from dawn to dusk things were happening at exactly the appropriate times. Chief Towpilot Neil Siemens was the brave pilot heading up at 4:33 am. He got a 2 am wake up call to get him to the field and doing all the pre-flight checks to greet the dawn.

Panic – I was responsible for breakfast! Surely they didn't expect the spread to be waiting for them at that time in the morning? Trusting to their sense of fair play I continued to get ready and headed to the clubhouse for a refreshing shower. Breakfast would be served when it was ready. Throughout the day over 75 glider flights were logged even though breaks were taken for a healthy breakfast and the supper! If we had the people to fly we could have logged the full 100 and then some.

Gwen Hoar

Alberta Premier Stelmach, who is a farmer at the nearby town of Andrew, presents a 50th anniversary commemorative plaque to ESC president Guy Blood during the 1 July celebrations.

The history of the Edmonton Soaring Club is full of incidents of individual members creating a plan and carrying it out to the betterment of the entire club. That was the way the current facilities were purchased. A piece of farming property was available just outside of the small town of Chipman. The important criterion of airspace was checked and the property was purchased by a group of members. The club was informed of the purchase then and the land was transferred to it. The home-like clubhouse was created by the generous donation of a member's wife – Mrs. McColeman. The hangar was built by a small group of club members who were passionate about having protection for the club ships. The modern fleet is a result of the excellent work done by one member in getting funding through the casinos.

Today, there were power and glider airplanes in abundance. All the Alberta clubs were represented. Former member Scott Rudd flew in from Vancouver Island with his son. A new pilot, the younger Rudd was able to fit in a glider ride (and do some real thermalling), a biplane ride, and a ride in a motorglider.

Kerry Bissell had his last flight on Sunday (see his obituary on page 19). His entire family came to Chipman to share Kerry's farewell with the club members. All flights stopped so Kerry could have the sky to himself. Dave Puckrin took up Kerry's son in the Puchacz to release the ashes. We were treated to a commentary over the radio and tears were plentiful when the puff of ashes was spotted. We hope that the spirit of Kerry Bissell (the "King of Scratch") will help inspire everyone that flies off the Chipman field in the future.

The big event drew more people than just pilots. Neighbouring farmers were invited to share our celebrations. Every mealtime I saw a number of them talking about how being near the airfield impacted on their lives – and most of the comments were favourable. They talked about knowing it was a weekend when the towplanes were taking off, they discussed the breaks in their day standing watching the flights and seeing all the energy and activity, and some even talked about their flying histories.

One local farmer of note was Alberta Premier Ed Stelmach. He recalled a number of the historic landmarks for the club as he presented a 50th Anniversary plaque to President Guy Blood. The County of Lamont presented a plaque and the town of Chipman was represented. But it wasn't just a political evening. Long-time members, and even one founding member, took a moment to tell everyone what ESC meant to them.

After the official ceremonies, we all adjourned to the hangar for a feast of roast pig and a groaning table of side dishes. It was my favourite meal of the weekend – I didn't have to cook! Over 100 people were at the club for the meal and as it was Canada Day, all participated in a round of "O Canada". Everyone should have a hangar to sing in as the sound is wonderful with the soft echo of the tin hangar roof. The meal ended with a series of door prizes which were won mostly by the Calgary contingent.

To thank everyone who helped make this event a success would be to list most of the members of ESC. Dave Puckrin was the primary in charge of organizing the event, Grant Ransom was responsible for media coverage, Neil Siemens for the towplanes, Bob Hagen for the instructors – but the event would not have been the success it was without the neighbours, politicians, and former members coming for a flight, as well as the ESC members who towed, instructed, guided, washed, ran wings, timed, collected, cooked, cleaned, and generally shared their excitement and enjoyment of the art of soaring on this special weekend.

Loretta Puckrin

Blink

from page 14

What does this mean to us as instructors and for student pilots who are learning to make decisions that will have to be made quickly in the future? One may argue, based on Gladwell's book, that to be effective we need to do some analysis to try to identify the underlying patterns that are important in a situation. I will use the example of the aerodynamic stall in flying training. Students need to do the process of editing the essential information about the stall, so that they may develop their unconscious criteria for making a snap decision for recovery. I think we would agree that there is generally no time at a stall to apply deliberate thinking.

Most experienced pilots might argue we have learned that the recognition criteria for the stall are sound, attitude, vibration, control force/feel, and perhaps airspeed. These may be the criteria we use to make a snap decision to avoid the stall by lowering the nose. These criteria can be subtle in some situations and other cues may be more important. Other information such as angle of attack for example, in a simple aircraft, does not help in decision-making. We may not be able to accurately identify all the criteria for a thin-slice decision for the many aviation situations that might constitute an emergency. Gladwell explains that creating scenarios as close to real life that will safely allow the student to experience what should be done, could unconsciously develop thin-slicing criteria for snap decision-making. In aviation instruction, Scenario Based Training (SBT) can help develop these useful criteria in our student's unconscious. Learning theory in the classroom is necessary but is primarily a cognitive process and will help us understand, but we need to develop and reinforce the experience presented in the scenario for the unconscious mind to develop criteria.

The last area the author touched on is, I believe, as important to us as pilots as the physiology of acute stress. Gladwell writes how acute stress and the adrenalin we produce can affect our thinking. He writes that "Dave Grossman, a former army lieutenant colonel and author of *On Killing*, argues that the optimal state of "arousal" – the range in which stress improves performance – is when our heart rate is between 115 and 145 beats per minute. After 145, bad things begin to happen. Complex motor skills start to break down". This is where many of us have the reaction that things appear to be happening in slow motion. He continues with, "Doing something with one hand and not the other becomes very difficult ... At 175 beats per minute, we begin to see an absolute breakdown of cognitive processing… The forebrain shuts down, and the midbrain takes over. Vision then becomes even more restricted. At this point some of us experience tunnel vision… behaviour can become aggressive. At heart rates above 175 the body considers physiological control to be a non-essential activity. Blood is withdrawn from our outer muscle layer and concentrated in the core muscle mass. This is to reduce bleeding in case of injury. But that leaves us clumsy and helpless". He describes people having had difficulty dialing 911 or moving away from an approaching vehicle.

Recall the earlier discussion on brain injury to the frontal lobe. Here they describe the forebrain shutting down at 175 beats per minute, which has similar symptoms to the ventromedial patient, resulting in lack of ability to make a decision and take action. We may call it "pilot error", but we have become the victims of our own physiology.

The author then explains how this acute stress has affected police in the performance of their duties in high stress situations. In some areas of police work, they have chosen to avoid high stress situations such as banning high-speed car chases or using single officer patrol cars to allow cool-off time while waiting for back-up. To counter some stress situations the police have been exposed to high stress environment "stress inoculation" using an element of surprise to cause stress in training. The controlled exercise is repeated over and over, with slight variations to keep up the element of surprise/stress until the trainee is able to complete a scenario with a heartbeat below 145.

Perhaps we need to look at our student pilot's heart rate as a clue when they are not able to perform under stress, and to repeat exercises that have caused the stress until they can cope.

In summary, the author states that "our unconscious thinking is, in one critical respect, no different from our conscious thinking: in both, we are able to develop our rapid decision-making with training and experience." I believe this is a good Human Factors book to read and add to your pilot library. It will give all pilots and instructors food for thought, an insight into how they perform and how perhaps training may be improved.

The author is a staff writer for New Yorker *magazine and formerly a business and science reporter at the* Washington Post.

Title: BLINK – the power of thinking without thinking
Author: Malcolm Gladwell
Publisher: Little, Brown and Company, Time Warner Book Group, New York, NY 2005
ISBN: 0141014598 ❖

Priorities

from page 2

A memorable experience for him was crewing for Ulli Werneburg at the World Championships in Paderborn, Germany in '81. Dave now flies with Silver Star Soaring. Dave and wife Pamela have 4 children and 3 grandchildren.

John Mulder, director of the Alberta Zone, started gliding with the Air Cadets in 1983. A few of his many achievements are glider instructor, APL, AME, inspector for home-built aircraft, and important positions in a scheduled and charter carrier in Alberta. He is currently a WestJet pilot. John shares a Jantar Standard with wife Carol, a Duster with four clubmates, and a Citabria towplane. He lives in Alberta with Carol and four children.

John Toles, President and Prairie Zone director, first flew with gliding clubs in Moose Jaw and Regina in the early 60s. He currently flies club gliders and shares instructing and towing duties at the Saskatoon Soaring Club. He has been involved with numerous positions and activities at the local, provincial, and national soaring levels. A semi-retired educator, he currently instructs part time in the Commercial Pilot Diploma and Adult Education programs at SIAST (Saskatoon Institute of Applied Science and Technology). When not flying or teaching, John and wife Joanne enjoy traveling as well as family time with three adult children and one grandson.

Eric Gillespie, the new Ontario Zone Director, started gliding in 1998. He has flown and owned a wide variety of gliders over the years. He is an active member and instructor at SOSA. When he isn't soaring, Eric practises law.

Sylvain Bourque, VP and Eastern Zone Director, first flew gliders in 1994 and is an active member of AVV Champlain, involved in training, towing, and in accounting. He is a Class 1 glider instructor and owns his CPL. He has organized the winter French ground school in the Montreal area since 1995. He is an aeronautical radio examiner and an authorized person for gliding licensing. Sylvain works as cameraman instructor and supervising technician for Radio-Canada in Montreal. He lives in Montreal with Isabelle and their two boys, quietly interesting the 16 year old in the sport of gliding.

I'm proud to be part of this board that has such a good variety of backgrounds and a huge involvement in the soaring community. We also have some committees who work hard for all of us. Here are the priorities of our committees this year:

- slow down the expansion of the controlled areas of the major airports by possibly using low power transponder in glider in terminal areas;
- revise the SMS documents to include some pertinent suggestions from clubs;
- improve safety of gliding in Canada – reducing insurance claims and reducing fees;
- improve communications and understanding of the SAC insurance plan;
- modernize the SAC website *www.sa.ca* ❖

FAI badges

Walter Weir

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

The following badge legs were recorded in the Canadian Soaring Register during the period 10 November 2006 to 11 July 2007.

750 km DIPLOMA

3	Allan Spurgeon	Rockies	754.3	Ventus 2CM	Invermere, BC
4	Tim Wood	York	760.2	ASW-27	Invermere, BC

SILVER BADGE

1007	David Fee	Vancouver		missed in last issue	

DIAMOND DISTANCE (500 km flight)

	Bob Lepp	Great Lakes	504.3	SZD-55	Seminole Lk, FL
	Ray Perino	Rockies	501.8	SZD-55	Invermere, BC

SILVER DISTANCE (50 km flight)

	David Fee	Vancouver	53.1	Std Libelle	Hope, BC

SILVER ALTITUDE (1000 m height gain)

	David Fee	Vancouver	1730m	Std Libelle	Hope, B
	Martin Sanderse	York	1510m	1-23	Arthur E, ON

SILVER DURATION (5 hour flight)

	David Fee	Vancouver	5:00	Std Libelle	Hope, BC
	Tim Radder	Central Alberta	5:06	Bergfalke III	Innisfail, AB
	Martin Sanderse	York	5:37	1-23	Arthur E, ON

C BADGE (1 hour flight)

2852	David Fee	Vancouver	5:00	Std Libelle	Hope, BC
2856	Tim Radder	Central Alberta	5:06	Bergfalke III	Innisfail, AB

We are having a super weather year and I'm getting lots of e-mail and checking lots of IGC files. They all seem to be good – pilots are doing a better job of making sure their files validate. But why does filling out and sending in the claim form taking months sometimes.

Remember; you have the option of making a paper declaration if the FR isn't very user-friendly. Be sure to include all the items on a paper declaration that used to be required on a photo declaration. Also, *be sure* the time on the paper declaration is *after* the time you turned your FR on. Otherwise your FR declaration will still be the valid one.

FAI BADGE SUPPLIES

Order through FAI badges chairman – Walter Weir

3 Sumac Court, Burketon, RR2, Blackstock, ON L0B 1B0

Note: item 6 not stocked – external purchase approval is given

1	FAI 'C' badge, silver plate pin	$ 6.00
2	FAI 'C' badge, cloth	$ 6.00
3	FAI SILVER badge, pin	$45.00
4	FAI GOLD badge, gold plate pin	$50.00
5	FAI GOLD badge, 10 k gold	$180.00
6	FAI DIAMOND badge diamonds	
7	FAI Gliding Certificate **10 for $39.00 to clubs**	$10.00
	Processing fee for each FAI application form submitted	**$15.00**
36	FAI SILVER badge, cloth 3" dia.	$12.00
37	FAI GOLD badge, cloth 3" dia.	$12.00

Order these through the SAC office

33	FAI 'A' badge, silver plate pin *(available from your club)*	$ 3.00
34	FAI 'B' badge, silver plate pin *(available from your club)*	$ 3.00
35	SAC BRONZE badge pin *(available from your club)*	$ 3.00

Please enclose payment with order; price includes postage.
GST not required. Ontario residents, add 8% sales tax.

SAC forms *(downloadable from SAC web site forms page)*
FAI badge application, Official Observer application, Flight trophies, FAI Records application, Flight Declaration form

"FLARM" design team honoured

At the spring Friedrichshafen Aerosport Aviation Fair, the team that developed the "FLARM" GPS-based anti-collision device, now installed on many gliders and light aircraft, received the *Prince Alvaro de Orleans Borbon Prize* for technical innovation in air sports.

The members of the team from Switzerland that developed FLARM, Urban Mäder, Urs Rothacher and Andrea Schapback, were recognized by the Trustees of the Prince Alvaro de Orleans Borbon Prize Fund as having made "a great contribution to the improvement of safety in air sport".

The US$20,000 prize was presented to the team by Mr. Alvaro de Orleans-Borbon, FAI Executive Director and son of the benefactor whose widow kindly created the fund, in the presence of the three trustees of the fund, Wolfgang Weinreich (Président d'Honneur de FAI), Loek Boermans, renowned aerodynamicist from Delft University and OSTIV President, and FAI President Pierre Portmann.

FLARM is gaining popularity rapidly and is becoming mandatory equipment in many competitions and in high glider traffic areas in Europe and in Omarama, for example.

from FAI website

Trading Post

Personal ads are free to SAC members (give me your club). $10 per insertion for non-members. Send ad to editor. Ad will run 3 times unless you renew. **Tell me when item has been sold**. Subject to editing for length (usually 6 lines max).

single seat

Miller Tern, N38826, 208h, 15m wooden homebuilt. Licensed 1983. Tasman Vario, $2000, w/trailer, 95 flights totalling 79 hours since 2001. (979) 823-2361, <*wwwolf2@verizon.net*> SCOH, TX

HP-11A, 1969, 200h, NDH, Winter & Filser varios, T&B, Two radios, O2 with mike in mask, bailout bottle. Hydraulic brake, two chutes, Winter baro, hangar dolly, tie-downs, Schreder trailer, tool box, rigging clamp and miscellaneous spare parts. Best offer over $8000. Horst Dahlem, (306) 955-0179 or <*dahlem@sasktel.net*>.

PW-5, C-FEPW, 1998, 700 h. No damage history, excellent condition. Custom Avionic trailer. Asking $29,750, negotiable. Ray Perino, Invermere, BC (250) 688-5052 <*pw5@shaw.ca*>.

L33 Solo, 1996, 620 h, stand. insts, Microair 760 w/ boom mic. Always hangared, excel. cond. At Pemberton. Asking $24,000, motivated seller will consider all offers. Jim Watson, (604) 898-9839 H, (604) 815-7704 cell, <*jwat@uniserve.com*>

HP-14T, C-FAXH, 1480 h, glider & trailer in vg cond. New MicroAir 760 with boom mike, ILEC SB8 glide computer, ELT, O2, new winglet-fences. Low maint. A/C giving good value for your dollar. $16,000 obo. E-mail me <*spencer.robinson@rogers.com*> for current photos, (416) 620-1218.

Jantar, C-GDPJ, 508 hours, 1978. May 2007 annual. Based in Regina. REDUCED US$19,000 Orlan Dowdeswell, <*odowdeswell@accesscomm.ca*> at (306) 789-3302.

ASW-20, 1982, 830h. All ADs. Good cond, fair gelcoat. Basic equip, Borgelt B40 vario, B500 final glide/ nav comp, built-in GPS. Both instruments under warranty. Dittel ATR 720 with boom mike, v.g. pee tube system for in-flight comfort. Older diluter demand O2. Simple, safe Wedekind rigging fittings. Komet trailer. US$32,000, in Quebec, (450) 647-2745 (days) or <*soarsvein@yahoo.com*>.

ASW-20, C-GGGE, 1979, 1200h, Komet trailer, refinished wings, excellent cond. Asking $42,500. (403) 282-2723, <*kevin.karin@shaw.ca*>

Open Cirrus, C-GORT, 1969, 1630h. Best offer over $10,000. Peter Neary <*p_neary@telus.net*>.

Slingsby Dart, T51/17R, 961 h TT, new canopy, Ball vario, Microair radio with boom mike, O2, excellent trailer with good rigging aids. Owned and maintained by AME in Red Deer, AB. $13,500 obo. Contact Blaine, (403) 886-5401 or Ernie, (403) 616-6397 for further detail. Photos at <*http://web.mac.com/ewsflys/iWeb/Dart17/DART17_Intro.html*>.

SZD-36 Cobra, C-GQWQ, 1977, 897h. No damage. L/D 38/1, A-1 condition, kept in hangar. Modified PIK-20 fiberglass trailer. Located in Toronto. Asking $15,000. Charles Kocsis <*karoly_cobra@yahoo.com*> (416) 908-5638.

ASK-14 motorglider, C-FIVQ, 1065h airframe, 155h engine, encl metal trailer, $13,000. Serge (780) 645-4034 <*larochelle@mcsnet.ca*>.

Genesis 2, 1998, 331h, 100% race ready. Excl. cond., CAI302, 303, SageCV, WinPilot, ATR720C, trailer, chute. US$45,000. Dave Mercer, <*djmercer@telus.net*>, (780) 987-6201, Alberta.

Ventus bT, C-FMVA, 1984, #37, 1454 h. 15m+ winglets and 16.6m wing tips. Optional 17.6m wing tip extensions incl. Solo 2350 sustainer motor, ~40h. Refinished with polyurethane in 2003. Cambridge 302/303, Compaq 1500 series PDA w. arm and cradle, mech vario, radio. Komet trailer with tow out gear, wing stand, wing wheel and tail dolly. Asking $79,500. At Great Lakes Gliding. Info call Jan Juurlink (705) 687-0158, Mike Ronan (905) 938-5529, <*jjuurlink@cogeco.ca*> or <*soarspot@zing-net.ca*>

two-place

RHJ-8, 1979, 1400 h. Side-by-side reclining seating, adjustable pedals for pilots to 6'-4". T-tail. Elevator and rudder gap seals, increased rudder length, wing root fillets, winglets. Best L/D 34 at 50 kts, thermal 40-42 kts, stall 35 kts, roll rate under 5 seconds. Parallel hinged single piece canopy, improved ventilation. New open trailer. $23,000. John Firth <*bc382@ncf.ca*> (613) 731-6997.

Super Ximango, motorglider, 1996, TTAF 266, TTEN 245. 2-place side-by-side w/bubble canopy. 57.3 foot wing folds to 33.3 ft. Rotax 912 4-cycle engine with liquid cooled heads, 81 hp. Hoffman 3-position feathering prop. Full panel. US$98,000 (replacement cost over $195,000) More detail on SAC Classifieds web page. <*gcfinlay@ rogers.com*> or call Greg at home (519) 884-7973 or cell (519) 841-9221.

misc.

Wanted, adjust. seatback (complete) for an **LS-1f.** If you have one please contact: <*thermalrider@bellsouth.net*> or (904) 284-8919 with cond. & price.

SOARING back issues. April 37, few 1940-1942,nearly all 1943-2003. $200, you pay shipping. Harold Eley, <*heley@sasktel.net*>.

suppliers

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

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Solaire Canada LS series of sailplanes, LX glide computers, Dittel radios, Collibri FRs. Ed Hollestelle, <*ed@solairecanada.com*>, (519) 461-1464.

Invermere Soaring Centre Mountain soaring, camping, glider rentals. Mountain flying instruction in Lark or Duo Discus. Trevor Florence, Box 2862, Invermere BC, V0A 1K0, cell (250) 342-1688, ph/fx (250) 342-7228. Website: <*www.soartherockies.com*> e-mail: <*info@ soartherockies.com*>.

High Performance Sailplanes Planeurs de grande finesse. AMS-flight DG ELAN Std class and 2-seaters. DG Flugzeugbau GmbH 15m, 18m gliders/motorgliders and 2-seat gliders. <*willem@langelaan.com*>

magazines

GLIDING & MOTORGLIDING — world-wide on-line magazine for the gliding community. Edited by Val Brain, <*www.glidingmagazine.com*>.

GLIDING KIWI — Editor, John Roake. Read worldwide with a great reputation for being first with the news. US$40. Personal cheques or credit cards accepted. NZ Gliding Kiwi, 79 Fifth Avenue, Tauranga, New Zealand. <*gk@johnroake.com*>.

SAILPLANE & GLIDING — the only authoritative British magazine devoted entirely to gliding. Bimonthly. US$45 per year airmail, US$35 surface. <*beverley@gliding.co.uk*>.

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

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