2016/3

free flight
Vol libre

L. Szczepaniak

Tom Coulson, Ontario Provinicals 2016. It's so Blue!!!!!

P. McMahon

Flight line, Canadian Nationals 2016

free flight Vol libre

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Photo by Laura Foster

What you get for Ten Bucks

Joerg Stieber SOSA, 2017 Canadian World Team Manager

In the 1960s and 70s Canada had a strong presence at international gliding competitions, commonly placing in the top third. Highlights were Wolf Mix in 1972, achieving a 4th place and Jim Carpenter 6th in Chateauroux in 1978.

In the mid-1980s it became difficult for Canadians to afford to fly in the Worlds when the Federal Government, which had been providing significant support to Canadian Teams, pulled its funding. Canadians showed up sporadically at Worlds and also fell behind for lack of training and exposure to the rigors of world level competitions. There were simply not enough pilots with solid international competition experience around to prepare and coach young, up-and-coming pilots for the next Worlds. We had a strong team in 1991 in Uvalde, TX because the cost of competing on-continent was so much less than going overseas. Two of our pilots boycotted the closing ceremony to protest that they had not received a single dollar of support from the country they were supposedly representing nor from the Soaring Association of Canada.

In 2001 one Canadian competed in the Worlds in South Africa and in 2003 we had two in Leszno. After that there was no more interest from our top pilots. The turn-around came in 2006/2007 when SAC recognized that the competitive side of soaring is an important aspect of our wonderful sport and dedicated $10 per member annually in matching funds to support the Canadian Team at international events. In addition SAC made funds available to promote provincial and national contests. This new attitude in the Soaring Association and the tangible support energized our competition pilots, who started to train with a focus on the next Worlds and built skills and contest experience by flying in US Regionals and Nationals in addition to Canadian contests.

With renewed energy and after thorough preparation, in 2008 we took two pilots to the Worlds in Lüsse, Germany with very encouraging results: Dave Springford, in 15m Class, came a close second on Day 4 with 999 points. Unfortunately, later in the contest he fell victim to the extremely complicated airspace structure in central Europe which cost him nearly all points for the day and killed any chance for a good overall placing. Jerzy Szemplinski was placed well within the top ten in the final days of the contest but fell back to 11th on the last day. Still, the best overall result in 30 years! In 2010 three pilots represented Canada in 15m Class, 18m Class and Open Class in Szeged, Hungary. This was a very challenging competition with several mass land-outs. Jerzy Szemplinski was well within the top ten most of the time. On the last day he leapfrogged from 6th place into 4th, missing 3rd place and the podium by a mere 11 points (out of 6000). The best result for a Canadian pilot since Wolf Mix in 1972!

In 2012, after 21 years, the World Championships returned to North America – again to Uvalde, TX. We had planned to field two pilots each in 15m and 18m class, a good opportunity to team fly. Tragically Derek Mackie, one of our 15m pilots, was killed in a gliding accident just before the Worlds. Dave Springford and Jerzy Szemplinski flew as a team in 18m class and did well. Jerzy placed within the top 10 on nine of the 13 competition days, Dave on three. Jerzy placed 1st on day 9, Dave placed 3rd on day 10. Both finished the competition with a bang: 1st for Jerzy and 2nd place for Dave on the last day. Jerzy placed 8th overall, Dave 16th. Both placed far ahead of the two US pilots in the class – great achievement!

The Canadian Team had another great success in 2015 in the 1st PanAmerican Championships in Athens, TN. We fielded 7 pilots, 3 in 15m and 4 in Handicapped Class. Jerzy Szemplinski won 15m Class by a good margin. His win was instrumental in the Canadians being awarded the Team Trophy as the strongest team between Ellesmere Island and Cape Horn.

The Club Class results of the 2016 Canadian Nationals show that there is a sizeable group of very competitive young pilots – the next generation. They have been inspired by the successes of Jerzy and Dave, our veterans of international competitions, and are being coached by them. Over the past 10 years we have built a Team that is respected at the Worlds level, is the leading Team in the Americas and has inspired many young Canadian pilots through seminars, XC clinics and competitions to follow in the footsteps of our top pilots.

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

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

Material published in *free flight* is contributed by individuals or clubs for the enjoyment of Canadian soaring enthusiasts. Individuals and clubs are invited to contribute articles, reports, club activities, and photos of soaring interest.

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

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

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

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

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

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

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SAC funding, with $10 per member being relatively small in the overall scheme of things, was and continues to be an important catalyst to make this all happen. Looking at what has been achieved and the fact that pilots have to fly 3 to 5 competitions every year to stay on top of their game, it saddens me when I hear that some of our members are begrudging the ten dollars of their membership that SAC sets aside to support the Team in international competitions. What else can you possibly buy for ten bucks that has more value – 5 cups of Tim Horton's coffee?
If you agree with me, please make a tax deductible donation to the World Contest Fund. Mail cheques to the SAC office –payable to: Soaring Association of Canada and on the notes line of the cheque indicate World Contest Fund. Thank you.

Editor's Note: *The ten bucks is much more than a donation to a guy who gets to fly in places that we don't. The amount is a tiny fraction of what each of us spends annually on flying, a quarter of one tow, and the bursary is probably less than 10% of what a National Team pilot has spent to get the World Competition. In order to be tops in Canada, a pilot has to buy a great glider, fly it a lot, and go to expensive regional competitions to get practice under pressure, and get seeded. Besides the SAC bursary and their own personal funds, the team raises substantial amounts through dinners, raffles, etc. from which we who participate get our own benefits. Here is an example. SOSA held a Spot Landing contest, the club picked up the relatively small actual cost of a short tow and a few minutes in a club glider, with the entry fees going to the Team. Aside from the funds raised, think of the benefits to the club as a group and the members themselves. What better way to have fun, rivalry, practice precision flying under supervision, learn from others, and feel good about yourself?*

It is obvious that a strong cross country program at a club enhances membership numbers, general pride, and helps retain members who otherwise get bored and leave. SOSA is famous for achieving this benefit, and York Soaring has gone from a "2-33-only place" to the host of one of the best ever Canadian Nationals. Even if you don't fly cross country, your club and all of us in Canada are stronger for having friends who do, and there are good reasons to contribute to those who do, because they help keep up interest and activity at our clubs. SAC pays a modest fee to support OLC, and when I was a SAC director, I opposed this, suggesting it should be "user pay." I was wrong. OLC has promoted and enhanced more flying in Canada than anything I can think of. Supporting competition pilots is, I think, very similar. ❖

Support The SAC Web Editor

SAC created a valuable resource by making Selena Phillips-Boyle our Web Editor. Up-to-date websites and a Twitter presence are great marketing tools and enable us to communicate in real time, which this magazine cannot do. We need you to send to Freeflight your in-depth articles, and Selena needs your help to keep you in contact with everyone across Canada. She is providing the platform, you need to supply the content. She writes:

I have been working to keep accurate and up-to-date content on our website, and maintain a presence on social media by connecting us with the worldwide soaring community. To reflect the bilingual nature of SAC, I have arranged to have all of our website's static content translated into French, beginning in 2017.

I will continue to increase the quantity of content in the News and Blogs section of our website, to diversify the visual content and to keep the calendar current with events from across Canada. I invite members and clubs to send me short stories and photos with time-sensitive content, and to continue sending longer more in-depth stories to Freeflight. If you want to make a submission, but are unsure what to write about, please contact me for ideas! I hope the website will continue to be a place for nationwide exchange of information, ideas, initiatives, and energy. Send web content or make suggestions to webeditor@sac.ca or connect with the Soaring Association of Canada on Twitter @canglide. ❖

Introduction To A Reprint Of An Ian Spence Record Flight

by J. R. Faliu

In Freeflight 2016/2, the "African Adventure" story, the Stiebers meet a guy they describe like this:"There were a number of characters amongst the bunch, but none larger than Frenchman J.R. Faliu." J.R. told them a story about a Canadian, Ian Spence, with whom he flew in Minden, Nevada, in 1990, when they set two FIA World Records on two consecutive flights. Ian wrote an article for freeflight in 1992/1, pg 6. , about the flights in which he notes: "We were fortunate to meet several interesting people. Among the most memorable were Jean–Renaud Faliu and Lee Hallerberg." Here is J.R. Faliu's intro to the story, then a reprint of Ian's article from 1992, followed by Ian's comments. Editor

Imagine this. I made a flight in Minden, with a Canadian pilot, Ian Spence, who had never flown an open class sailplane, in an ASH 25. I had completely forgotten that story. It's these two Canadian pilots here in Bitterwasser, at the end of their stay that told me: "JR, you're still on the listing at home, your record still stands, since 1990!"

He (Ian) asked me if he could do a flight with me, and then attempt a 300 speed triangle record task. Why not? I asked him the speed of the Canadian record and at the time, it was 74 km/h! "Uh", I told him, it's not very fast, your record! But we will not do it today! The sky will explode in our faces pretty soon. We will be lucky if we go to the first point, Potato Mountain, and luckier if we come back. Also, if you want to set a record, I do not touch the controls, unless you're about to break the machine. "

20 km before the turnpoint, lightning everywhere! "Quick quick", I said, we go, sharply, and turn presto!" On the way back, I see pink color between two cu nims. Biagi had told me: "If there is pink, it's the sun shining on the other side!" I told my pilot, "Are you ready to outland?" "Of course, he replied" He was ready for anything! Think about it; first flight in an ASH-25, a record, or a potential out landing.... In short we steer 90 ° from our return leg, cross a little bit of rain, and we stumble into the sunlight (I knew we had a landing strip, just below us if needed). "Find me a 6 m/s and climb to cloud base" To my dismay, he finds a 6 m/s, and we pass 5000m !! "Now, I tell him, you see the small light bar between the mountain and the cu nim? Well, that's where we're going! The display says 220 km/h and Banzai!" But he said to me, we will never get there! It's too far! "Never mind I said, it's an ASH-25, go!" We pass the clear bar with 50m to spare and report our arrival. In short, my pilot makes a fair landing. Then he comes to see me, and said: "We have beaten the Canadian record" The guy was floating above the ground being so happy!
(Now, back to the present day.) Namibia is not what it used to be! This morning, I am the one that did the briefing, in English. I told them to stop their breakfast, to stand up, hold hands and repeat after me an incantation to the inventor of Top Weather, Bernd Goretzki, designer of forecasts system that come here to fly here...It began: "Dear God Goretzki, be good, be generous, we cry, we are sad, send us beautiful cumulus, good thermals If you want blood, you have two victims for you, both chief pilots of the day, one being bigger than the other". They were bent in two with laughter. And to have them laugh is unusual. First, they are German... and second, Germans who have not flown for four days, € 180 the daily pension, and 380 € rent of the glider while prepaid, non-refundable ...

All the best, Jean Renaud ❖

http://lynx01.over-blog.com/article-plaisirs-et-per[illegible]es-en-vol-a-voile-en-namibie-avec-mon-ami-pierre-charodie-46798084.html

An Offer I Couldn't Refuse

Ian Spence, SOSA

Ed. Note: This is a great story, from Freeflight, 1992/1. I have made some changes, to shorten it a bit, and to take out references to services which may not still be available in Minden. Ian was a great guy to have around at SOSA and we miss him since he moved west.

IT WAS A GREAT DISAPPOINTMENT not to go to Uvalde for the Worlds. The organizers discovered that they had erred in allowing four Canadian pilots to fly in one class and informed us that the IGC rules allow only three per class. My crew, Michael Steckner from the London Soaring Society, and I had taken holidays and prepared for a month's cross country flying, so we did the next best thing and went to Minden, Nevada, which had been the original venue for the 1991 World contest before the SSA organizers changed the site. I found Minden a fascinating place to fly during Ameriglide and looked forward to returning. In summer Nevada offers spectacular desert and mountain flying, and Minden is probably the pre–eminent North American winter wave site. You can mix in some skiing at Lake Tahoe when the wave is not working or backpack in the Sierras during the summer. The less athletically inclined can lighten their wallets at the many casinos in the area.

We set off with my LS4, WW, in tow and covered 4000 kilometres in 3 days of fairly hard driving. Although a little tired, we both flew the LS4 on the following day. The conditions were pretty decent and I flew to Mount Patterson and back in just over an hour, averaging about 140 km/h. Alas, the following days were not to provide classic Minden conditions. Under the influence of a southeasterly monsoonal flow, we had massive overdevelopment by mid–afternoon each day, producing some spectacular flying but, since the thunderstorms eventually washed everything out, long flights were impossible. I decided to concentrate on shorter flights, and make attempts on some Canadian records, while Michael tried for his 500 km Diamond distance. Minden attracts good pilots from all over the world, hoping to make long flights or break records. That summer was no exception and we were fortunate to meet several interesting people. Among the most memorable were Jean–Renaud Faliu and Lee Hallerberg. The former is a veteran French glider pilot with vast and varied experience and his friend Lee is a Californian who owns a Schleicher ASH–25. Lee was making attempts on US multiplace records while J–R, as everyone calls him, was attacking the French records. He speaks perfect English, which he teaches in a Paris high school, and has travelled widely promoting the French HUDIS heads–up glide computer system as well as giving talks on many aspects of soaring. He is a born raconteur and I greatly enjoyed listening to his witty and informed opinions on all facets of our sport.

My crew Michael owns a well-travelled Ka6CR, in which he has flown his Diamond goal, but his experience in glass is limited to a few flights in a Grob and his dad's ASW–15. However, Michael had no problems with the LS4, which must be one of the nicest and easiest of all ships to fly, and on his third flight made a creditable attempt on the 500 km. He completed about 440 km on a day that I would not have thought much more than 300 km was possible. Had he been more aggressive earlier in the flight he might have completed. Distance flying is speed flying and we must push early, as well as during the strong part of the day. I made one interesting long flight which took me south to the White Mountains and then east to Tonopah (they tested the Stealth fighter nearby.) The desert and mountain scenery was spectacular and, after a somewhat slow start to the day, I was regularly getting 12 kt lift to 18,000 ft. I had intended to go north to Winnemucca before returning home but the sky started to fall down and I had the greatest difficulty threading my way around and under giant thunderstorm cells for a direct return to Minden. I encountered rain, sleet, and terrific sink in places, and was quite pessimistic about making it home, and fortunately, my luck held and I managed to squeak back.

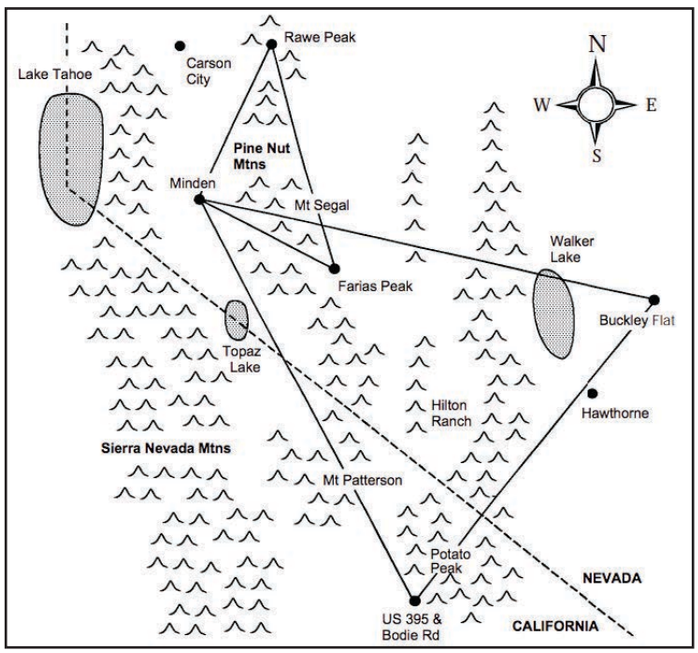
Because of the daily problems with overdevelopment, I decided to concentrate on the 300 km triangle record, hoping to complete my attempts by early afternoon before the sky blew up. I made two tries at Peter Masak's record of 149 km/h which was set in a Nimbus 3. Although I believe that over 140 km/h is certainly possible in an LS4 on the right day, I could only manage 127 and 121 km/h. Since the weather had not been great on each of these days, I was quite hopeful as I prepared for another attempt on the 30th July. Sitting in Whiskey Whiskey, just about to be pulled onto Runway 16 for takeoff, I was surprised to see Jean–Renaud Faliu come running up. "Ian," he said, "I am about to make you an offer that I do not think you can refuse. How would you like to fly the ASH–25?" As you may imagine, I was out of the LS4 in record time — I don't expect that I'll get many opportunities to fly what is arguably the best glider in the world! As we towed Two Five Hotel to the takeoff point, I asked J–R whether he planned a record flight. He said no, he did not think that conditions were good enough and, I was not going to be a passenger, but was going to fly the ASH–25. An idea immediately took shape in my mind: if J–R was not going after a French record, why not declare a Canadian record? I already had my declaration, maps, and cameras prepared for a 300 km triangle open attempt and so the change was minor to accommodate a multiplace attempt.

With Michael's assistance as Official Observer, this was done in a few minutes. Then followed a rapid briefing from J–R on flying the ASH–25 and using the amazing French HUDIS heads–up computer display. In less than 15 minutes we were ready to take to the air. The afternoon temperature was about 33 degrees C and at the time of launch several large thunderstorm cells were visible along the first leg of the task. On tow I felt like a rank beginner with Two Five Hotel swaying left and right

behind the Pawnee. The long 25 metre wings create considerable adverse yaw, requiring a lot of rudder, while the ailerons are incredibly light and sensitive for such a large ship. Although flying the ASH–25 is not difficult, getting used to the coordination of rudder and aileron takes time. Off tow, I had difficulty in suppressing small–glider habits. Attitude changes are necessarily made more slowly in big ships, and Jean–Renaud had to caution me, "Gently!" several times, as I tended to want to move the glider around like my LS4.

Because of the developing thunderstorms (with the consequent need to get going soon) we decided to forego a speed start through the gate, which would require towing to about 1000 metres, finding lift, and climbing another 500 metres, or more, before calling IP and making the start run. Instead, we released above the gate, using the release time as the start time. We cut loose at 2000 ft (6700 ft MSL), rather than higher, so that there would be no doubt about our having started below 1000 metres (as determined from the barograph trace). At Minden, the ASH–25 usually can climb faster alone than be towed full of water at 6700 ft! After release we went about a kilometre to a thermal we had noted on tow. We lost no height on the way and contacted about 4 kts which improved to 6 kts as we climbed through 9500 ft, before heading for Mount Segal in the Pine Nut mountains about 18 km southeast of the airport. We took 4 to 8 kt lift to 16,000 ft, over 4000 ft above the highest of the Pine Nut mountains. (This is the standard departure for flights heading south from Minden. In general, you fly the mountains — the valleys rarely provide good lift and you quickly learn to stay over the high ground, even though it often looks quite inhospitable.)

We left the Pine Nuts en route to Mount Patterson,



which still had some snow on its summit in late July. By this time we were running under the windward side of some fairly large, black thunderstorm cells. Just before Patterson we climbed to 16,500 ft under a huge black brooding cloud deck alongside a heavy rain shower. We then faced a problem. There was heavy rain ahead with frequent lightning strikes on Potato Peak, just to the east and north of the turn. We had to divert to the west, into the valley, around lightning and rain before approaching the first turnpoint at 15:47.

The lightning was striking near Bodie, a ghost town of the Old West which is quite a tourist attraction. Cruise speed on the first leg was only 80 kts since we tried to conserve as much altitude as possible as insurance against the heavy down that we knew could be lurking in wait for us under the threatening clouds. After the picture was taken, a detour to the north was necessary to avoid the thunderstorms which had closed out the second leg. Near Sweetwater we could just see some sun on the ground east of Walker Lake and were finally able to deviate due east, past the Hilton Ranch, and eventually cross over just north of Mount Grant, where we took 8 kts to 17,000 ft before heading for the second turnpoint at Buckley Flat.

Cruise speeds on the second leg were about 80–90 kts, and we made the turn at 16:26 with 13,500 ft, where we climbed in the best lift of the day at 12 kts to just over 17,000 ft. The last leg was done without circling. Michael called to say that, from his vantage point at Minden, the sky looked absolutely dead on the third leg. The sun was totally blocked by blow–off from the cumulo–nimbus anvils and there was a fair amount of mid– level scrappy dying cumulus. I replied that I didn't think there was a problem since the HUDIS promised that we could get home with no further climbs. Some patches of weak lift were encountered on course and we climbed straight ahead when passing through. The run in over the Pine Nut mountains was quite exciting as we zoomed low over the ridges before coasting the remaining 15 km up the Carson Valley. I flipped the water ballast dump valves about 2 km out, and we crossed the finish line at about 100 ft before pulling up to 900 for the circuit. The last leg was flown at about 100 kts. The task took 2 hours and 22 minutes yielding 128.6 km/h, which was good enough for a new Canadian record. This speed can hardly be considered spectacular for an ASH–25 at Minden, but given the relatively poor weather and my inexpert handling of the ASH–25, I should not grumble. On a classic Minden day over 160 km/h should be possible.

A few days later J–R asked me to be the passenger in a 100 km triangle attempt on his own French record of 154 km/h. Again, the weather was not optimal, with overdevelopment threatening, and no strong lift reported by other pilots. I didn't refuse this offer either, and J–R was kind enough to let me do the flying before we made the start gate run. This gave me a chance to get more comfortable with the ASH–25 and I really

started to feel at home in this extraordinary glider. I particularly liked the way the long flexible wings took the bumps out of the air, especially when thermalling. The ship grooves much like the ASW–20, requiring little stick attention even during the very steep turns that most Minden thermals seem to require.

The flight was an eye opener. J–R is a master pilot and handles the ASH–25 like a Standard class ship. Most of the trip was at, or below, mountain top height. Jean–Renaud is a true mountain flying expert and it was instructive to observe his decision making and technique. The first turnpoint was Rawe Peak just south of Dayton Valley. We came within a hairsbreadth of having to slide off the mountain and head for the Carson City Airport since we found no decent lift on our glide into the mountain after running the start gate. We were right down to the deck before J–R racked Two Five Hotel into a rather poor thermal several hundred feet below ridge top. He stayed only long enough to get sufficient working height before heading for the turn, where we found a rather better thermal that we rode to 10,500 feet.

We left for the second turn, needing several thousand feet, and immediately ran into some bad luck in the form of rain from a dying thunderstorm cloud. Things were not looking good and J–R anxiously asked for updates on our time and likely speed. My replies were not encouraging. On the second leg under an ominous but largely lifeless thundercloud that was still dropping rain however, J–R deviated towards the valley to run a secondary ridge, rather than take the high ridge. On the way we suffered heavy sink, losing perhaps 1200 feet. Afterwards, I asked J–R why he dropped to the lower range, since I had been absolutely sure that the upper ridge was the right choice. "Ah," he explained, "we needed a good last climb before the second turn, and I knew we would not find it on the top ridge, but there is a rock outcrop at the end of the low ridge that I was certain would provide what we needed." And so it proved to be. The HUDIS started to sing as the lift increased to 14 kts, taking us to 13,000 ft before heading over Mount Segal for the turnpoint and we took the pictures at Farias Wheel Airport from 11,300 feet. I activated the fixed cameras and J–R took the handheld insurance shot. Then we turned for home, skimming across the spine of Mount Segal, before dropping down the slope into the Carson Valley. We came in from the Pine Nuts at 110 knots, speeding up to 130 during the last few miles.

After the landing, a quick cockpit calculation showed that 108 km in less than 41 minutes gave J–R the new French record at 160 km/h. It was a pleasure to fly with J–R in Lee's beautiful glider. J–R has several thousand hours in gliders, and several hundred in the ASH–25. Two Five Hotel is a wonderful sailplane with state–of–the–art instrumentation and I am very grateful to Lee Hallerberg for letting me have two memorable flights in his ship. I learned a lot and had a great deal of fun, too. As I said to Jean–Renaud, maybe we should make flying together in Lee's ASH–25 a habit — every time we do it, we break a record!

And so, after almost three weeks of interesting flying, we said goodbye to Minden. Michael made his Gold altitude but did not get a good enough day to complete Diamond distance. The weather was something of a disappointment and we did not manage the 500s, 750s, and 1000s that we had dreamt of. Nonetheless, we had some spectacular soaring in two superb gliders over a landscape that is rugged and intimidating but always beautiful and awe inspiring. This is one of the best places in the world to fly sailplanes, with good ground support and I recommend it wholeheartedly.

Ian's comments from 2016

I have fond memories of the two multiplace record flights with J-R in Lee Hallerberg's fabulous ASH-25. Sadly, I heard a few weeks ago, that Lee had just died of a stroke on February 6, at the age of 78. He was a larger than life character with varied interests and passions. He was a great aviation enthusiast and a friend of soaring and glider pilots. In 2005, he bought the Ely Jet Center, Ely, NV where so many record soaring distance flights have been made in recent years.

I was amused to read J-R's recollection of the flight. He gets a few details wrong but after a quarter of a century his memory is surprisingly accurate! To my chagrin, he is not mistaken in saying that I was a little ham-handed during my first flight in an open class ship. The ASH-25 remains a fine glider but it has been surpassed by the latest generation of "libres" like the ASH-30, Quintus, Eta, EB-28/29, and Concordia. Even current 18 m ships like the JS-1, LAK 17, ASG-29, and my own Ventus 2cxt, are not far behind and, when fully loaded in strong conditions, they are competitive with the big ships.

Record flying is so much easier today with GPS and flight computers. Fiddling with paper declarations, maps, barographs, cameras and film, was a royal pain, to say nothing of the aerobatics needed to get the turn point in the frame without the wing obscuring it. But we did have one "space-age" instrument: the French HUDIS head-up display. It was a transparent panel with a sandwiched LCD that showed speed, altitude, and lift, as well as a rudimentary glide calculator (you can see one on YouTube—Google "Ventus C cross country"). The HUDIS was not very easy to read since the contrast was fairly low but it made you feel like a fighter pilot. Unfortunately, its price and poor readability doomed it to commercial failure and I don't think that very many units were sold. Today's LXNAV, ClearNav, and LX Zeus flight computers are incomparably better … but they are still not HUDs.

Many thanks to Lee and J-R for these unforgettable flights in Two Five Hotel. Our 300 km multiplace triangle record still stands. It's high time that it was broken. ❖

Manfred Radius Receives Award at Oshskosh

EdNote: *The following two paragraphs are edited for brevity from the September 2016 issue of Soaring Magazine, reprinted by courtesy of the SSA, and the acceptance photo is from their October 2016 issue.*

Manfred Radius is the 2016 recipient of the Bill Barber Award for Showmanship. He joins a long list of honorees that reads like an airshow hall of fame. Manfred Radius started flying sailplanes in 1961 at the age of 17 in Hamburg, Germany. He immigrated to Canada in 1969 and became a glider instructor pilot in 1972, adding the glider aerobatic instructor endorsement in 1977. For many years, Radius was the only glider aerobatic competitor in North America. He competed in the German Glider Aerobatic Championships in 1977, 1979, and 1981, and in 1985, he represented Canada in the first World Championship of Glider Aerobatics in Austria.

Radius began flying at airshows in 1986, and has since performed all over North America and as far away as Australia. Flying an H101 Salto sailplane, his graceful, silent aerobatics are accompanied by a classical music soundtrack and wingtip smoke. His act is a crowd-pleasing change of pace from the noisy performances of powered aircraft. Radius is well-known for his unique sailplane inverted ribbon cut. The Bill Barber Award for Showmanship was presented during EAA AirVenture.

Manfred is a friend of ours who flies at York Soaring near Arthur, Ontario, and we asked him to explain the award. Congratulations, Manfred, and we think you will enjoy his website at http://www.radiusairshows.com/ Editor

"Bill Barber was an air show performer extraordinaire, performing with several different airplanes. He performed many different acts in his Clipped Wing Cub alone, including skywriting, a deadstick routine, a comedy act, a rope ladder pickup, and a car-top landing. He also performed team aerobatics and a wing-walking routine. This uncommon ability prompted one aviation writer to dub him "Aerobatic Flying's Renaissance Man" and another, "The One-Man Air Show." His last public performance was at the 1987 EAA Convention and Air Show at Oshkosh. On October 10, 1987, Barber died of cancer at home. Presented annually at EAA AirVenture Oshkosh by World Airshow News and friends and family of the late Bill Barber, the award recognizes an air show entertainer who has demonstrated superb showmanship ability. I was the lucky recipient on July 26, 2016." ❖

Eric Dumigan

Soaring Oct 2016

Eric Dumigan

Another Tribute to Jim McCollum

(A self-confessed "Strange Combination")

by Doug Scott, Editor, and friend

Our long-time Executive Director of SAC sadly passed away on Nov.20th. For years he worked alone, making our association run better, his dogs quietly sleeping in their baskets and old tapes of "Bob and Ray" playing in the background. Ed Hollestelle says, "Sorry to hear of Jim's passing. He was a really nice person, and one of the few that knew how SAC operated...His investment skills earned a lot of money for our organisation. Most of our members do not know about this."

Last year Jim wrote: "Please don't print an obituary when I croak. At the time that John Toles, et al wrote an article about me, I told Tony that it could serve as an obituary. Incidentally there were a few errors in that article - but then I was not exactly cooperative in providing information. In any event, who cares? Incidentally, Elisabeth received an ad from Beachwood Cemetery today - should I be worried? It sort of reads like a travel brochure - higher prices for a plot (cabin) with a view, etc." The previous article was in ff 2011/3, pg. 4, and was a "Tribute". Well, old friend, this is not an obit, just another "Tribute. "

Jim was the subject of the Beanie Copter story, ff 2016/1 pg 22. He said "The history of this is, of course, shrouded in mystery and legend; here is another obscure and goofy fact: my secretary at the time was previously employed as a magician's helper. I don't know that I can recall all of the details. The events would have taken place some 25+ years ago and I am now a tottering old fuddy duddy, fumbling and bumbling my way through my golden years. You can draw on these notes, but leave my name out of it. (It was hard to disguise him, because how many GGC members worked for Interpol and drove Citroens?) I already have a reputation as an eccentric. For example, the University of Waterloo used a picture and quotes by me in a brochure seeking donations. I reluctantly agreed; what persuaded me was I thought some experience as a panhandler might come in handy in case I get reincarnated as a beggar in Mumbai. (Boy, talk about financial planning for the future.)

Other correspondence included: "I can't say that I read Playboy very often. I think that the last time that I bought it I was about 17. I bought a copy of Scientific American at the same time. It was in a drugstore in Grimsby, not far from where I lived. The lady at the cash remarked that it was a strange combination. As I recall Playboy was pretty tame in those days." On his Catholic upbringing: "I used to confuse Jesus with Wiarton Willy. Was it cloudy or sunny when Jesus emerged from the cave? And did this have implications for the Second Coming?" On setting a dinner date with my wife and I: "On May 14th we usually celebrate the birthday of Rudolf Lipschitz; however we could make an exception. May 14th has a culinary connection in that Gail Borden patented her process for condensed milk on this date in 1853. On the other hand, on May 13th Cardinal Richelieu introduced the table knife. Either date would be ok." I told him I just wanted to see the park bench he once shared with Louis St. Laurent.

A few years ago, the Nats at GGC had more wait time than I had ever seen, and during a siesta, I looked up at Jim reading about a 10 pound biography of Alan Greenspan, former Chair of the Federal Reserve. I myself was thumbing through Calvin and Hobbes. When I sent Jim an obit of a former colleague, he wrote back: "Among other things in the early 70s I worked on the econometric model that is mentioned in the article. I was responsible for the financial sectors of the model: domestic monetary conditions (interest rates, etc.) and international capital flows and the foreign exchange market. Elisabeth and I used to go cross-country skiing with Mike and his wife. We also had a connection through Rice University - his undergraduate degree is from Rice and I have a MA and PhD from Rice. I am pretty well out of economics and finance these days, although I participated in a couple of international conferences (Ottawa & Paris) and could have given a paper in early September in London."

I learned never to ask him to recommend something to read, and expect it to be in English. "I haven't been doing much writing these days, although I may do an article in comparative French & Spanish literature, drawing on the work of Eduardo Mendoza and Fred Vargas (pen name of Frédérique Audoin-Rouzeau) for an academic conference and publication."

Lately, the tone of the emails changed. "I am having some serious mobility and other health problems which prevent me from flying. There is little chance of me doing gliding in the future, accordingly, I have decided to sell the glider. (And the canoe and the motorcycle.) It is all very sad." I wrote sometime later and inquired about progress. "Thank you for you thoughtfulness. Actually my aliments are getting worse. I think that it will pass however." In a misguided attempt at humour, I asked which would pass, the ailments or him. He sent me some old photos and his last words to me, to us all, were:

Cheers and Merry Christmas. Jim

An Interview With Col. Chris Hadfield

Part Two of Two

David Donaldson, SAC National Safety Officer

The last issue of Freeflight featured the first half of my interview with Colonel Chris Hadfield. We had a conversation regarding safety in soaring and what lessons can be learned from a life of flying as a fighter pilot, test pilot and astronaut. We covered such topics as dealing with added pressure in the cockpit during a contest and the need for properly understanding the environment and the aircraft we are operating. In part two, the conversation shifts to explore the concept of a club's culture and how we can leverage that to enhance safety in gliding.

Freeflight: We often struggle at an organizational level, both within clubs as well as nationally. What advice would you give to help build a generative safety culture?

Col. Chris Hadfield: Number one is in the way it's taught. People should recognize that there is a personal and a public trust that go along with getting a licence. A licence is not permission to do whatever you want. A licence comes with an earned set of responsibilities. They are not just responsibilities to pass a test, but they are responsibilities to do something that only a tiny subset of the population does and so they need to be taken seriously.

A lot of that is in safety and it should just be a natural thought and process of everything that is going on, the rote by which you prepare for a flight, how you prepare the airplane, how you check it, how you check all your equipment, you know, just the standard patterns should be driven by safety. They should be taught that way, not as a restriction on what you are doing, but as a habit pattern, and then they should be encouraged at the operational level. People should be looking out for each other's safety. People should chastise each other when they see somebody doing something that is unsafe. There should be a reporting process by which people can fess up to what they did that was stupid or what they did that they learned from. Or, you know, you had a near miss or a bird strike or confusion or you got caught short or you did an off-field landing and what did you learn from it.

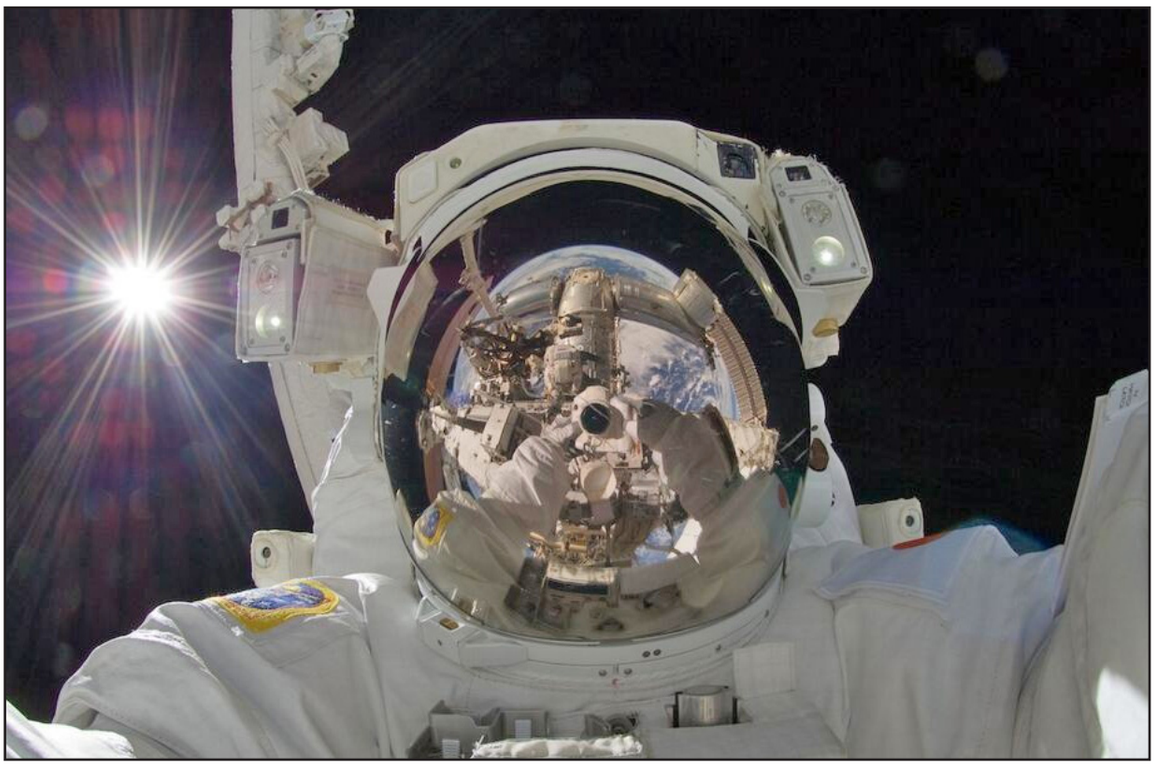
I think that professionalism and that culture of an expectation of everybody rising to a standard of responsibility and safety should be endemic in what everybody does. People should feel both wrong and guilty if they have caught themselves doing something that is unsafe. They should then feel the responsibility to impart what they learned from it to as many other people as possible. You need a board where everybody can report what they've been doing and what they learned from it. When I am going to fly a new airplane I go to the National Transportation Safety Board's site and I read the last hundred accidents in that airplane. What is it that people did wrong? What are the normal failures for this airplane? How does this airplane manifest its particular problems? How have people screwed up in this airplane? So that I can learn from other people. The only way that process works is if people fess up and talk about it, and then you don't have to learn all the hard knocks yourself.

Imagine if every time you got in your glider that you could read about the last 30 people that ran into a problem with this airplane, either something serious or a near miss, how did it happen? What did they forget or what are the tricky things about this plane? Or how does it try and kill you or what caught them? Imagine if you had those answers in the front of your mind. You would be a better pilot with a better chance of bringing it back. It is just kind of a culture you should always, I think, be cultivating.

FF: What are your thoughts on ego in the context of flight safety?

CH: Well, ego is normally just a verbalized insecurity and if you are truly a competent pilot, and you're truly a professional pilot, then you're pretty secure in your own set of skills. You also recognize that some days you fly better than other days. Some days you get yourself into a set of circumstances that you didn't anticipate and other people should learn from those mistakes.

I started with Air Cadets when I was 15 but ever since have been a professional pilot. On a professional fighter squadron where we get very, very close to death on a regular basis and we push those airplanes, the highest performance airplanes in the world, we push them right to the limits of what they will do. Every Monday morning we talk about the stupid stuff everybody did this past week, and someone will stand up and give a long briefing on a bad situation they got into. It is the only culture that can keep us all alive. It's just expected, non-accountable reporting. You know, where people are not personally accountable for reporting the problems that they ran into so that therefore they don't face the recriminations of it. It's really critical to have that as part of the culture. If people are hiding mistakes or lessons learned then either they don't feel enabled by the environment, they feel someone is going to persecute them, or they are worried that someone is going to think they are less of a pilot. But they are less of a pilot if they keep it to themselves and then watch somebody else repeat the mistake and have a worse consequence. So it's mostly a mindset and you have to get people over it and the only real way to get there is to adopt it as your own personal habit. All of the senior pilots should be smart and experienced enough to adopt it as their habit and then the new pilots who come in will just see it as



C. Hadfield http://colchrishadfield.tumblr.com/image/62727552358

normal. That is how it is in the professional flying world and there is no reason that it shouldn't be that way in the private flying world.

FF: Fantastic. Thank you. I love that you said, when you report it, you are not going to have that retribution. Many people say we have to do anonymous reporting so that you don't get in trouble. But really if we can cultivate the attitude that it's safe to report, as opposed to anonymous reporting, I think we are much, much better off.

CH: Yes. And people should not feel personally threatened to stand up and go, "You won't believe the stupid thing that I did today. I just can't believe, you know, I landed the wrong way on the runway. Why?" Why did I land the wrong way today? How did I get it wrong? Did I miss the windsock, did I miss the briefing, did I forget to make a radio call, did I not look? What was the process by which I did something stupid today? Because everything possible will eventually be done and hopefully you can keep somebody from really hurting themselves. Because if you are there to debrief people, you got away with it and so hopefully people can learn from it. I have watched pilots kill themselves because they didn't learn from other people or they thought they couldn't make a mistake. You need to develop a mindset that will help stop that, or at least head it off at the pass, wherever you possibly can.

FF: Yes. Fantastic, thank you.

CH: There is something I wanted to mention. I did a lot of testing on ground effects back in 1988, of whether you should use ground effect or not if you don't think you are going to quite make it to the field. Whether you should hold best L over D or best penetration or whether you should stuff it down and get into ground effect. We did the definitive study of that back in 1988, in the desert, as a test pilot out at Edwards using Grobs and Blaniks.

FF: Yes?

CH: So three different aspect ratio airplanes, and it was written up in Soaring magazine in about '89 or '90. It was kind of a study of, okay, here is a common problem pilots are faced with but without definitive answers people just sort of guessed. It's nice to always have the definitive source of the answer and I learned a lot about flying from that test and our ability to truly filter out what the right thing is to do if you're not going to make it to the field. I would just recommend, anybody, if you ever have a question, probably somebody in the past has figured out the definitive answer. Especially with internet capability now, dig back in and learn what the answers are while you are sitting looking at a computer. And not try and figure the answer out when suddenly the fates have conspired to box you into a corner that you didn't think you'd ever have to deal with.

I'm always trying to do things in advance. When you ask, you know, what has life experience taught me about safety: visualizing failure, visualizing things going wrong and trying to learn the lessons before the event happens. To me that's the only way we could ever fly in space. The only way I could ever have succeeded as a test pilot, and I think it applies not just to test piloting but also to soaring and glider flying but also just to regular management of life. (Author's note: A copy of the research paper on extending glide by using ground effect has been posted

on the SAC FTSC Forum. Its conclusion? Ground effect is not effective in extending your glide.)

FF: So to just wrap it up, here is an absolutely personal curiosity question. With over 70 types of aircraft in your logbook, what's your all-time favourite aircraft to fly?

CH: I think it's over 100 now, that's an old number. My favourite? Well, there were only a few that I disliked. I've been lucky to fly a lot of different airplanes. I currently fly an F-86 Sabre and it is so delightful because it's one engine, a set of wings, one seat, and a bubble canopy. It is just pure flying. It feels to me like someone just actually mounted wings on my back and told me I could fly. You know, it's just beautiful. The airplane is just so much fun to fly, it looks good and it flies good. I mean, I've flown airplanes that have a lot more power but as far as just straight unfiltered joy of flying, I probably like the F-86 Sabre as much as anything I've ever flown.

FF: Nice. Thank you. You've given me great material to work with here.

CH: Great, well thanks very much. I appreciate you making the time and I hope you got everything you need for your article.

Reflections after our conversation:

Col. Hadfield's humble and approachable demeanour was the first thing that struck me upon meeting him. I felt like we were a couple of colleagues chatting over a coffee. This, coupled with his very logical approach to flight safety not only made sense, but put me in a frame of mind to better receive those messages.

Safety culture needs to be a community effort. "People should be looking out for each other's safety," part of what I love about soaring is the community aspect of it. I was at a Transport Canada seminar recently chatting with a power pilot who was telling me how he would sometimes go a whole year without seeing or talking to another pilot. He keeps his airplane at a small private strip with a half dozen other aircraft and it is normal for him to come out, fly and not see another individual. Personally, I enjoy the company of others and I appreciate those extra eyes when it comes to safety.

"Ego is a verbalized insecurity … if you are truly a competent pilot … then you're pretty secure in your own set of skills." We are life-long learners and that is especially true in aviation. A pilot who "knows it all" is a dangerous pilot and it takes courage to admit failings and ask for assistance. This is a concept I have wrestled with personally and my work in aviation, and in particular in safety, has really helped. A couple of years ago GLGC started an award that was designed to celebrate people's mistakes. Well, not really the mistake, the corrective action that prevented the mistake from developing. We all make mistakes. It is the corrective action that separates the great pilots from the statistics. The first step is to admit to ourselves that we are not perfect, accept our failings, and recognize when the chain of events is developing. This is simple logic behind the chain-of-events concept in accident prevention. I am very happy to see several examples of this in the annual safety report from multiple clubs last year. Not only are people seeing the chain develop and taking appropriate action, but they are talking about it.

"When I am going to fly a new airplane I go to the National Transportation Safety Board's site and I read the last hundred accidents in that airplane." Do the research. Investigate and educate yourself as much as possible so you are able to deal with situations. In the book "*Blink*", by Malcolm Gladwell (Back Bay 2006), he talks about how improv groups work. It is a combination of rules and rehearsal. He contends that spontaneity is not random and, having done some improv in school, I agree. In flying we are constantly improvising, dealing with an ever-changing situation. It is the rules of the game and our rehearsal that enables us to remain effective in those situations. Researching is how we establish those rules as well, when we practice we are researching our own capabilities so we know what we are capable of, and what we are not. This "research" needs to be done in the safety of a simulator or with an instructor present. In short, know the limitations of your machine and your own limitations and then respect those limits.

With great ability comes great responsibility. When I look at the pilots whom I respect and want to model, I always find a high degree of discipline. That need for discipline has never been so eloquently stated as, "A licence comes with an earned set of responsibilities." We have a responsibility to the public trust, as Col. Hadfield says, we have the privilege of doing what very few people get to do, taking that responsibility lightly violates that trust.

Chatting with Col. Hadfield ("interview" feels too formal to appropriately describe the experience) was an inspiring and educational experience. I plan to review this interview periodically to remind myself of the key takeaways. I hope you are able to do the same. Fly Safe. ❖

Canadian Nationals at York Soaring 2016

Patrick McMahon, YSA

My mother said when you caught a clock displaying 11:11, you make a wish. In the fall of 2015 I volunteered to manage the 2016 Nationals at York Soaring and every time I caught a clock at this magical time thereafter, I wished for good weather for the competition. York would have to balance a busy training schedule, various other contests of interest to contestants, and not run out of soaring weather in planning the Nationals, which ended up being between August 1st and 12th.

When the event began, our field, which is normally home to zero ASG-29's had a rigging line with six of them, including Sean Fidler of the US National Team - a last minute addition inspired by a promising forecast. The contestant list would eventually total 28 between 2 classes of gliders running concurrently with York's international training camp of 8 students from Hong Kong. On average, the club launched 70+ gliders on contest days!

August 1st - Practice Day 1

Stratford - 20km, Wingham AP - 20km, Priceville - 20km, Arthur AP

Nine pilots took off on a common practice task that featured overdevelopment and rain to the southwest and blue conditions to the final turn point and back to York. Normally practice days don't create winners, but this was an exception. Sam Whiteside's 1-26 Traveling trophy had recently been recovered from Great Lakes Gliding Club to York. When Zbigniew Sobolewski delivered his airplane from Toronto Soaring Club to York for the Nationals, he consequently claimed the trophy for TSC. Hours later, Luke Szepaniak opted to land at TSC and claimed the trophy for SOSA. This was the first multiple movement day for the trophy since July 25th, 1990. twitter.com/travelling126

More notable was the inclusion of Ed Hollestelle Sr. who flew a glider PIC for the first time in 3 years. It was a thrill to have him take that flight at York in the early days of what would become a tremendous contest in Canada. Anyone who has met Ed has likely not met a more passionate Canadian glider pilot. His unwavering support for our community and this sport is remarkable, especially considering the headwinds he battled to return to the sky in A1. He would prove that glider racing is like riding a bike through the days to come and if there was any rust it came off quickly. On behalf of the gliding community in Canada - welcome back Ed Sr.!

FAI: Stieber, Joerg (JS) - 93.18 (85.26)
Club: McMahon, Patrick (4B) - 77.63 (73.75)

August 2nd - Practice Day 2 (TAT)

FAI Task: Mitchell - 20km, Hanover - 20k, New Hamburg - 20km, Fergus AP - 2km, Arthur AP

Club Task: Mitchell - 20km, Mildmay - 20km,Conestoga Lk - 10km, Fergus AP - 2km Arthur AP -

The second practice day was one of the strongest soaring days of an already noteworthy soaring season in Southern Ontario! Lift was strong, the sky was dotted with perfect clouds with bases that provided heights to support incredibly fast flying. For context, the average distance FAI pilots flew was 357.8km at an average speed across 7 pilots of 116.6km/h! It looked as though we were set up for a great contest with promising weather after a good night's sleep. Pilots and crew enjoyed a social dinner after the mandatory pilots meeting supported by Gentech Insurance Services Ltd.

FAI: Szepaniak, Luke (2W) - 126.62 (111.17)
Club: Martin, Stan (Z1) - 99.18 (93.23)

Day 1 - August 3rd

FAI Task: St Marys - 20km, Priceville - 20km, New Hamburg - 20km, Clifford - 20km, Arthur AP

Club Task: St Marys - 20km, Priceville - 20km, New Hamburg - 10km, Arthur AP

Tony Firmin delivered what would become a near constant through the contest - a cautiously optimistic weather forecast which fuelled pilots with a quiet sense of optimism for what the day and the contest would hold. There would be a risk of over development through the late afternoon and possibly some lake effect off of Lake Huron to the west. Lift was strong and cloud bases were around 7000'. Conditions started early and went from perfect to over developed to large blue holes near the end of the task - another great and fast day, but the first that really mattered.

FAI: Springford, Dave (F1) - 120.48 (101.81)
Club: Wiercioch, Krzysztof (MF) - 87.37 (86.5)

Day 2 - August 4th

FAI Task: Lucan AP - 20km, Wingham AP - 20km, Dundalk - 20km, Arthur AP

Club Task: Mitchell - 15km, Wingham AP - 20km, Dundalk - 20km, Arthur AP

Pilots took off toward the southwest on a day that would be bluer than previous flying days and where other gliders ahead on course proved helpful for many coming up from behind. FAI racers were able to make momentary use of convergence heading northeast out of Lucan before reaching clouds again around the Wingham turn point. Another great day with faster speeds than the day before.

FAI: Szemplinski, Jerzy (XG) - 119.27 (100.78)
Club: Wiercioch, Krzysztof (MF) - 89.98 (89.08)

Day 3 - August 6th

FAI Task: New Hamburg - 15km, Tillsonburg - 20km, Hagersville - 15km, Ernewein Field -20km
Arthur AP -

Club Task: Woodstock - 20km, Waterford - 15km, New Hamburg - 20km, Arthur AP

After two great days of racing and a non-flying day, the most remarkable race was developing in Club where the 4th to 8th placed pilots were separated by only 14 points! On Day 3, Virginia Thompson was coordinating a steak dinner to support the Canadian National team, which as superstition has it is a surefire way to manufacture landouts. The weather on this day was characterized by low cloud bases, and broken lift due to strong winds. Five pilots landed safely off field, 2 did not start and the dinner went on much longer than expected with patrons enjoying cold Coronas, a delicious meal and a lovely sunset on the York Soaring flight deck.

FAI: Morozov, Sergei (MS) - 104.91 (88.65)
Club: Hollestelle, Ed Sr (A1) - 77.06 (69.36)

Day 4 - August 7th

FAI Task: Rockton - 10km, Embro AP - 20km, Burbank Field - 20km, Mount Forest - 10km,
Arthur AP

Club Task: Rockton - 10km, Woodstock - 20kmBurbank Field - 20km, Mount Forest - 10km,
Arthur AP

As pilots had come to expect, Tony delivered more exceptional weather on the first task day that took competitors through the 'corridor' between YKF and YYZ. Conditions started strong with an obvious path south toward SOSA. Pilots found very strong lift heading out of the second turn point on their way to the Northeast with clearly developed thermal streets… running perpendicular to their course. A blue finish tricked a few pilots, but overall day 4 delivered more great racing conditions. The contest to watch had shifted into FAI with 84 points separating the top 4 pilots.

FAI: Szemplinski, Jerzy (XG) - 114.2 (96.5)
Club: Butts, Thomas (J3) - 91.03 (83.11)

Day 5 - August 8th

FAI Task: Mildmay - 20km, St Marys - 20km, Badjeros - 20km, Hanover AP - 20km,
Arthur AP

Club Task: Mildmay - 20km, Milverton - 20km, Badjeros - 20km, Hanover AP - 20km,
Arthur AP

We were relieved to avoid the 'extra day' controversy of the past few Canadian Nationals as the contest was now official, on what was forecast to be a strong, but predominantly blue soaring day. This is effectively what pilots found through the day, with less emphasis on blue and more emphasis on strong. Some pilots broke the radio silence to celebrate dust devils they found on dry fields west of Palmerston. No one had imagined the conditions pilots would find on the second last leg just south of Georgian Bay running west with incredibly strong, densely packed clouds creating high speed thermal highways and putting 17 pilots under time. Into the final week of racing, the race to watch was at the top of FAI with only 23 points separating the top 2 pilots.

FAI: Springford, Dave - 123.2 (104.1)
Club: Wiercioch, Krzysztof (MF) - 94.95 (94)

Day 6 - August 9th

FAI Task: Hanover AP - 20km, Listowel AP - 20km, Toronto-Soaring
- 10km, Hanover AP - 20km, Badjeros - 20km

Club Task: Hanover AP - 20km, Listowel AP - 20km, Badjeros - 20km, Arthur AP

The forecast was one of the least optimistic of the contest with the risk of high cloud later in the day potentially shutting down lift. The high clouds did arrive, but did not shut down the lift for those who could successfully adapt. Adapt they did and the day produced conditions sufficient to set the speed record for the contest.

FAI: Szemplinski, Jerzy - 127.24 (107.52)
Club: Cadieux, Emmanuel (PE) - 95.82 // Wiercioch, Krzysztof (MF) - 85.25 (84.4)

Day 7 - August 10th

FAI Task: Burbank Field - 20km, Durham - 20km, New Hamburg - 20km, St George - 15km
Badjeros - 20km, Arthur AP

Club Task: Burbank Field - 20km, Durham - 20km, New Hamburg - 20km, Arthur AP

Sounding like a broken record, Tony delivered yet another optimistic weather forecast and pilots took off into large cumulus clouds toward the north that dissipated as they moved to turn points to the south. The competition remained close at the top of FAI and a race for 3rd was developing in Club.

FAI: Springford, Dave (F1) - 112.35 (94.93)
Club: Wiercioch, Krzysztof (MF) - 93.52 (92.59)

Pilots rigged and FAI launched, then scrubbed Day 8

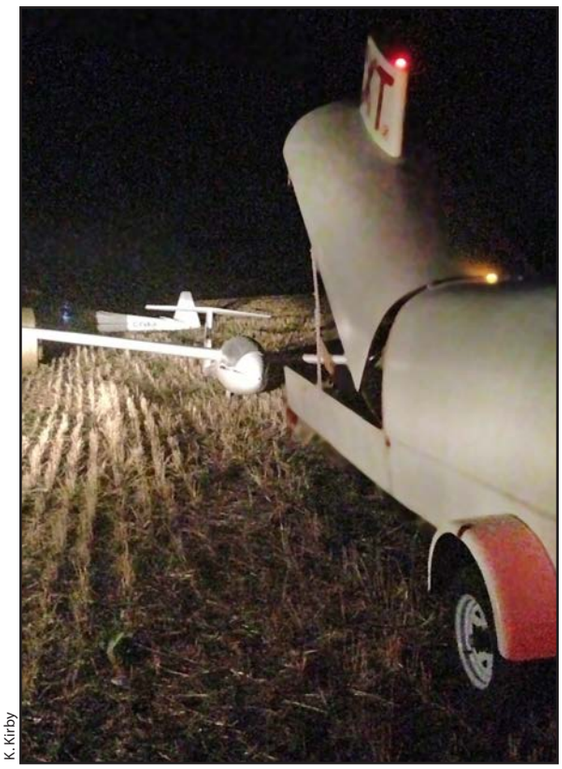
⇨ **p 30**

2016 CANADIAN NATIONAL GLIDING CHAMPIONSHIPS			DAY 1			DAY 2			DAY 3			DAY 4			DAY 5			DAY 6			DAY 7				
			day pos	km/h	pts	day pos	km/h	pts	day pos	km/h	pts	day pos	km/h	pts	day pos	km/h	pts	day pos	km/h	pts	day pos	km/h	pts	total pts	pos
FAI CLASS			3 h TAT			3 h TAT			2.5 h TAT			3 h TAT			3.5 h TAT			2.5 h TAT			3.5 h TAT				
Jerzy Szemplinski	ASG-29/18	XG	5	97.7	960	1	100.8	1000	4	85.5	806	1	96.5	1000	2	102.3	983	1	107.5	851	3	93.2	982	6582	1
Dave Springford	ASG-29/18	F1	1	101.8	1000	3	94.7	940	3	87.1	821	3	93.1	965	1	104.1	1000	2	102.3	810	1	94.9	1000	6536	2
Sergei Morozov	ASG-29/18	MS	4	98.6	969	2	96.9	950	1	88.6	836	5	89.4	927	5	97.1	933	3	98.6	780	5	91.7	966	6361	3
Chris Gough	LS-8/18	44	2	100.7	990	4	93.5	928	6	77.3	728	12	72.7	753	8	94.1	904	5	97.1	768	4	92.0	969	6040	4
Joerg Stieber	LS-8/15	JS	7	97.3	956	9	84.5	839	8	70.3	663	7	83.5	865	4	99.6	957	6	90.8	719	2	94.8	999	5998	5
Wilf Krueger	DG-808B/18	K2	8	94.2	926	6	88.0	874	5	79.9	754	6	87.2	904	12	81.6	784	10	85.1	674	8	86.2	909	5819	6
Luke Szczepaniak	ASW-27	2W	5	97.7	960	7	86.3	856	10	(184.8)	379	4	92.5	959	3	101.4	974	7	89.2	706	6	89.6	944	5778	7
Randy Neilson	LS-6	EH	11	74.1	727	11	78.9	783	9	62.3	588	8	81.2	841	6	96.5	927	8	86.1	681	9	82.6	870	5417	8
Sean Fidler	ASG-29/18	7T	3	99.7	979	5	91.8	911	2	88.0	827	2	94.4	978	7	96.1	924	4	97.4	771	12	(0.0)	0	5390	9
Roy Bourgeois	ASG-29/18	ROY	9	89.5	879	8	85.4	847	11	(127.3)	261	10	77.4	802	11	84.3	809	11	84.4	641	7	87.6	922	5161	10
Jim Fryett	LAK-17A/18	JF	10	78.0	766	12	78.5	779	12	66.8	254	11	76.7	795	10	89.5	859	9	85.6	677	10	75.2	793	4923	11
Jean Yves-Germain	ASG-29/18	VV	12	(0.0)	0	10	83.8	832	7	72.6	675	9	79.0	819	9	92.8	892	12	83.5	561	11	(241.0)	440	4219	12
CLUB CLASS			4 h TAT			2.5 h TAT			3 h TAT			3.5 h TAT			4 h TAT			3 h TAT			3 h TAT				
Krzysztof Wiercioch	Jantar	MF	1	86.5	975	1	89.1	842	2	63.6	910	3	78.1	940	1	94.0	1000	1	84.4	957	1	92.6	1000	6624	1
Thomas Butts	ASW-20	J3	3	84.4	952	6	83.0	785	3	61.2	876	1	83.1	1000	2	85.8	913	9	74.5	845	6	80.8	873	6244	2
Emmanuel Cadieux	ASW-20b	PE	4	82.2	927	11	76.3	721	5	59.0	845	5	76.9	925	11	77.7	826	1	84.4	957	3	82.4	890	6091	3
Marian Nowak	SZD-55-1	N1	2	84.7	955	5	83.5	789	11	53.3	764	2	81.5	981	11	77.6	826	5	79.7	904	7	79.3	857	6076	4
Dave Cole	SZD-55-1	AF1	5	81.4	918	9	78.7	744	7	57.8	827	6	76.6	922	8	82.6	879	7	88.2	868	10	74.0	800	5958	5
Sylvain Larue	LS-4A	84	6	81.1	914	10	78.0	737	4	59.2	848	14	71.3	772	6	84.1	895	4	80.1	908	8	78.3	845	5919	6
Jeffrey Dixon	Jantar	BW	9	74.9	844	7	81.0	766	10	54.7	784	12	68.0	818	5	85.0	904	3	82.1	931	9	75.5	816	5863	7
Bill Cole	Mosquito	BC	10	74.6	841	14	68.1	644	8	55.7	797	7	74.5	897	9	80.9	861	12	67.9	770	4	81.8	884	5694	8
Robert Zachemski	SZD-55-1	Z	14	(280.3)	478	12	69.3	655	6	58.1	832	4	77.7	935	4	85.2	906	6	79.2	899	2	85.8	926	5631	9
Ed Hollestelle Jr	HP-18	A2	8	75.8	855	3	84.2	796	9	55.0	787	15	59.6	717	10	80.4	855	10	69.6	789	11	71.5	772	5571	10
Ed Hollestelle Sr	AFH-3	A1	13	(293.4)	501	2	87.6	828	1	69.4	993	10	78.6	842	3	85.7	912	11	68.5	776	15	57.4	554	5406	11
Stan Martin	Mini-Nimbus	Z1	11	69.1	779	13	68.8	651	12	(216.8)	557	8	72.0	867	13	75.6	804	8	75.5	857	13	70.2	758	5273	12
Patrick McMahon	LS-4B	4B	7	76.4	862	4	86.1	792	15	(0.0)	0	9	75.1	859	7	83.0	883	13	66.9	759	5	81.1	876	5031	13
Stanislaw Maj	SZD-55-1	KO	12	63.2	713	8	80.6	762	13	(205.3)	527	11	68.9	829	14	76.7	450	14	65.8	746	12	71.2	769	4796	14
Zbigniew Sobolewski	Jantar	1M	15	(171.8)	293	15	53.8	509	14	(123.2)	317	13	64.9	781	15	58.9	166	15	50.6	574	14	58.1	627	3267	15

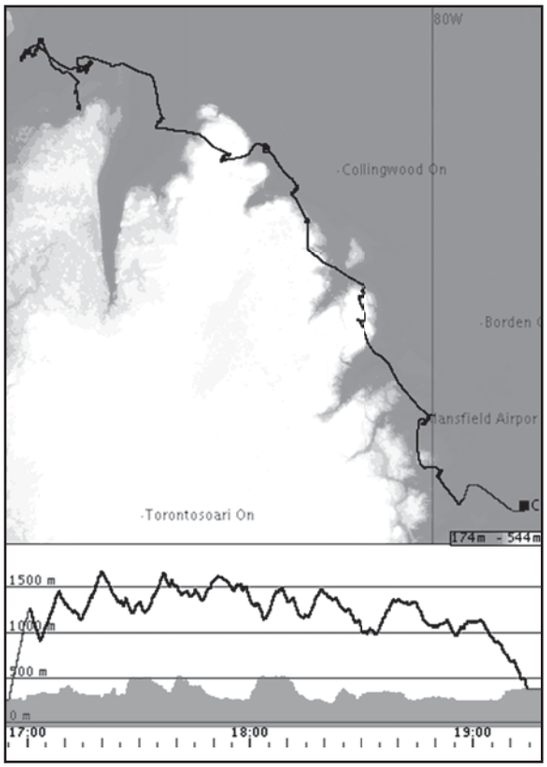
Notes: A speed value in brackets is a landout distance. All speed and distances are the handicapped values. Scores include any penalty points.

Derig At Midnight

Kerry Kirby, GLGC



K. Kirby



Ed Note: *Kerry Kirby recently sold his venerable Jantar and now flies a K6, so he has to try harder to get back home from far away. He sent us the picture shown here, with the caption: "3 of us in 2 fields". I asked him for the story of how this might have occurred. We have his notes and the OLC trace. In his words: "Cool how the flight path follows the plateau."*

Long version (it's OK, Jim is here with me)

When you are riding on the back of a long necked dragon, be prepared to be bitten at any time. I stopped to see if I could get into the wave off Blue Mountain. I coaxed the guys out to the edge of the water to ride some clouds. The water's edge shot north at Meaford away from us with lots of trees to land in if we followed. We would have had to beat it into wind in K 6's to get back to a landable area. Even collectively the three us could not amass (euphemism for male 'spheres') big enough for that. The midnight pic is that we had no crew and had to call for a ride back to get trailers. Then go back for gliders. Did I mention my 1/2 hour walk through a swamp and thick brush where mean killer cranes stood watch over their kingdom on my way to the field where the other guys landed about 1.5 km away? I am adding a machete to my on-board survival gear. Did I also note that, while I was lost in the hostile swamp, that I had 2% life left in my cell phone battery? I did not mention the fact that I used some of that precious battery life to Google Map my location in the swamp and send a text to the guys in the other field. " Can you go to the edge of the road and yell so I can get a bearing where you are? I am in the swamp" The reply I got was " it's OK, Jim is here with me" I had thought about sitting down there at that point and just waiting for the snakes to get me!

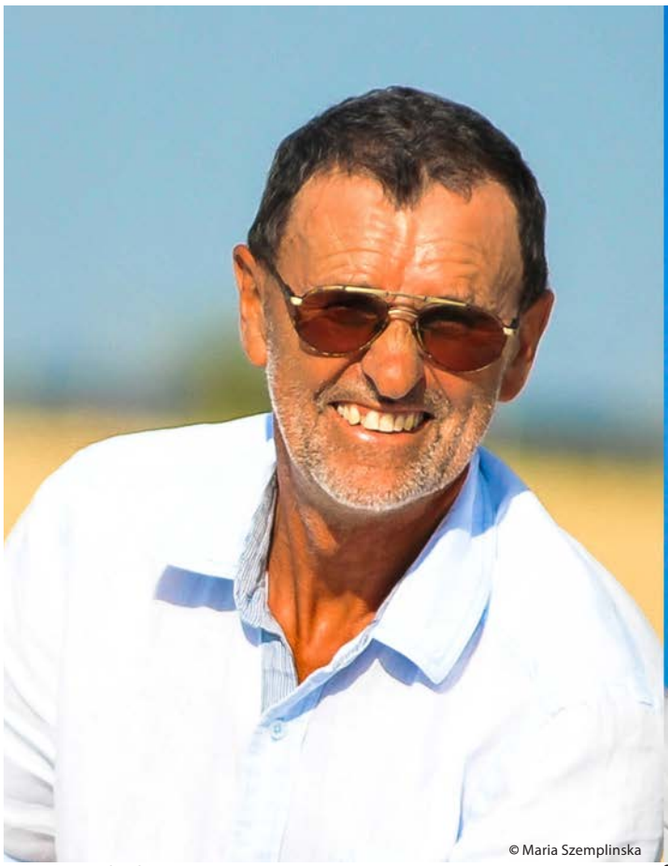
Short version

Crap happens.

Ed. Note: *With respect to the crane/machete dialog above, we feel it is sheer envy on the part of the author. Here is what Wikipedia has to say about the local crane. "Sandhill cranes' large wingspans, typically 1.65 to 2.30 m make them very skilled soaring birds, similar in style to hawks and eagles. Using thermals to obtain lift, they can stay aloft for many hours, requiring only occasional flapping of their wings and consequently expending little energy. Migratory flocks contain hundreds of birds, and can create clear outlines of the normally invisible rising columns of air (thermals) they ride."*

Kerry's response: The fact that they require "occasional flapping of their wings" makes them 'sustainers' and therefore not in the same class as a K6.

B. Cole



Jerzy Szemplinski

Sergei Morozov

Dave Springford

Luke Szczepaniak

B. Cole

Marion Nowak N1, Canadian Nationals 2016

York Sunset

EL
D-KPSA

EL – for Electric

Bernard Eckey

The electric revolution is in full swing in the car industry. Electric cars have come of age and inquisitive glider pilots – myself included – are keen to know whether this also applies to light aircraft and to gliders in particular. Coincidently the spectacular 'Solar Impulse' completed its successful flight around the world during my recent trip to Germany - another good reason for putting this investigation on my to-do-list.

Even at last year's AERO trade fair a trend towards electrically powered light aircraft was clearly evident and by all accounts it has gathered more momentum since. And for good reasons! Such aircraft are environmentally friendly, unbelievably quiet, low on maintenance and often even less costly to operate. Recent advances in battery technology are nothing short of breathtaking although the energy density of even the most efficient batteries just cannot be compared to petrol (gasoline). Still, electric propulsion systems are ideal for applications with short duty cycles, (such as basic training or aerobatic flying) and are therefore conquering an ever-increasing share of the market. But doesn't exactly the same apply to gliding? We also require power for only a short period of time, either to avoid an outlanding or to get airborne in the first place and it is therefore no wonder that most manufacturers are working hard to add an electric powered version to their fleet of motorized gliders.

The new ASG 32 El ready for a test flight on the factory airstrip

Much to my astonishment I was in for a bit of a surprise to start with! While discussing the issue with European gliding insiders it became apparent that the initial enthusiasm for electrically powered self-launchers is clearly diminishing. Their high power requirements necessitate a big and heavy electric motor plus heavy, large capacity batteries and the combined weight penalty not only causes handling issues on the ground and in the air but also restricts the range of available wing loadings. After a typical self-launch the battery capacity is often reduced to a point where a self-retrieve becomes questionable and where a powered flight home (in case thermals collapse earlier than expected) is no longer possible.

But the situation is fundamentally different if self-launching isn't a requirement and the motor is only used to get home or out of trouble. In this case the entire battery capacity is still available for a self-retrieve and the drive system can be kept lighter, smaller and simpler.

This is exactly what the engineering team of the ASG 32 El has focused on and what Schleicher is now introducing. Needless to say that I jumped at the chance to test-fly this new glider and see how the system performs in practice. However, when the big day finally arrived the weather was anything but ideal and, to make matters worse, I was told that Mac Ichikawa was waiting to take the prototype away for the world comps in Lithuania. Thankfully Mac agreed to let me have the first flight with young development engineer Paul Anklam in the back seat.

The ever-cheerful Mac Ichikawa helping with take-off preparations

Straight after coming off tow Paul said: "Master on, power lever up and press the red button when the engine instrument indicates that everything is ready". The engine bay doors opened without delay, the motor popped up and automatically developed full power promptly and smoothly but without any noticeable change in pitch. "For the most efficient climb you better slow down to about 50 to 55 knots now", "Paul remarked "and then adjust the power to 27 kW. "Even I can do that," I replied, and after a small power reduction both varios were reading just under 4 knots up. Not surprisingly there was no noise, apart from a pleasant humming sound coming off the propeller. I very much doubt whether anyone on the ground would have noticed the motor glider just 1000 feet overhead. Paul didn't even have to raise his voice when he said, "If you want to retract the motor again, just push the power lever all the way down".

Just for the fun of it I ran the motor with different power settings a few times and enjoyed the almost unbelievable smooth and quiet operation. Then it was time to put

the “get out of jail card” away again. After closing the “throttle” I kept one eye on the mirror and observed the propeller slowing down, automatically moving into a vertical position and disappearing again. “That’s too easy” I remarked and Paul replied enthusiastically “With a 27 KW power setting and with two people on board the ASG 32 El climbs between 1.5 and 2 m/s. At this power setting we get a full 20 minutes of engine running time out of a fully charged battery and the range is 100 km when using the saw tooth method. Best of all, with an electric motor the power reduction at altitude is negligible”.

The engine instrument displays all relevant information

By now we were under a suspiciously dark spot of an otherwise overcast sky. Much to our surprise, the varios came alive again and soon we were climbing without the help of the motor. As an Open Class pilot I’m certainly not spoiled when it comes to a fast roll rate but the ASG 32 features an agility and control harmony that I have never before experienced with any other 20 m glider. The reason is the new and innovative control mixer, which is providing a previously unknown method of integrating flaps with ailerons. The outer flaperons extend over 48% of the wingspan but despite this the stick forces remain pleasantly low and make flying this surprisingly docile glider almost effortless.

Another pleasant surprise is the excellent feedback from the air and the aircraft’s ability to point its pilot into the better part of the thermal. Without doubt this glider is another masterpiece from designer Michael Greiner – already a household name in gliding circles for his ASG 29.

Knowing that Mac Ichikawa and his young Australian travel companion were waiting, we decided to land but not before testing the motor a few more times. Its intuitive control system makes using this power plant a real pleasure. Engine management hardly adds to the pilot’s workload and couldn’t be easier thanks to a degree of automation impossible to achieve with combustion engines! After just a briefing or a short demonstration even low-experienced pilots can safely operate this powered glider without any stress at all. It is also the long awaited answer for clubs with competitively minded pilots! For the first time ever they have access to a performance oriented and motorized two-seater that can put members on the podium and is also perfect for coaching, long distance flying and record attempts. Without doubt, the integration of the new electric drive unit into this proven airframe is a big step forward for the entire gliding movement.

Back on the ground the young development engineer explained that quite a number of reputable companies helped to bring this new drive concept to fruition, a fact that Schleicher openly acknowledges by putting the logos of all these organizations on the fin of the ASG 32 El prototype. (refer to picture below)

In contrast to other electrically powered gliders the 67 kg Lithium-Ion battery pack of the ASG 32 El is located in the engine bay of the fuselage. There it is easily accessible and lengthy cables with heavy-duty electrical connectors are no longer required. It also keeps the weight of the wings at manageable levels and still allows the installation of the same water ballast system that is fitted to other variants of the same model. With 120 liters of water in the wings (plus 5 liters in the tail tank) the wing loading can be increased to 54.1 kg/m^2 - by far the highest in its class.

Starting with a clean sheet of paper allowed the development team to implement a few additional special features. On top of the list is a fully certified all-up weight of 850 kg – a whopping 50 kg more than any other 20 m glider. A maximum load of 120 kg per seat is also previously unheard of and so are the cockpit dimensions. Even extra large and 2-meter tall pilots can enjoy long cross-country flights in absolute comfort. An in-flight adjustable backrest for the front seat is just as much standard as an anti fogging system for both cockpits and automatic control connections.

Occupant safety ranked evenly high on the list of priorities. As an example, the latest CS 22 cockpit crashworthiness requirements of 9 g (formerly 6 g) have already been implemented and all remaining elements of the renowned Schleicher safety cockpit were also

integrated. Thanks to the forward placement of the main wheel, the glider has no tendency to put the nose on the ground - even at maximum power or wheel brake application. This has allowed the elimination of a draggy nose wheel and together with other aerodynamic refinements – such as the optionally available retractable tail wheel – the glider features the cleanest fuselage of any two-seater currently on the market. Competition feedback indicates that this might contribute to the ASG 32s superior high-speed performance.

Picture 5
Location of battery pack in the front of the engine bay

In summary, there is now a new entry in the 20 m two-seater FAI class. It is called ASG 32 and it comes in three different versions, namely a pure sailplane, a self-launcher and an electric sustainer (or "Turbo"). No wonder it has already taken over as the most dominant aircraft on the Schleicher production line.

http://www.alexander-schleicher.de/en/flugzeuge/asg-32-el/

About Bernard Eckey

Bernard got his glider licence in Germany in 1982, then moved to Australia in 1983, where the truly excellent gliding conditions occupied most of his spare time. With over 4500 hours soaring in his logbook, Bernard always strives to extract the maximum distance out of any gliding day. He can look back on an estimated 400 000 km of cross-country soaring with his heart set on long distance flying. He holds all GFA distance badges, has performed 6 flights in excess of 1000 km and has set a new Australian record for a 1000 km out & return flight. In addition he has performed one flight in excess of 1100 km (FAI triangle of 1134 km).

He is well-regarded internationally for his comprehensive soaring book, "Advanced Soaring Made Easy", available in English, German, French, Japanese (an e-book), and soon Spanish. ❖

Another popular option is the FES. FES is is short for Front Electric Selflaunch / Sustainer propulsion, developed and produced by LZ design company located in Slovenia. FES can be ordered in a number of new gliders. including, Ventus 2cxa FES, Discus 2c FES, LAK17B FES, MiniLAK FES, LAK19 FES, HPH304ES, Silent 2 Electro - FES, AS13,5m FES

Flying Faster than MacCready Cross-country Speed

Ronald Smith, GGC

François Ragot's (FR) "Best Speed Story" (Technical Soaring, Jan/Apr 2004) is a masterful history of achieving the highest cross-country speed possible using Speed To Fly (STF) theory. Ragot's research makes it clear that Romuald Szukiewicz (PL) with Leszek Szwarc (PL) and Wolfgang Späte (DE) had partly understood classic STF theory in early 1938. By mid-1938, John Fox (GB) had fully understood classic STF theory and produced a linear variometer scale. But it is also clear that, as of 1949, Paul MacCready (US) through his practical understanding of classic STF theory gave sailplane pilots worldwide the ability to easily use STF via his circular variometer scale. Because for decades pilots flew according to MacCready variometer rings, the term MacCready speed is sometimes used instead of STF. Over the years, many individuals including Helmut Reichmann (DE), Branko Stojkovic (CA) and John Cochran (US) have further detailed STF theory, aiming for what Stojkovic called a generalized STF theory.

Some flatland (no ridge, no wave), sailplane pilots manage to achieve average cross-country speeds well above classic STF theory, so a further discussion is instructive. Although I completed my university studies as an aerospace engineer, I began then as a visual artist. The visual language of graphs speaks to me more simply than the more abstract language of mathematical formulas.

Nicolas Moreau

André Pépin and his 21 meter LAK-17B FES

On June 26, 2015, André Pépin of Montreal Soaring Council (MSC) managed a 721 km On-Line Contest (OLC) or 808 km total distance flight from Hawkesbury, Ontario in his LAK-17B FES – figure 1. To give André's flight context, John Firth (CA) in his Kestrel 19 is the only person to ever have flown a Fédération Aéronautique Internationale (FAI) 750 km in eastern Canada (Kars, Ontario, 10 July,

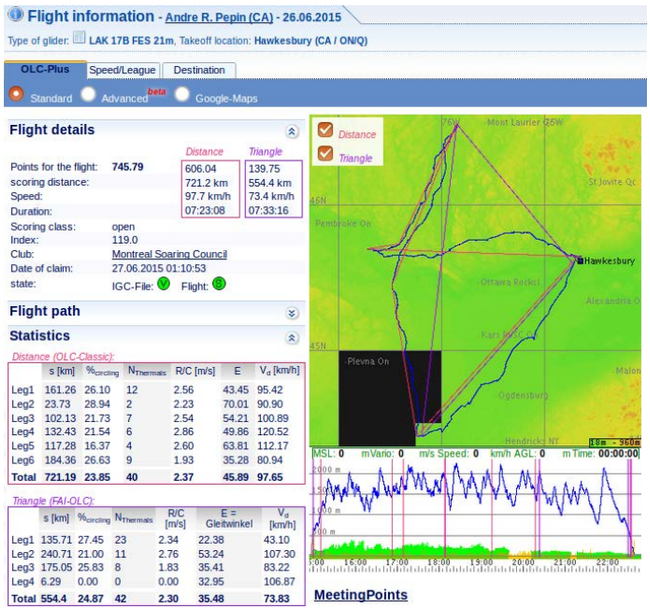


figure 1 – André's OLC flight information

1977). According to SeeYou flight analysis software, André's average Rate Of Climb (ROC) was 2.3 m/s. The 2nd best average ROC at MSC that day was 1.8 m/s by a LAK-17A. So André found the best thermals that day! According to classic STF theory and with a ROC of 2.3 m/s, André's average cross-country speed in his unballasted LAK-17B FES should have been 100 kph. But André's average cross-country speed was 106 kph. So not only did André find the best thermals but his average cross-country speed was 6 kph faster than classic STF theory predicts! Again according to classic STF theory and with a ROC of 2.3 m/s, André should have spent 40% of his time thermalling. Yet André spent 23% of his time thermalling. So André found the best thermals, had a faster average cross-country speed and spent less time thermalling than classic STF theory predicts! With SeeYou, we can see that **André was achieving a mean cruise rate of descent (ROD) lower than the still air value for the same speed.**

Why is this last point important?

Over the years people have added missing parts to STF theory. In the summer of 2000, John Cochrane wrote an article titled "Just a little faster, please". In simple terms, Cochrane says that the probability of finding a better thermal improves with altitude and/or glide ratio (L/D), because you can search a larger area. Put differently, for given thermal height and given sailplane L/D, a pilot who finds more lift than sink during cruise can search a larger area, increasing the probability of finding better thermals. Cochrane points out that you can compensate for diminishing altitude by slowing down towards L/D max to increase the area you can search. At the expense of cross-country speed, of course. But eventually your chances of finding a good thermal diminish rapidly. Cochrane, who is well versed in mathematics, says that the probability STF (P-STF) curve is exponential – figure 2. To keep it simple, above 50% thermal height the P-STF is not greatly affected.

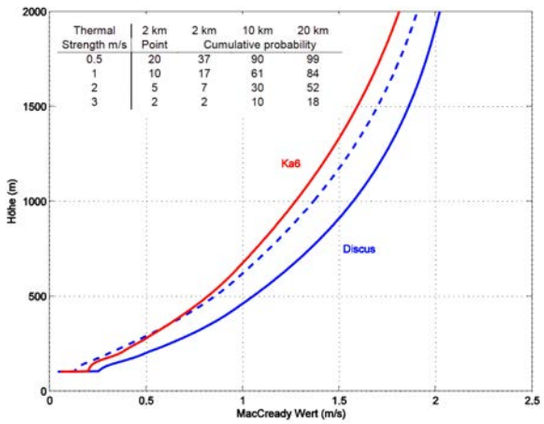


figure 2 – Cochrane's probability STF graph

Ignoring the height of the launch, the amount of altitude lost during a soaring flight must equal the amount of altitude gained during that same flight. Soaring is a zero-net-altitude-gain activity, assuming one lands at the same airfield as departure. Cross-country soaring is also mainly about converting vertical motion into horizontal motion. Thus it is informative to plot the motions of thermalling (arrows pointing up on graphs) and cruising (arrows pointing down on graphs) for the same period of time. The graphs' horizontal x-axis are normally in kilometers/hour or miles/hour while the vertical y-axis are likely in meters/second, feet/minute or knots. The all important average cross-country speed (inverted triangles on graphs) is found graphically where the line (solid+dashed line on graphs) joining the climb motion to the cruise motion crosses the zero altitude gain .. remember, soaring is a zero net altitude gain sport. Figure 3 (top) shows a day with no wind while figure 3 (middle and bottom) shows a day with wind where we assume the thermal is drifting at wind speed. Sometimes, thermals drift at less than wind speed and only then are the average

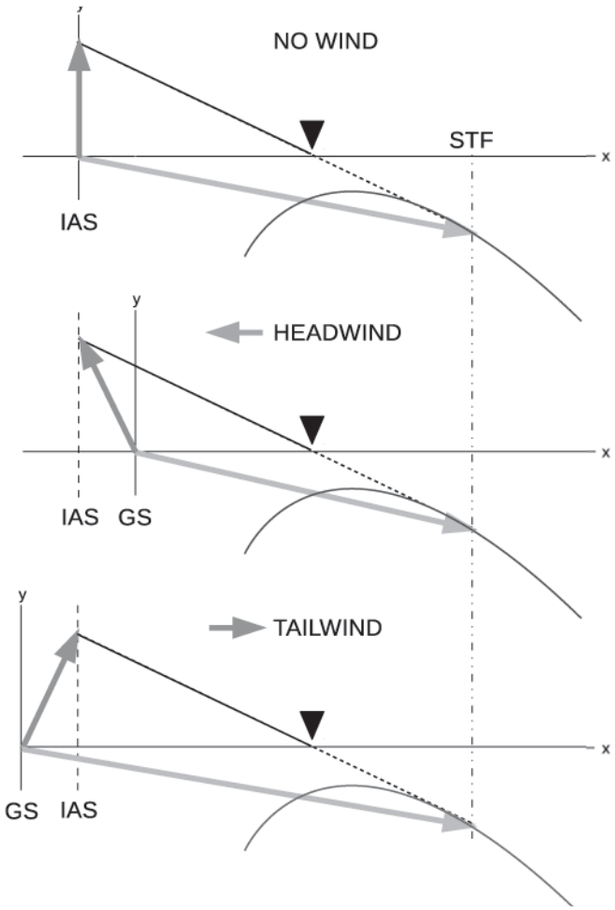


figure 3 – STF assuming thermal moves at wind speed
Speed to fly is independent of the wind speed, because the fastest average speed achievable through the airmass corresponds to the fastest achievable average groundspeed (inverted black triangle)

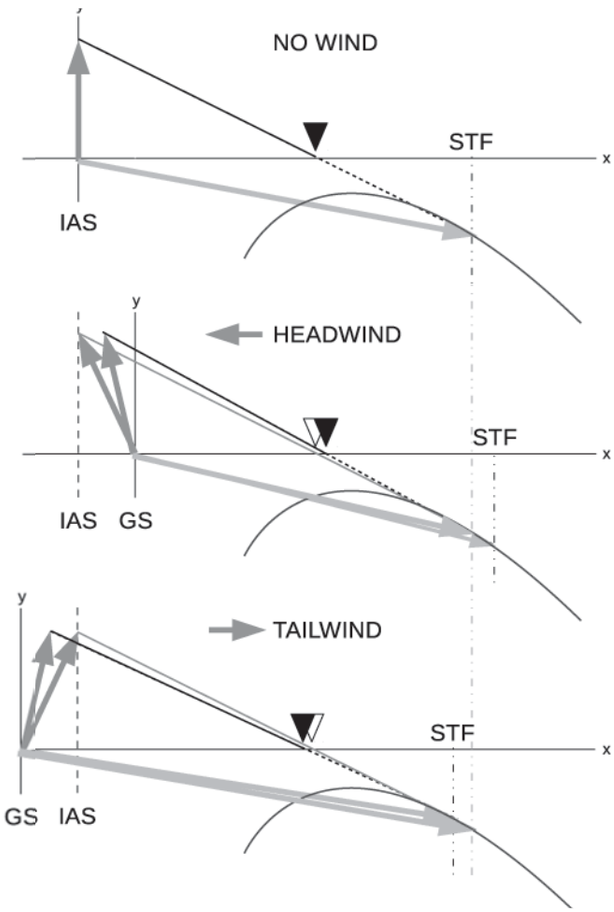


figure 4 – STF assuming thermal moves at less than wind speed
Speed to fly is slightly faster ina headwind (middle pannel) and slower in a tailwind

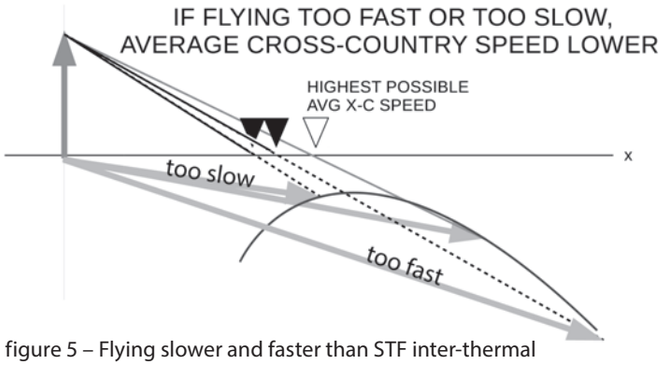


figure 5 – Flying slower and faster than STF inter-thermal

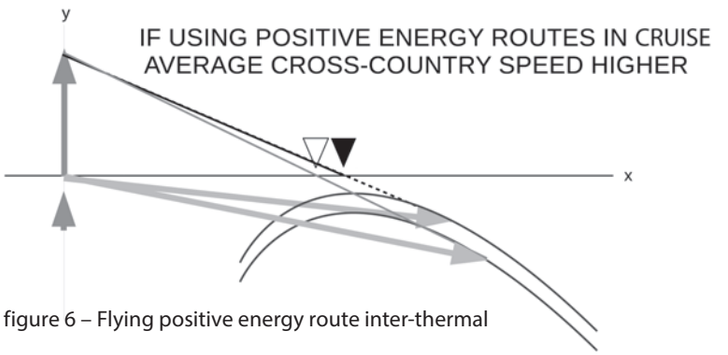


figure 6 – Flying positive energy route inter-thermal

Flight statistics

Maximum altitude gained: 1614m, low point 635m at 15:02:05, high point 2249m at 18:24:13

Circling:	Time	Vario	Alt.Gain	Alt.Loss	Thermals
Total	01:47:00 (23%)	2.3m/s	15149m	-390m	42
Left	00:46:36 (44%)	2.1m/s	6139m	-145m	14
Right	01:00:24 (56%)	2.4m/s	9010m	-245m	28
Tries (<45s)	00:13:04 (3%)	1.0m/s	1085m	-293m	20

Straight:	Time	Dis.Done	Alt.diff	Netto	Avg.GS	IAS	Glides	Avg.Glide	Mean L/D
Total	05:51:44 (77%)	808.1km	-15386m	0.4m/s	138km/h	127km/h	43	18.8km	53
Rising	01:40:52 (29%)	207.2km	1257m	2.6m/s	123km/h	116km/h			-17
Sinking	04:10:52 (71%)	600.9km	-27758m	-0.4m/s	144km/h	132km/h			22
Netto rising	03:16:56 (56%)	437.8km	6828m	1.7m/s	133km/h	125km/h			-64

Figure 7 - SeeYou flight statistics of André's flight

cross-country speed and STF slightly affected compared to thermals drifting at wind speed – figure 4 (middle and bottom.)

Based on the sailplane's polar, we can locate the best possible average cross-country speed for the ROC achieved – figure 5. Remember STF is simply the mechanism for achieving the highest cross-country speed possible. Reichmann points out in his book Cross-Country Soaring that STF should be based on the sky ahead for tactical reasons while flight computers understandably can only base STF on the previous thermal(s).

To achieve an average cross-country speed above classic STF theory, we must reduce the average cruise ROD which will in turn increase our average cross-country speed – figure 6. André did this during his 808 km total distance flight.
André found positive energy routes between thermals. Those reduced his average cruise ROD, meaning he needed fewer thermals – 39% less thermals, reducing his cumulative time lost to centering and climbing. The reduced ROD also allowed him to search a larger area, in turn increasing his probability of finding better thermals – 28% better thermals. The reduced cruise ROD which likely lead to fewer and better thermals improved his average cross-country speed – 6%! And André operated mainly above 50% thermal height, keeping his P-STF generally between 80% and 100% STF.

Likely when you started soaring, finding thermals was an unreliable process. But in time, you became adept at locating thermals. Pilots such as André are adept at locating and following positive energy routes inter-thermal, way beyond simply following their STF computer moment by moment.

To monitor your progress post-flight at flying positive energy routes between thermals, you can use flight analysis software like SeeYou. Your total straight flight mean ROD (altitude divided by time) should be lower than the still air value for the same speed – figure 7. Be careful because your recorded ROD is in true airspeed, therefore erroneous for an indicated airspeed polar. For this and other reasons, the cruise L/D and netto calculations are prone to error. Also, be certain that you are using a real-world polar for your sailplane when gauging your performance or you will be unnecessarily discouraged.

If your aspiration is to fly farther, you need to fly faster. But simply lowering the nose does not improve your cross-country speed (See figure 5). To fly faster, I would suggest reading 1970 and 1974 world soaring champion George Moffat's (US) timeless advice on "Low-Loss Flying" (Winning, chapter 2 or Internet). Additionally, as past US soaring champions such as AJ Smith, Ben Greene, Dick Johnson and George Moffat understood back in the 1970s, develop your skills at locating and following positive energy routes inter-thermal to fly faster!

"when you are able to find and use these [lift] streets or streams, advantageously on the course, you shoot my classical calculated cruise speed to pieces . . . This is a real way . . . to up your average speed." -Dick Johnson (11 times US soaring champion), 1972 Soaring Symposia

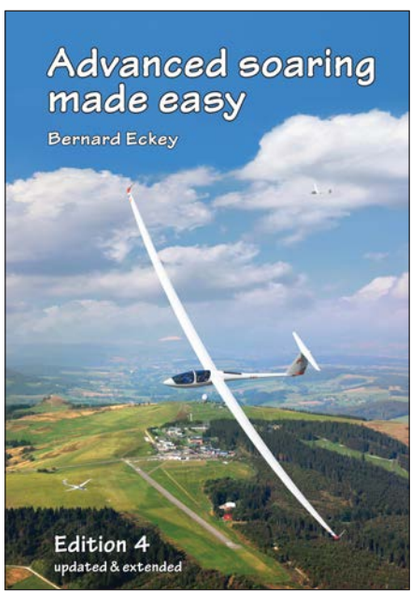
Ronald Smith has been flying most of his life, everything from a Lambie-Smith "Hang Loose" glider to an experimental Boeing 707. His current soaring mount is a 20.5 meter LAK-12. Ron has been at the Gatineau Gliding Club since the 1960s. ❖

Bill Cole Comment:** This summer Jerzy Szemplinski presented at an advance soaring clinic at SOSA where he emphasized the importance of following positive energy lines. These often run parallel to horizontal airflow but sometime form hexagonal cells according to Fernando Silva. Had I followed his advice I might have made it home rather than 7 km short. Knowing positive energy lines exist and being able to recognize them is the challenge. An acronym that I received in an email exchange (TT, 2W) discussing cross country flight path tactics was **WWJD**. If you Google this, you will not find the correct meaning of **What Would Jerzy Do ❖

Gliding Book Corner

Hot off the press, and a great Christmas gift idea, is the ***4th edition of Bernard Eckey's book, "Advanced Soaring Made Easy"***, with 432 pages, 187 illustrations and 176 photographs, and it has been updated with new topics. For example, have you ever heard of climbing in an atmospheric hydraulic jump? (Ed. Note: We have an article on this by Bernard for a future issue.) The book is reorganized, the page layout and graphics much improved, the text has been revised or extended throughout, and the quality of many new photographs is simply spectacular – all courtesy of a year-long effort and the editing skills of Tony Burton.

Bernard wrote, "Without Tony's help and assistance, this edition would not have seen the light of day. He encouraged me to go ahead and he did a truly great job putting it all together. The final result is testimony of countless hours of hard work and total dedication on his part. All I did is provide the additional content."



(Ed. Note: I love the following photo from page 103 on the importance of pilot comfort. I assume that it is NOT part of the new, revised and up-to-date content.)

The Hang Loose shown here has been hanging around in the Gatineau hangar since the 70s and is hauled out occasionally and towed around the triangular runway at barely flying speed. It was built by Elvie Smith (now deceased) and his son, Ronald, recalls flying it in his article elsewhere in this issue on Macready Speeds.

Previous editions of this best seller have already helped many pilots become highly skilled and very competent at cross-country flying. This 4th and final edition is now an all-encompassing book on advanced soaring. It is completely up-to-date with current changes in the sport and offers new pilots a self-coaching tool with all the information needed in a single source.

Every glider pilot can benefit from the breadth of information in this book. Inexperienced pilots will gain valuable insights while building basic skills, avoiding setbacks and disappointments. Experienced pilots will find their knowledge challenged, resulting in insights that will greatly contribute to rapid progress, supported by chapters on glider fine-tuning and the all-important psychological aspects to assist the best pilots to improve their success rate in competitions or enhance their chances at record attempts.

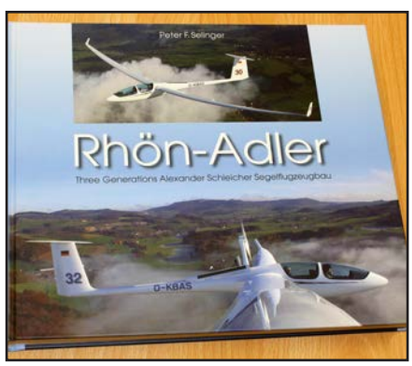
"Advanced Soaring Made Easy" is the ultimate book for pilots trying to get on the fast track to success – a book that no ambitious glider pilot can afford to ignore.

The price is a bit more than two tow tickets ($75) from Tony. < t-burton@telus.net > A plan is in the works to have copies available for pick-up in the Toronto and Ottawa areas where most glider pilots live to avoid the rather high mailing cost of at least $17. ❖

"Maitriser le vol à voile" is the title of the book's French version, which was translated and edited by the team of Jo Lanoë (CVVQ) and Tony, and has been on sale for a year now. Thanks to word-of-mouth advertising on social media channels (https://www.facebook.com/maitriserlevolavoile/), and an extensive description of it on http://www.future-aviation.com, it has already become very popular with French-speaking glider pilots. So far hardly any sales outlets have been established but interested pilots can obtain a copy directly from the above web site, or for quantity orders by contacting the distributor : jo@jolanoe.com

"Maitriser le vol à voile" est le nom en français de ce livre. Il n'est pas disponible en librairie, nous avons préféré confier sa vente en direct par celui qui en a fait la traduction, Jo Lanoë, pour diminuer les frais de distribution. Pour placer une commande, allez sur on http://www.future-aviation.com. Vous pouvez aussi visiter la Page Facebook qui lui est consacrée (https://www.facebook.com/maitriserlevolavoile/), ou contacter directement jo@jolanoe.com pour des commandes en quantité. ❖

A new gliding book has come on the market. It is the new English version of the popular ***"Rhön-Adler"*** by Peter Selinger. In 340 pages, it features all the gliders built by Schleicher, with many photos and a detailed descriptions of every model – often including drawings. It is fully up-to-date including the latest Schleicher models, namely the ASG 29, ASH 30, ASH 31 and ASG 32 with all of their variants. *www.cumulus-soaring.com/books* ❖



Continued from pg 16.
making August 10th the last day of the 2016 Canadian Nationals, with pilots who were thrilled by one of the best contests for the Canadian Nationals, before a lovely banquet in nearby Grand Valley the following evening.

We will look back on this contest and celebrate the tremendous weather supporting many days of flying at incredible speeds - and we would be right to do so. Beyond days and kilometres flown, this paints a positive story for soaring in Canada - two strong classes, the average age of the top three Club pilots under 30, and conditions that had provided more flying days with consistently faster speeds than a comparable contest in Uvalde, TX. Beyond the flying, the camaraderie that might only be found at a Canadian contest was on display with support among competitors, great food, good drinks and lots of laughs.

Special thanks to all the people involved at all levels of engagement. From the contest director Tom Coulson of SOSA, grid manager Charles Petersen and his crew Jessica, Rachel and David, our expert weatherman Tony Firmin, the new, naive but now seasoned scorer David Connolly, the York Soaring board and instructors who were influential in the background in creating a platform to deliver such a high calibre event. Thanks for guidance from Virginia Thompson and field support from York's intern Jakub, campground manager Gord and Sophia for her help with the banquet. As a first time Contest Manager (first time managing the Nationals, first time racing in a Nationals) I must commend all the members of York Soaring who came together to create a welcoming environment and viable location to launch such a great event.

Great flying, yes. Great people and a stronger soaring community in Canada, also yes. Thank you and see you next year - here's to wishing for more good weather and great flying!

Charles Petersen

B. Cole

Wolf Mix Trophy - Jerzy Szemplinski
Dow Trophy - FAI - Jerzy Szemplinski - Raw: 127.24 km/h (107.54)

B. Cole

CALPA Trophy - Krzystof Wiercioch

Dow Trophy - Club - Krzystof Wiercioch - Raw: 94.95 km/h (94)

SOSA Trophy - Jeff Dixon - 7th in Club

J. Standen

Maria getting the shot

V. Yesikov

Sergei getting ready

44 on Final

Introducing the 2017 Canadian Team for the 2017 World Gliding Championships

by Joerg Stieber SOSA

Luke Szczepaniak

Luke who became a top competition pilot at SOSA, was coached by Canada's best. He has placed well in a number of Canadian and US Nationals. The Pan American Championships in 2015 were his first true international competition. Luke is now ready to take it to the next level. He will fly his first Worlds in Australia in January 2017. In many ways, Luke represents the next generation of Canadian Team pilots.

Dave Springford

Dave is a seasoned competition pilot with well over 20 years of racing experience. He has won the Canadian Nationals several times and placed near the top in US Nationals.

Sergei Morozov

Sergei flew his first competitions as a young pilot in the Soviet Union. He has flown in many Canadian and US competitions over the last 10 years, placing 4th in the first FAI Pan American Championships last year and thus contributing to the overall win of the Canadian Team. Australia will be his first World Championships as well.

Team photos from http://sailplaneracing.com/team/index.php?option=com_content&view=category&layout=blog&id=9&Itemid=102

Photos by Maria Szemplinska, except 2W finish (by Colin Bantin) and Luke's cockpit selfie . Marjorie photo-artwork

Jerzy Szemplinski

Jerzy flew his first competitions in Poland along with Janusz Centka who went on to win three World Championships. He came back to soaring in the early 2000s after an excursion into sailboat racing. It didn't take him long to get his wings back as he went on to an impressive string of first places. Besides winning several Canadian Championships, Jerzy won four US Nationals, most recently the 18m class back to back in 2015 and 2016. He also led the Canadian Team to victory by placing first in the FAI Pan American Championships in 2015 and topped it all off by winning the FAI qualifying Grand Prix in North America this year. Based on this series of impressive wins within two seasons, I believe,and the US team manager agrees, that Jerzy is currently the strongest pilot in the Americas. His position on the IGC International Pilot Ranking list as the highest ranked North American pilot is further confirmation.

Dave and Jerzy are both veterans of 4 World Championships: 2008 Lüsse, Germany; 2010 Szeged, Hungary; 2012 Uvalde, Tx and 2014 Leszno, Poland. They have accumulated a wealth of experience which will benefit our younger team members. We had our biggest success so far, when Jerzy came unexpectedly within a hair (11 points) of third place and the medal podium in Szeged. This was the best result for Canada in a World Gliding Championship since 1970 when Wolf Mix placed 4th in Marfa, Tx.

Canada also had a glorious day in Uvalde when Jerzy and Dave came in 1st and 2nd in the day score after Jerzy had already won a day.

34th FAI World Gliding Championships Benalla Australia

Follow the contest on

CDN Team Blog
http://sailplaneracing.com/team/

WGC 2017 Benalla, FaceBook
https://www.facebook.com/WGCBenalla/

WGC 2017 Benalla, Home page
http://wgc2017.com/

Wind Shear

David Donaldson SAC Nat. Safety Officer

Arguably the most dangerous part of any flight is the turn to final. We refer to the stall/-spin as a classic accident scenario. A contributing factor in many accidents of this type is wind shear. This article will examine the different types of shear and what we can do to ensure a safe arrival.

There are two basic types: horizontal and vertical. Horizontal can be further broken down into diminishing strength and change of direction. Let's start with the classic, the one we were all taught in ground school, diminishing strength. As we get lower to the ground the wind is slower and that can happen rapidly enough to cause trouble. In certain situations the head wind reduces faster than the aircraft can adjust and hence we have a reduction in airspeed. Fortunately there is a simple cure for this: carry extra speed.

A change-in-direction wind shear presents the same issues as the diminishing speed scenario because the net effect is that we lose airspeed faster than we are able to compensate for the loss. With changing direction we lose the head wind component as well as having the additional possibility that the head wind could change to a tail wind, therefore creating an even greater effect on our airspeed.

A vertical wind shear can be either up or down or, of course, both. We will examine each starting with up. Vertical wind shear can be disastrous when encountered in the lower end of the speed envelope and close to the ground. As we slow for landing, our wing is operating close to the critical angle of attack. Exposed to vertical shear, the wing could exceed the critical angle and enter into a stall condition. This is especially dangerous if it happens on one wing.

Down vertical, conversely, will not increase the angle of attack but it will reduce it, therefore reducing lift. This, combined with the down moving air results in a loss of altitude. In its extreme form - the micro burst - it can be powerful enough to bring down an airliner. In either or both vertical cases our defence is increased airspeed.

Universally the answer is increased speed but we need to know our airplane. What are its capabilities and characteristics? What does it mean to fly "faster"? How will that affect your landing roll? Does your ship bleed off speed easily or will you be carried into the next county? How effective are your spoilers? What is your flap extension speed? What does the manual recommend for windy condition landings? These are all factors we need to take into consideration.

On a final note, we need to be careful we do not fall into habits. We should adjust for each approach. What are the current conditions? Have the winds changed since we launched? Are the conditions there to cause shear? Fly Safe.

Editor's note: I fly a Cessna at an uncontrolled airport with no base operator, and it is common for arriving or departing pilots to broadcast their experience with wind effects on the Unicom frequency, or to call in when approaching to request up-to-date information from those in the pattern. ❖

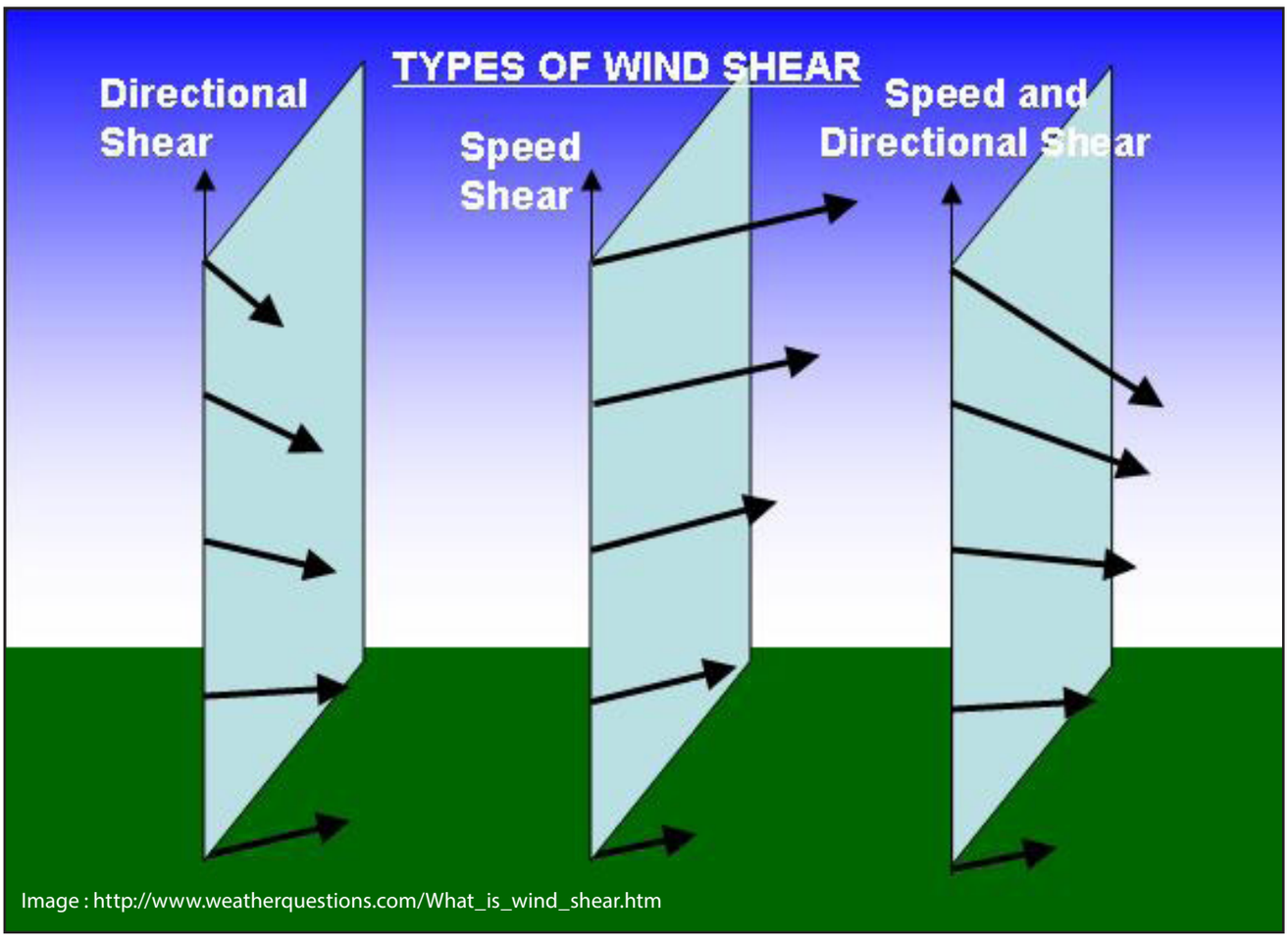


Image : http://www.weatherquestions.com/What_is_wind_shear.htm

The Ontario Provincials

Bill Cole, TSC

At the Canadian Nationals banquet, the subtle hints that somebody should host the Provincials turned into "It's about time we (TSC) did it again". With promises of support from York and SOSA we agreed.

We had three fun filled days of mostly blue soaring and bright fires each night. I'd like to send a special thanks to York Soaring who provided 1-2 tow-planes to help with the launch. Tom Coulson did a great job as contest director, Joerg Stieber was spot on with the weather forecasts and Luke Szczepaniak's timely scoring made the event run smoothly. Results on page 35. Thanks to all the Toronto Soaring members who came out to help with food and running the line.

David Bluhm did a stellar job as Chief tow pilot along with his York counterpart Miguel Londoño.

Special thanks to Dave and Chris for a great Indian food night and Dave Gossen for organizing the BBQ night. (scores on p 35)

Day prizes were provided by Aeropol Aviation Services Corp. http://www.aeropol.com/company_profile/company_profile.html and Four Fathers Brewery http://fourfathersbrewing.ca/

B. Cole

L. Foster

FAI records

Roger Hildesheim

The 2013 release of the FAI Sporting Code was supposed to include wording that would allow pilots to claim multiple (shorter distance) speed records for a given distance flight. However, the actual wording of the 2013 Sporting code was still unclear as to whether these multiple speed claims would be allowed. After seeking clarification with the FAI we now have concurrence that multiple speed claims can be made as of the Oct 1/2013 Sporting Code release. With this updated guidance from the FAI (thanks to Joerg for chasing this down), the speed records claimed by Chris Gough and Bruce Friesen in 2015 can now be applied to shorter distance speed records as well.

The following Canadian soaring records claims have been approved:

Pilot: Christopher Gough
Date/Place: 24 May 2015, Chipman, AB
Record Type: 500 km Speed Triangle, Territorial, Club
FAI Category: FAI 3.1.6b
Sailplane Type: Jantar SZD-41a, C-GXTS
Speed: 98.4 km/h (Club)
Task: Start/Finish N53°43'00" W112°38'00" (Chipman), TP#1 N52°28'41" W109°43'07" (Senlac), TP#2 N51°07'25" W112°04'17"(Finnegan)
Previous Record: Bruce Friesen 85.1 km/h (2011)

Pilot: Bruce Friesen
Date/Place: 23 May 2015, Chipman, AB
Record Type: 300km Triangle Speed, Territorial (Open, 15m, Club)
FAI Category: FAI 3.1.6b
Sailplane Type: Discus B, C-FZHT
Speed: 134.2 km/h (Open & 15m), 124.8 km/h (Club)
Task: Start/Finish N53°43'03" W112°38'00" (Chipman), TP#1 N53°20'22" W110°20'00" (Kitscoty), TP#2 N52°34'16" W112°03'27"(Forestburg Rd. Junction)
Previous Records: Kevin Bennett 113.1 km/h (Open & 15m-1988), Tony Burton 101.4 km/h (Club-2008)

Pilot: Bruce Friesen
Date/Place: 23 May 2015, Chipman, AB
Record Type: 300km Triangle Speed, Territorial (Open, 15m, Club)
FAI Category: SAC
Sailplane Type: Discus B, C-FZHT
Speed: 134.2 km/h (Open & 15m), 124.8 km/h (Club)
Task: Start/Finish N53°43'03" W112°38'00" (Chipman), TP#1 N53°20'22" W110°20'00" (Kitscoty), TP#2 N52°34'16" W112°03'27"(Forestburg Rd. Junction)
Previous Records: John Firth 110.6 km/h (Open-1984), Tim Wood 95.2 km/h (15m-2007), Tony Burton 99.0 km/h (Club-2003)

FAI awards

Walter Weir

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

These badges & badge legs were recorded in the Canadian Soaring Register during the period 5 October 2015 to 12 November 2016

DIAMOND BADGE

106	Pavan Kumar	Lethbridge	World number 451
107	Denis Pepin	Quebec	World number 7477
108	Jean-Guy Helie	Quebec	World number 7480
109	Guy Blood	Edmonton	World number 7481
110	Pierre Gavillet	Montreal	World number 7486
111	Valdur Pille	Quebec	World number pending

GOLD BADGE

340	Pavan Kumar	Lethbridge
341	Emmanuel Cadieux	Montreal
342	Pierre Pepin	Champlain

SILVER BADGE

1099	Andrzej Pilakowski	SOSA
1100	Youssef Chaoui	SOSA
1101	Karl Waskiewicz	Edmonton
1102	Rainer Hau	Montreal
1103	Andrzej Cholewinski	SOSA
1104	Ken Minchau	Montreal
1105	Sergey Skobkarev	Vancouver

DIAMOND DISTANCE (500 km distance flight)

Emmanuel Cadieux	Montreal	513.7	Std Cirrus	Narromine AUS
Denis Pepin	Quebec	510.2	ASW-20	St Raymond QC
Robert Zachemski	SOSA	510.4	SZD-55	Rockton ON
Krzysztof Wiercioch	SOSA	503.8	Jantar Std	Rockton ON
Jean-Guy Helie	Quebec	517.3	ASW-20	St Raymond QC
Tom Coulson	SOSA	504.6	Mosquito	Rockton ON
Guy Blood	Edmonton	509.3	Kestrel 19	Chipman AB
Pierre Gavillet	Montreal	505.4	LAK-17a	Hawkesbury ON
Valdur Pille	Quebec	534.6	DG-600M	St Raymond QC

DIAMOND ALTITUDE (5000m height gain)

Pavan Kumar	Lethbridge	6138	Libelle 201B	Cowley AB

DIAMOND GOAL (300 km goal flight)

Emmanuel Cadieux	Montreal	379.4	Std Cirrus	Lake Keepit AUS
Matthew Watson	York	323.5	HP-18H	Arthur E ON
Krzysztof Wiercioch	SOSA	503.6	Jantar Std	Rockton ON

GOLD DISTANCE (300 km distance flight)

Roy Troppmann	Edmonton	303.5	ASW-15	Chipman AB
Matthew Watson	York	323.5	HP-18H	Arthur E ON
Karl Boutin	Gatineau	303.7	ASW-20	Pendleton ON

GOLD ALITITUDE (3000m height gain)

Geoffry Minors	Lethbridge	3345	ASW-19	Cowley AB
Pavan Kumar	Lethbridge	6138	Libelle 201-B	Cowley AB
Emmanuel Cadieux	Montreal	3179	Std Cirrus	Lake Keepit AUS
Pierre Pepin	Champlain	3465	DG-600-18m	Lake Placid NY

SILVER DISTANCE (50 km distance flight)

Andrzej Pilakowski	SOSA	59.3	SZD-51	Rockton ON
Geoffry Minors	Lethbridge	81.3	ASW-19	Cowley AB
Karl Waskiewicz	Edmonton	68.9	PW-5	Chipman AB
Robert Harvey	SOSA	62.2	SZD-51-1	Rockton ON
Youssef Chaoui	SOSA	58.4	SZD-51	Rockton ON
Rainer Hau	Montreal	58.6	DG-303	Hawkesbury ON
Andrzej Cholewinski	SOSA	61.1	SZD-51	Rockton ON
Sergey Skobkarev	Vancouver	59.0	DG-505	Hope BC
Matt Swain	Cu Nim	72.6	DG-303	Black Diamond AB

SILVER/GOLD DURATION (5 hour flight)

Andrzej Pilakowski	SOSA	5:27	SZD-51	Rockton ON
Youssef Chaoui	SOSA	5:10	SZD-51	Rockton ON
Martin Van Den Berghe	Montreal	6:20	Grob 102	Hawkesbury ON
Karl Waskiewicz	Edmonton	5:21	ASW-15B	Chipman AB
Fernando Garza	Saskatoon	5:13	Open Cirrus	Cudworth SK
Rainer Hau	Montreal	6:33	DG-303	Hawkesbury ON
Andrzej Cholewinski	SOSA	5:25	SZD-51	Rockton ON
Ken Minchau	Montreal	5:00	DG-300	Hawkesbury ON
Sergey Skobkarev	Vancouver	5:46	Blanik L-23	Hope BC
Pavan Kumar	Lethbridge	7:45	DG-400/17	Elko BC

SILVER ALTITUDE (1000m height gain)

Donald Kuehn	York	1058	Grob 103	Arthur E ON
Denise Vanderkooi	Edmonton	1948	PW-5	Chipman AB
Roberto Figueroa	Gatineau	1615	ASW-24	Pendleton ON

2016 CANADIAN ONT PROV GLIDING CHAMPIONSHIPS			DAY 1			DAY 2			DAY 3			Total	
			day			day			day				
			pos	km/h	pts	pos	km/h	pts	pos	km/h	pts	pos	pts
				2.0 h TAT			2.75 h TAT			2.0 h TAT			
Dave Springford	ASG-29/18	F1	1	64.0	913	2	61.0	936	4	63.7	806	1	 2624
Luke Szczepaniak	ASW-27	2W	10	49.1	700	3	59.2	909	1	73.0	924	2	 2503
Krzysztof Wiercioch	Jantar	MF	5	53.2	759	1	62.0	952	5	63.7	805	3	 2484
Chris Wilson	303 Moquito	W2	2	58.6	835	7	51.8	796	3	68.0	861	4	 2465
Joerg Stieber	LS-8/15	JS	8	50.6	721	4	58.0	891	2	69.3	877	5	 2460
David Gossen	ASW-20	PM	3	57.7	822	9	48.8	749	6	62.1	786	6	 2333
Ed Hollestelle Sr	AFH-3	A1	9	49.4	705	6	55.3	850	7	59.8	757	7	 2284
Jim Fryett	LAK-17A/18	JF	6	52.1	743	5	56.1	862	11	49.1	621	8	 2198
Hans Juergensen	Antares 18S	OX	11	(108.1)	464	12	46.0	706	8	59.7	755	9	 1902
Stan Martin	Mini-Nimbus A	ZI	15	(58.3)	250	8	48.8	750	9	59.0	746	10	 1721
Timothy Belchoir	Astir CS	CD	7	50.6	722	11	46.8	719	13	(102.8)	436	11	 1673
James Balasch	Jantar Std 2	BW	12	(102.6)	441	10	47.6	732	12	(120.4)	511	12	 1660
Chris Razl	LS-4B	4B	4	56.3	803	13	(113.5)	398	14	(98.8)	419	13	 1614
Zbigniew Sobolewski	Jantar	1M	13	(92.1)	396	14	(93.9)	329	16	(82.2)	349	14	 1070
Stanislaw Maj	SZD-55-1	KO	16	(57.5)	247	15	(79.9)	280	15	(92.1)	390	15	 913
Marian Nowak	SZD-55-1	NI	14	(59.5)	256	16	(63.7)	223	17	(79.6)	338	16	 814
Bill Cole	Mosquito	BC	17	nf	0	17	nf	0	10	52.5	664	17	 664

Notes: A speed value in brackets is a landout distance. All speed and distances are the handicapped values. Scores include any penalty points.

SILVER ALTITUDE (1000m height gain) cont.

Tracey Brake	York	1275	Libelle H301	Arthur E ON
Stephen Godreau	Edmonton	1945	Puchacz	Chipman AB
Yvan Cote	Quebec	1125	Grob 103	St Raymond QC
Thorsten Duebel	Edmonton	1176	PW-5	Chipman AB
Sergey Skobkarev	Vancouver	1326	Grob 102	Hope BC
Rainer Hau	Montreal	2011	DG-303	Hawkesbury ON
Martin Van Den Berghe	Montreal	1730	Grob 102	Hawkesbury ON
Andrzej Cholewinski	SOSA	1848	SZD-51	Rockton ON
Ken Minchau	Montreal	1923	DG-300	Hawkesbury ON
Matt Swain	Cu Nim	1075	DG-303	Black Diamond AB

C BADGE (1 hour flight)

3059	Andrzej Pilakowski	SOSA	1:15	SZD-51	Rockton ON
3060	Geoffry Minors	Lethbridge	3:26	ASW-19	Cowley AB
3061	Karl Waskiewicz	Edmonton	2:55	PW-5	Chipman AB
3062	Robert Harvey	SOSA	1:20	ASK-21	Rockton ON
3063	Youssef Chaoui	SOSA	5:10	SZD-51	Rockton ON
3064	Martin Van Den Berghe	Montreal	6:20	Grob 102	Hawkesbury ON
3065	Denis Saucier	Quebec	1:09	Blanik L-23	St Raymond QC
3066	Roberto Figueroa	Gatineau	2:49	ASW-24	Pendleton ON
3067	Stephen Godreau	Edmonton	2:02	Puchacz	Chipman AB6
3068	Thorsten Duebel	Edmonton	1:04	PW-5	Chipman AB
3069	Sergey Skobkarev	Vancouver	3:03	Grob 102	Hope BC
3070	Fernando Garza	Saskatoon	5:13	Open Cirrus	Cudworth SK
3071	Rainer Hau	Montreal	6:33	DG-303	Hawkesbury ON
3072	Andrzej Cholewinski	SOSA	5:25	SZD-51	Rockton ON
3073	Conall Muir	Edmonton	1:30	Blanik L-33	Chipman AB 6
3074	Matt Swain	Cu Nim	1:55	DG-303	Black Diamond AB
3075	Daniel-Andre Samson	Quebec	1:23	Pilatus B-4	St Raymond QC
3076	Edouard Lariviere	Quebec	1:45	Grob 102	St Raymond QC
3077	Francois Proulx	Quebec	1:12	Puchacz	St Raymond QC

L. Foster

PM launch at Ont Provincials

Grand Prix Racing 101

Bill Cole TSC

So what is Grand Prix sailplane racing?
Well it is a simplified race for up to 20 competitors: with start and finish lines and a number of 0.5km manditory turnpoints (100km min), no handicaps, one start time where the first one crossing the finish line gets first place. This results in an exciting race to watch where the winner should be apparent without hours of scoring.

This summer Ionia, Michigan, hosted the first north American FAI sanctioned Grand Prix race. Canada not only sent 5 pilots (Jerzy Szemplinski, Sergei Morozov, Krzysztof Wiercioch, Nick Bonniere, and Emmanuel Cadieux) but took 2 of the top 3 places Well done Jerzy and Sergi (see photo ->)
Congradulations to the participants and crew who flew fast in some challanging conditions.

See news blog on the SAC web site.
http://www.sac.ca/index.php/en/news-blogs/240-competition-update-fai-sailplane-grand-prix-usa-2016

Our Canadians are busy preparing for the Worlds in Benalla 2017 with gliders in the container for the long boat trip to Australia. (photo below right)

Good Luck team Canada ❖

FAI Sailplane Grand Prix - Series VII
USA SGP 2016
Event classification
Official

Pos	ID	Pilot		Sailplane	Points	Race 1	Race 2	Race 3	Race 4
1	XG	Jerzy Szemplinski		ASG-29	33	1	3	1	1
2	ZJ	Jerzy Zieba		Diana 2	21	7	1	5	3
3	MS	Sergei Morozov		ASG-29	19	2	5	4	6
4	QT	Garret Willat		ASW-27	15	4	12	3	4
5	98	Pete Alexander		ASG-29	13	6	2	13	5
6	2W	Krzysztof Wiercioch		ASW-27	13	3	5	7	DNF
7	5E	Erik Nelson		Ventus 2	12	DNF	8	6	2
8	7T	Sean Fidler		ASG-29	11	DNF	7	2	DNF
9	F1	Sean Franke		LAK-17a	10	5	4	10	7
10	DL	Dennis Linnekin		ASG-29	2	DNF	DNF	8	DNF
11	BZ	John Mittell		ASW-27	1	DNF	10	9	DNF
12	ST	D. Bonniere		LAK-17b-FES-15	1	DNF	9	DNF	DNF
13	PE	Emmanuel Cadieux		ASW-20		DNF	11	12	DNF
14	5	George Green		ASG-29		DNF	DNF	11	DNF
15	W	Glen Betzoldt		Discus 2a		DNF	DNF	DNF	DNF
16	M1	Michael Stimac		ASW-20		DNC	DNF	DSQ	DNF

CND Nat 2016 YSA

Magazines

GLIDING AUSTRALIA – the bimonthly journal of the Gliding Federation of Australia. <*www.soaring.org.au*>. International rates for on-line access.

SAILPLANE & GLIDING – the bimonthly journal of the BGA. £41.50/yr airmail, £25.75 surface. <*www.gliding.co.uk/sailplaneandgliding/subscriptions.htm*>.

SOARING – the monthly journal of the Soaring Society of America. Sub-scriptions, US$52. Credit cards accepted. Box 2100, Hobbs, NM 88241-2100. <*feedback@ssa.org*>. (505) 392-1177.

SOARING NZ – personal check or credit cards accepted, NZ$135/yr. Subscription enquires <*soaringnz@mccawmedia.co.nz*>.

Soaring services

Fox One Canadian distribution for instruments and software for LX Navigation, SeeYou, Becker and Dittel radios, and will continue to support Ed's former customers. For more product info, go to <www.foxone corp. com>.

High Performance Sailplanes Dealer for Antares gliders, ClearNav Instruments, soaring computers and varios, SAGE mechanical varios, Strong parachutes and Cobra trailers. For product details visit <*www.langelaan.com*> or email <*willem@langelaan.com*>, (647) 236-1286.

Solaire Canada Dealer for the PowerFlarm "core" (brick) and portable collision avoidance systems. Now transponder and ADSB capable and approved for use in Canada (and the USA). Also still available some new and used PDA, PNA and Dell Streak devices, various flight computers, instruments etc. Details at <*www.solairecanada.com*> or *ed@solairecanada.com*, (226) 271-5322.

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

Windpath North American dealer for SZD-54-2 Perkoz, SZD 51-1 Junior, SZD-59 Acro, and SZD55-1. Also MDM-1 Fox, PW-6, PW-5, and Avionic trailers. Jerzy Szemplinski, <*www.windpath.ca*>, <*info@windpath.ca*>, (905) 848-1250.

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www.yorksoaring.com

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