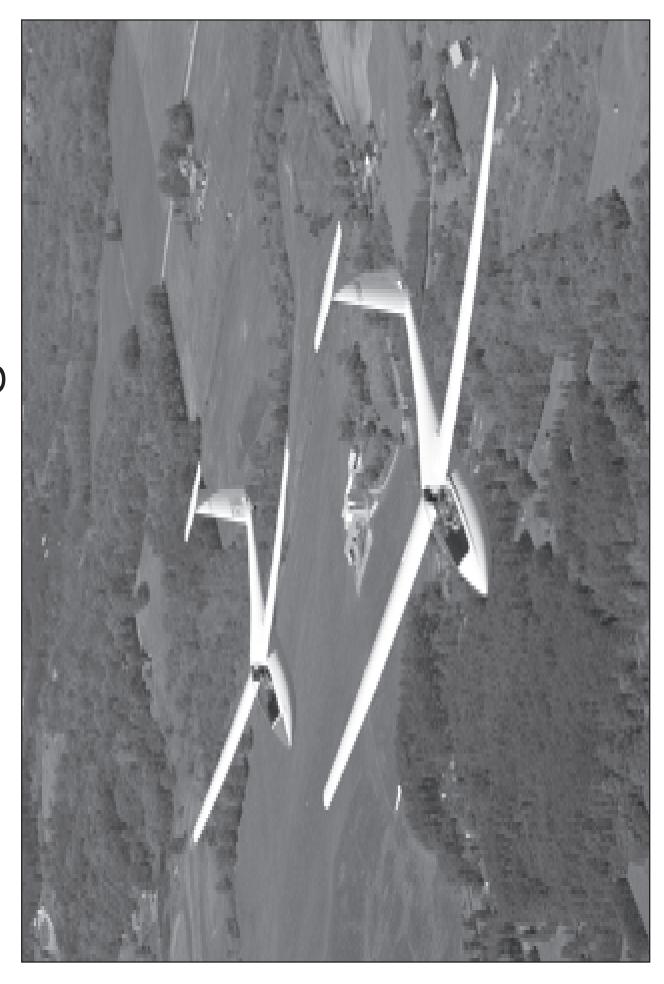
free flight · vol libre



5/01 Oct/Nov

PRIORITIES

By the time this reaches you the tragic events of 11 September will have been detailed and analyzed, and we will be living with the actions that result from that day. Aviation is an environment that is particularly sensitive at the current time as new information emerges as to how the terrorists trained, and other possible plans they may have had to spread havoc. We are daily receiving information from a variety of sources on new rules and regulations, and these are continuously changing. Writing this column is particularly difficult as the issue will go out some weeks from now, and much will no doubt happen in the intervening period.

Security is an area that clearly needs to be addressed. Unfortunately it often happens that regulations enacted for one segment of aviation are imposed as a general blanket, and gliding is affected even though we are clearly not an activity for practical concern. It is necessary to monitor what is happening, and our colleagues at COPA have been particularly helpful in this regard. They had an immediate problem as there was a prohibition on flying non-American registered general aviation aircraft in the States, which stranded Canadians who were caught there when the rule came down. This restriction has since been lifted.

In discussion with our broker, Grant Robinson, he informed me that all insurers world-wide have cancelled war-risks coverage. The SAC policy has been so amended effective 2 October. We agreed that such coverage at this time appears to be of little risk to our community, however he is writing to all club treasurers to inform them of the change, and that for those that want cover can be obtained for an additional premium.

The new rules on flying foreign registered private aircraft in the States could be a problem for our members who normally go to Florida or to various wave or ridge locations at this time of year. Again, this restriction will likely be lifted by the time you read this, however it would be prudent to check with the SSA at <www.ssa.org> for any remaining restrictions to gliding.

While the timing was coincidental, the Transport Minister, David Collenette, announced on 10 September proposed amendments to regulations for overflight, takeoffs, landings and approaches in less populated areas that are consistent with those currently in place for cities and towns. CARs is to be amended so that the definition of operating over a built-up area or open-air assembly of persons is to be expanded to horizontal distance of 2000 feet. Importantly, TC has not provided definitions of the terms "built-up area", or "open-air assembly". Thus while it may appear that our activities take place outside these limits, the regulations as proposed may give an opportunity for complaint by those who are annoyed by our operations.

Just before going to press I learned that our previous president, Pierre Pepin, had been hospitalized for a heart condition and would be undergoing surgery. Our thoughts go to him and his family with wishes for a full and speedy recovery.

Richard Longhurst

free flight

vol libre

5/01 - Oct/Nov

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

ISSN 0827 - 2557

hee hee!

4

practical joke at an old contest * Kai Gertsen

1000 km in Rockies waves

6

long wave flight in southern Rockies ♦ Vaughan Allan

the Bald Eagle meets the falcon

10 the gastronomy of gliding ♦ the "Bald Eagle"

no one gets lost these days!

12

18

14

16

GPS and nostalgia for the bad old days * Val Brain

sailplanes, 1920-1945

book review * Tony Burton



Taken over the Tottenham, Ontario area. In the foreground is Mike Ronan, with Ric Willems off his right wing. They are flying out of Great Lakes Gliding www.greatlakesgliding.com whose field is about 40 minutes northwest of Toronto.

photo by Charles Bryant <www.charlesbryantphotography.on.ca> Chase plane was a Super Cubby piloted by Joe Ronan.

DEPARTMENTS

Letters & Opinion — solo, club annual awards

Safety & Training — camera mounts on gliders, drugs in aviation, forum on getting the student solo

FAI Badges & Records — current badge achievements and approved record claims

Change of address?

The mailing list is maintained at the SAC office, so contact Jim, not the editor.

Hee hee!

Kai Gertsen, from SOARING

Contests were a bit different in the old days

ONCE I WAS ASKED to make a short after-dinner speech at the banquet for the annual Seniors Contest in Florida, and was told to say something funny. After thinking about this for a while, I came to realize that today's competitions do not tend to offer up a lot of material in this line and that I'd have to resort to earlier times.

Nowadays our competitions consist mostly of chasing each other around closed circuits for a couple or three hours, then smartly rolling our glider up to the trailer in ample time for cocktail hour. Here is a sample of a winner's how-I-dunnit speech: "I drove into the first turnpoint where seven knots took me to 7000 feet. Then I drove on to the second turn where eight knots got me to cloudbase. Then I went home." Exciting, but some of the adventure of former days is gone.

In the distant past we used to have a little more variety in our tasks, such as Free Distance and Race-to-a-Goal. Race-to-a-Goal was popular as it got everybody in action — the finish gate crew was the first to leave for the goal, as it was obviously a good thing if they arrived first. Then all the crews took off in a huge caravan.

On the second day of the 1962 Canadian Nationals in Regina, Saskatchewan, the task was Race-to-a-Goal — 167 miles to the airport at Virden. After a long struggle the goal finally came in sight. One more check with the map. Yes, there were the railroad tracks, there was the town and the airport — exactly where they were supposed to be. I had altitude to spare, so down came the nose and the airport soon lay before me. But wait — something was wrong. I promptly hauled in the reins. I knew for certain that a handful of competitors had been ahead of me. Where were they? They should definitely be at the goal by now. Could I have passed them? No, that was beyond the realm of possibility. Even in those days, the thought of me getting ahead of anybody would boggle the mind.

What I thought to be the goal was now in plain view, and nobody was there. Obviously, this was not the place. A little bit of zero sink here, good. Out came the map again. Checked and double-checked again. Everything looked exactly as it should. Where had the others gone? Could they have all got lost? That didn't seem possible. If anybody were to get lost it would most likely be me. Another check on the map and scenery — it sure looked right. What to do? Finally I made up my mind: I didn't know what the others had done or where they'd gone, but this was where I was going to land.

I hadn't even stopped rolling when a whole troop of guys came running out from behind the hangar in full sprint. "Stay in, stay in" they hollered. I had no choice as they seized the Ka6 and shoved me, at a smart trot, up behind the hangar where the other gliders were hidden. As I got out of the glider one of them said, "Wait till you see this — you'll love it."

We didn't have to wait long, and he was right — it was beautiful. Another glider came into view, approaching with purposeful stride. Then all at once he slowed up and proceeded to waft about aimlessly. Having been through that same process a short time before, it didn't take supernatural powers to read his mind.

It was absolutely marvelous. Eventually, he reached the same conclusion as the rest of us, and came on in. With him safely stored behind the hangar, we looked for the next one, and so on. All in all, a very entertaining afternoon. Those were the days my friends.

PS You may wonder what possessed me to fly in the Canadian Nationals. Well, we lived in Hamilton, Ontario in the early fifties where I flew with such Canadian icons as Charlie Yeates, Wolf Mix, Albie Pow, Gordon Oates and Jack Ames. At that time we operated out of Mt. Hope airport for a while, then Kitchener briefly before moving on to Brantford. As a result, we felt more at home in the Canadian soaring fold. We had such a good time in 1962 that we came back to Regina in '66 when we were guests of the Audettes, the period that Julien was the driving force of gliding in Saskatchewan. Presently I fly my ASW-27 out of Harris Hill, NY. When I am not in the '27,I teach cross-country in a K-21.



The SOARING ASSOCIATION of CANADA

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

free flight is the official journal of SAC.

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

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

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

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

For change of address and subscriptions for non-SAC members (\$26/\$47/\$65 for 1/2/3 years, US\$26/\$47/\$65 in USA & overseas), contact the SAC office at the address below.

President Vice President Executive Director Treasurer Legal Counsel Secretary

Richard Longhurst Howard Loewen Jim McCollum Jim McCollum Robert Wappel vacant

SAC office: 107 – 1025 Richmond Road Ottawa, ON K2B 8G8

tel: (613) 829-0536 fax: 829-9497 e-mail: **sac@sac.ca**

website: www.sac.ca

Deadline for contributions:

5"

January, March May, July September, November

L'ASSOCIATION CANADIENNE DE VOL À VOILE

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

vol libre est le journal officiel de l'ACVV.

Les articles publiés dans vol libre proviennent d'individus ou de groupes de vélivoles bienveillants. Leur contenu n'engage que leurs auteurs. Aucune rémunération n'est versée pour ces articles. Tous sont invités à participer à la réalisation du magazine, soit par des reportages, des échanges d'idées, des nouvelles des clubs, des photos pertinentes, etc. L'idéal est de soumettre ces articles par courrier électronique, bien que d'autres moyens soient acceptés. Ils seront publiés selon l'espace disponible, leur intérêt et leur respect des normes de qualité du magazine.

Des photos, des fichiers .jpg ou .tif haute définition et niveaux de gris peuvent servir d'illustrations. Les photos vous seront retournées sur demande.

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

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

Pour signaler un changement d'adresse ou s'abonner, contacter le bureau national à l'adresse à la gauche. Les tarifs au Canada sont de 26\$, 47\$ ou 65\$ pour 1, 2 ou 3 ans, et de 26\$US. 47\$US ou 65\$US à l'extérieur.

EDITOR

Tony Burton Box 1916 Claresholm, AB TOL 0T0 tel & fax (403) 625-4563 e-mail free-flt@agt.net

Any service of Canada Post to above address. Any commercial courier service to 335 - 50 Ave W

COMMERCIAL ADVERTISING SAC office (613) 829-0536 e-mail *sac@sac.ca*

Date limite:

5 janv mai sep

janvier, mars mai, juillet septembre, novembre

letters & opinion

Solo

For those of you who have soloed, you know what I mean. For those of you yet to solo, you'll never forget it.

It is four days after my solo (thanks everyone) and I still get a strange sense of happiness from time to time.

It took me a while to figure out what that feeling was and why it was happening.

It's a soft subtle feeling of contentment, like the memory of a friend or a place.

Sometimes it comes without (apparent) reason, sometimes something will trigger it.

You carry it with you like a little gift that no one but you knows about.

You don't need to wave it around, it only has value to you.

It's very nice, I highly recommend it.

Thanks all for helping get me here and for letting me indulge myself.

David Fee Alberni Valley Soaring

Club annual awards

Trophies are on the minds of most clubs this time of year as they have been collected from last year's winner, polished up (and have broken bits glued back on), engraved for the new recipient, and presented at the year-end gatherings. I think it's important that clubs

reward the flight successes and the labour of their members. In big clubs this is common — a SOSA or a Vancouver Soaring have enough trophies, plaques, certificates, and funny giveaways to break the table at the annual Christmas party.

It's even more important for smaller clubs that recognition of the good flights and a reward for club work by their members be made, since these clubs are often more heavily dependent on the volunteerism of just one or two stalwarts. Such an effort pays solid dividends in club health because their keenest pilots are less likely to leave. People will never begrudge doing an enormous amount of work for their group when they know the effort is useful, and especially, appreciated.

Don't forget to reward well the flying of your pilots. I knew of one fairly large club that had a mass of club awards, but not a "best flight of the year" trophy! (I hope this has changed now.) How there could be no recognition for achievement in the very raison d'être of a gliding club was beyond understanding. The existence of good flying awards says that a club encourages skill in cross-country flying and that has the valuable side effect of improving flight safety.

A trophy is a visible reminder of that appreciation, even if it is only assembled from bits of metal.

Tony Burton



Gatineau Gliding Club's I-26 and Blanik are framed in the rear view mirror of the club's Pawnee. Taber Bucknall was adjusting the towplane's mirrors while waiting for the pilot to get ready in the I-26. After aiming the mirrors, and seeing that it would still be some time until he restarted the Pawnee, he took this shot with a Canon S100 digital camera.

Vaughan Allan



Rotor/cu of the Livingstone and High Rock wave. Looking southeast at the Oldman Gap in the Livingstone Range.

WOULD LIKE TO TELL THE STORY of a personal best flight I had this year. I launched from Claresholm Alberta, was airborne for 7.2 hours, covering 1011 kilometres (my unofficial map measurement). The flight used four different wave systems to fly two laps of a route extending from the US border in the south to west of the city of Calgary in the north.

I started flying "91", my Pik-20E from Claresholm airport in 1992. The majority of my previous gliding experience was with the Cu Nim club, flying from Black Diamond. Claresholm, about one hour south of Calgary, is one of many early 1940's vintage Commonwealth air training bases dotting southern Alberta. One of the unexpected benefits of my new home field was the wave soaring opportunity that it opened up for me. When you mention wave soaring in southern Alberta, pilots immediately think of Cowley and Diamond climbs. As far as wave soaring is concerned, Claresholm is not in the same league as Cowley, but it is situated 60 kilometres ENE of the Livingstone Range. This places it downwind of some of the best wave generating topography in the southern Rocky Mountains. The other major change to my wave flying technique adopted at the new site was a complete switch from high altitude attempts to cross-country flights at altitudes below 12,500 feet.

As my flying experience in the various wave systems accumulated, I started to scheme and dream of a 1000-kilometre flight. It is surprisingly difficult to fit a wave flight that long into southern Alberta, but after some planning I selected a task area and route. The route starts and finishes from Claresholm, with two full laps in racetrack-like fashion of a course from the Oldman River Gap in the Livingstone Range, to Chief Mountain on the US border, the Little Elbow River west of Calgary and returning to the Gap. All components of this course had been covered on many earlier flights, but this was only the second serious attempt to put it all together on one day.

Last year I was able to catch a day in late May that started with considerable promise, but the wave dissipated in midafternoon. A similar route was attempted that day but I had to break off the flight and return to Claresholm after 640 kilometres. In July of this year nature was kinder to me.

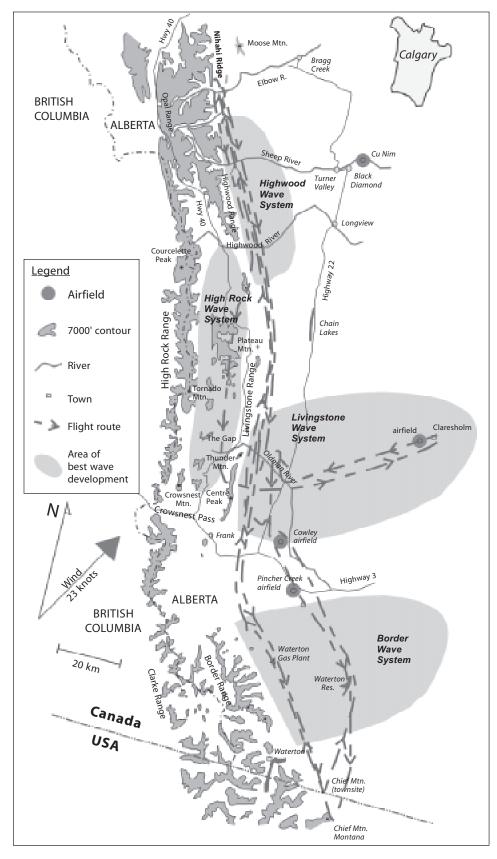
The decision to go flying on July 17 was made for no other reason than I had cleared the decks of all the other things competing for my time. The day started with little apparent promise, Calgary was overcast, the radio weather forecast predicted afternoon clearing and the development of a light southwest breeze. The cloud cover was associated with the trailing edge of a low pressure system that was moving off to the northeast. I was slow to get under way and was not on the road until 9 am. Around the town of High River on the drive south, the sky cleared to about 1/8 cumulus clouds with an encouraging wave organization to them.

On the airfield at Claresholm things actually looked more like a thermal soaring day, with cloud streets aligned with the southwest wind. The wave organization I noted earlier was not present, so I delayed my launch until 12:20, waiting for the cu to develop in the local area. Once off, I launched straight into a thermal and needed only three minutes of airborne engine run time to climb to 2000 feet. With engine stowed and thermal recentred, I achieved a 4 knot climb to 8000 feet. Local cloudbase was about 9500 feet, but I left the thermal early to run to the southwest along the cloud street. About 15 kilometres SW of Claresholm the street was broken by a large blue gap so I topped up to cloudbase and struck out at a conservative speed planning to reconnect with lift on the other side. I admit surprise when I found 1-2 knots of wave lift in the blue.

Working across the wind, parallel to the upwind edge of the cu, lift increased to over 5 knots. It was amazing how the obvious presence of wave lift changed my entire perception of the sky. I could now see it, the tertiary, secondary and primary waves of the Livingstone system delineated by scrappy rotor clouds. How could I have missed it? In my own defence, the cumulus were sparse and no lenticulars had developed, so it required some imagination to see the wave system, but I still can't believe I didn't see it sooner.

It took about an hour to push into the wind and get established in the secondary wave north of the Cowley airfield. This represented a ground speed of less than 50 km/h, but the slowest phase of a flight is always the upwind transition, across the wave system.

The Livingstone wave in the Cowley area is consistently the strongest in southern Alberta. At its very best I have seen this wave deliver an eye-popping 25 knots of lift.



On this day I settled for cruising in smooth lift at 110 knots, while climbing at rates up to 6 knots.

Determining how fast to fly on wave cross-country flights is not a trivial matter. One of the things I did early in my wave flying experience was a simple calculation to comparing indicated and true airspeeds. Airspeed indicators are subject

to systematic altitude errors that will cause them under-read by 2% for every 1000 feet above sea level. At 12,500 this represents a 25% error and the Pik's 151 knot red line actually occurs at 120 knots indicated. It would be very easy in strong conditions to inadvertently exceed red line and possibly expose your aircraft to such extreme consequence as flutter or structural failure.

The heady cruising speeds quickly came to an end south of the Cowley airfield where I slowed down to 70-90 knots to cross the gap between the Livingstone and Border wave systems. I think this gap in the wave is due to the nature of the upwind terrain. The combination of the Crowsnest Pass and a lack of a high, continuous ridge in the Front Ranges to the west produces a weak, disorganized wave, and the need to slow to a more conservative speed. The transition to the secondary wave of the Border system was relatively painless and I was able to top up on altitude while returning to my top cruise speed of 110 knots. It was interesting how long the wavelength of the Border system was on this day. The secondary wave was 25 kilometres downwind from the Border Range; on some days you could fit four or five waves into the same space.

The south end of the Border system around the 49th parallel is a consistently tricky area where I have had difficulty in the past. The Front Ranges change orientation from southwest in the Waterton area to almost due south in Montana, this seems to cause poor wave development around the bend. (It's a bit childish, but I like to dip a wing into the USA just so I can refer to my 'international' flight.) On this day there is an isolated rotor cloud in the lee of Chief Mountain peak in Montana. I use this patch of lift as a convenient turnpoint to top up my altitude and head back north. It is 2 pm when I round the turnpoint, and I'm surprised to see that the secondary wave of the Border system has deteriorated considerably, but the primary has strengthened. This phenomenon must be part of the dynamics of the wave system, as I have noted it occurring on previous flights. I head off at my conservative cruise speed, 70-90 knots, and connect with the primary wave north of Water-

ton. Once in the best lift I was able to top up altitude and return to high speed cruising. I had another easy crossing of the Crowsnest gap aided by a quartering tailwind and connected with the primary wave of the Livingstone system. The lift is so strong in the Cowley area that even at 115 knots I had to move upwind out of the main axis of the wave to find weaker lift and avoid being

carried above 12,500 feet. It's hard to believe, but "too much lift" is not an oxymoron. I prefer moving upwind to handle this situation, because flying faster is not an option and the thought of opening the spoilers at red line is very unappealing.

I arrive north of the Oldman Gap on the Livingstone Range at 2:45. The view north isn't inviting. The retreating low is still in the Calgary area and, judging by the look of the clouds, there is little evidence of good wave in the Highwood system. This is disappointing, so I decide to turn around and do another lap of the southern portion of my task area, where things are still working well.

I fly the second lap in the reverse direction of the first, and the primary wave in the Border system is still looking strong and continuous. There are only two major changes from my first time around. The isolated wave at Chief Mountain is no longer present, so I turn at the townsite of Chief Mountain on the border. Once I am around the turn I see that the secondary wave has regained its dominance and is the preferred route for the return leg back to the north. The first real rough spot in the flight comes with the fourth crossing of the Crowsnest gap. I encounter more sink than before and limp into the Cowley area at 7000 feet, too low to reconnect with the Livingstone wave.

It is about 4:15 and after three hours of fast, straight flying I slow down to 45 knots and use rotor/thermal lift to climb back up into the wave. It is an odd, but not unpleasant feeling; the glider is quiet at low speed and turning gives me a full panoramic view of the sky—it would be a nice break if my flight were not in danger of ending. At 9000 I contact the secondary northwest of Cowley and transition to the primary south of Centre Peak. Once back up and in the wave, I'm away for an easy cruise north of the Oldman Gap.

The north end of the Livingstone and the Highwood wave systems has now come to life and look soarable. The low pressure system has finally cleared through the area. There are still no lenticular clouds, but a scrappy, broken string of rotor cu marks the wave. This is a major decision point for me — push on or return to Claresholm? The duration and distance of my flight to this point is typical for my previous good cross-country wave flights. All my flights prior to this have been just for fun, and as soon as I get tired, cold or stiff from sitting in the cockpit, I am no longer having fun, so I land. This is the first time during the day that I seriously entertain thoughts of a thousand kilometres and a decision is made to try at least one lap of the northern end of the task area.

The first challenge at hand is to cross the area of poor wave development west of Chain Lakes. This stretch of the Livingstone wave system suffers from the lack of a high, continuous ridge along the Front Ranges to the west. I've dropped into this hole on past flights and have learned to be cautious. Today with a quartering tail wind and broken wave lift I cruise across it with little fuss. Once in the primary of the Highwood wave system I shift up to high gear for an easy run to the Elbow River.

The area north of the Elbow River has never been kind to me. There is generally weak, disorganized wave and the Calgary Terminal Control Area lies just to the east, squeezing me into a small corridor of available airspace. I'm not entirely sure why the wave doesn't favour this section of



Vaughan at altitude in "91".



"91" at Claresholm airport after landing, looking south.

the Front Ranges — there is plenty of high terrain to the west. Perhaps the topography of the ridgeline (it lacks an abrupt lee slope) is not ideal for wave generation. Another unusual feature of this area is the high terrain downwind. Moose Mountain, the highest peak in the southern Alberta foothills, lies to the northeast and may disrupt wave development as well.

On this trip I get an unexpected break, a small isolated wave has developed east of Nihahi Ridge which keeps me flying fast and limits height loss. Further north to the Bow River and Trans-Canada highway doesn't look promising, lots of overdevelopment and nothing looks like wave; it is now 5 pm so I turn back south.

The return leg goes smoothly, slightly slower with a quartering headwind but no problem areas excepting a pilot that is getting tired. About 6 pm I arrive at the turnpoint south of the Oldman Gap in the Livingstone wave, determined to do one more lap of the northern leg. When I turn back north the view shows the primary wave of the Livingstone and Highwood systems is still the best option, but the rotor clouds definitely look a little more ragged and discontinuous. Some high thin lenticulars have started to form but they are of no use to me down where I am.

For the first time I take full notice of the High Rock wave system, which is strengthening, with rotor clouds filling in and fattening up. The High Rock wave is much like the ridge that produces it, strong and continuous. When this wave is working it can deliver 80 kilometres of very fast cruising. The High Rock wave system is a contender for the title of best wave in the southern Rockies. It is certainly the longest and most continuous, but to my knowledge no one has ever explored its upper reaches with a high altitude flight. I am not in a good location to make an upwind transition into the High Rock wave, so

I opt for the straight-ahead course, the primary of the Livingstone and Highwood systems.

The leg north goes smoothly until I approach the Elbow River. The north end of the Highwood system is weaker and that isolated wave in the lee of Nihahi Ridge is no longer working. I am steadily losing altitude and turn back south as soon as I cross the Little Elbow River. This is an uncomfortable place to fall out of the wave, with lots of high ground, rocks and trees around. I am down to about 8000 feet, below the rotors, and cruising south at 65 knots trying to get back into the primary wave of the Highwood system. Obviously too low to connect with the wave lift, I endure a bumpy ride while milking some extra height out of the rotor. I am relieved that I don't have to resort to circling at minimum sink speed, and pick up a thousand feet while flying straight ahead. Mercifully the wave seems to reach down and pick me up as I approach the Sheep River, this allows for fast cruising while climbing back up to 12,500.

Arriving at the south end of the Highwood system, the wave gap at the Chain Lakes has expanded in size and has very few encouraging signs of lift within it. After the little episode at the northern turnpoint, I do not relish the thought of fighting my way through this gap with a headwind component and limited hope of thermals at this hour. To my great relief the High Rock wave system is in full bloom and I am in a good position to make an easy upwind transition into it.

In my limited experience, I have found that the best way to get into the High Rock wave is to slide into it from the ends, rather than trying to dive into the middle. This allows you to avoid the extreme sink that can develop in the down side of the wave. Using this model, the two logical entry points for the High Rock system are the Crowsnest Pass and the Highwood River gap. I entered the primary wave north of Plateau Mountain after an altitude loss of less than 2000 feet. The wavelength in the High Rock system is also surprisingly long today, placing the primary wave only 10 kilometres west of the Front Ranges. An almost unbroken line of rotor clouds mark the wave, the best development I have seen all day. What a feeling of relief, I am now confident of successfully completing the flight, even though home base is still over a hundred kilometres away. I take a short break and pull out my

camera to snap a few photos. Then it's a fast run down to the turnpoint southwest of Thunder Mountain on the Livingstone Range, and I arrive with excess altitude for a slow final glide into Claresholm.

The slow glide is a deliberate strategy to reduce "shaken pilot syndrome" as the route cuts across the Livingstone wave system and through the associated rotor turbulence. Flying on the numbers, I could cruise home at over 100 knots, but hitting strong rotor turbulence at high speed can be very disconcerting. I prefer to fly in the 70–80 knot range and arrive over Claresholm airfield at 3500 feet above ground.

There is a gusty 20 knot wind blowing right down the runway as I touch down at 7:30. When packing up to leave around 9 pm there are still some wave clouds visible to the west. A more aggressive and motivated pilot would still be out there, running up and down in the wave...

If you will allow me a closing rant, I would like to say it's time to change our wave flying philosophy. A shift needs to take place in our wave flying, from the almost exclusive emphasis on high altitude flights to a balanced approach which also utilizes the wave's cross-country potential. In the last few years there have been some spectacular wave flights of over 2000 kilometres from New Zealand and recently Argentina. We also are blessed with world class wave soaring conditions in southern Alberta and, with the Cowley airfield, a perfect site to exploit them. A 500 kilometre flight in three hours is achievable from Cowley, but the vast majority of pilots are focussed on altitude attempts in the "house" wave.

The message I hope you take away from my story is that wave cross-country flying is fun, challenging, and safe. The risk of landing out is quite acceptably low. In examining some hard statistics for the average pilot and aircraft (me and mine), there is a 3/42 or 7% chance of landing away (if I had just been a little more conservative on obviously weak days this number would be even lower). I am, of course, looking at the motorglider equivalent of an outlanding and it's interesting to note that two of my three engine extractions were at Cowley so the "out-landing" would have occurred at an airfield. So think about it — go sideways in the wave!

DG-303 Elan Club/Standard 1:41.5/43, acro +7, -5g
DG-800S 15/18 1:46/51.5
DG-808B 15/18 SOLO 53hp 1:46/51.5
DG-505 ORION 17/18/20 1:acro/40/44

DG-505 MB 20/22 SOLO 64hp 1:44/47 DG-1000 18/20 1:acro/43/46.5

DG-800 placeholder



High Performance Sailplanes Limited

planeurs à grande finesse

willem langelaan willem@langelaan.com
905.278.6988 www.langelaan.com/sailplanes

The Bald Eagle meets the Jalcon

the "Bald Eagle"

the gastronomy of gliding

HIS IS A STORY ABOUT EATING. If you really want to read about flying, there will be an interesting article by one of my friends concerning the intricacies of weight and balance in a forthcoming issue.

I am at the age where certain pleasures are no longer as available, as attainable, or as satisfying as they once were. Or at least as I remember them to have been. Sometimes, the hyperbole that periodically appears in the pages of this magazine actually creeps into my own memories, and I have some difficulty recalling what is fact and what is fancy. And, of course, with the onrush of senility, I often have trouble recalling anything at all. Having a bad memory and being a storyteller to boot, well, that's certainly a dangerous combination. It seems that, instead of me improving with age, it's my stories that improve with age. Yes, it's true. The older I get, the better I was. You know; nudge, nudge, wink, wink, I once stayed up for FOUR hours. Who would believe me? (I mean in a glider, of course.) These days, however, my search for pleasure has left its mark with some lasting evidence.

Now that I am older, eating has replaced everything else as my favourite physical and social activity. I can do it with a friend, I sometimes do it in a group, and I even do it alone. In fact, I have just had a mirror installed over my dining room table. Trouble is, if I get any fatter, I fear I'll be mentioned by name in that article on weight and balance. I have begun to notice my friends are also gaining weight, and some are having their arteries reamed out on a regular basis. I am thinking seriously of starting my own Bald Eagle Soaring Club, where us overweight, over-the-hill guys can sit around the bar all day, telling stories instead of flying, and have as our slogan, "All Gut, No Glory".

On a quest to research people who have started their own clubs, I invited myself to a barbecue at Great Lakes Gliding. Their story is that they always wanted their own club. Since this group of guys are working out of their fourth airport in about seven years, I had formed the natural conclusion that they must be antisocial. I found instead the opposite. Quite the opposite. The only reason I could guess for their having to move so frequently was the chance of the neighbours complaining about the loud music at 3 am. Talk about keeping it up for hours, these folks know how to throw a party. They attracted members and sailplanes from a few other clubs, along with plenty of first-timers who kept everyone busy doing intro flights and working up an appetite until mealtime. And what a meal it was.

I have often thought that food, and to some extent drink, are as important to glider pilots as, oh, say, weight

and balance. I may ask if we can have a section on this at our next ground school. With respect to food, SOSA's noted culinary expert Andrew Parker has lectured about the benefits from a snack of complex carbohydrates, and he has written recently in *free flight* about the perils of flying at 10,000 feet after eating Hungarian sausage.

With respect to drink, we encourage pilots to take plenty of fluids to avoid dehydration, and food on the ground is as critical to a successful day at the airfield as a mid-air snack. I fondly remember that early in my gliding career, I had a girlfriend who really knew how to pack a lunch. No, that is not a euphemism, nor an example of the wishful thinking noted above. You see, what her technique was, she wrapped the tomato slices separately from the sandwiches, to keep the bread from getting soggy. It was interactive to the extent that, prior to consumption, the food had some assembly required, but I never had a fresher lunch. These days I do miss her, and am reduced to walking around the field eating peanut butter from the jar.

In the evenings, when other folks are bringing their own food to slap on the barbecue, I usually heat a microwaveable entrée. They have the advantage that on hot days, I can suck them still frozen, like a Popsicle. One night, one of the other members offered me some of their extra vegetables, and another family suggested I help finish off their salad. To me, this was the dining equivalent of someone marking a thermal. I became a worse leech on the ground than I am in the air. I began to show up at dinner with utensils and an empty plate. I would wander past the firepit, peering at the separate steaks, chops, etc, complaining loudly that my food would never be cooked given the poor arrangement of coals. Periodically, I would borrow a long fork and poke ostentatiously at some item whose rightful owner had gone off in search of refreshment. Eventually, various families would each offer sundry items to tide me over until my stuff was done. I ate like a king for months.

Even after the ruse was exposed, I managed to keep up a healthy competition among my benefactors by challenging them. I would shamelessly say, "Oh, no potatoes thanks, Olga might be offended if I don't have a big helping of her wonderful Potatoes Paprikash", or "just a small portion of ice cream would be great, I need to save room for Marg Ferguson's terrific apple pie."

When it comes to dining at other clubs, I have eaten very well, but at some locations they made you cook the stuff yourself, which was not without peril. Last year at Pendleton, we grilled steaks in a rainstorm, and some years ago I wrote about a trick fork at Champlain that caused several burgers to land out during the flipping operation.

Here at Great Lakes, the barbecue was second to none. There was lots to eat and drink, and the highlights included fresh corn and a magnificent hip of beef, roasted all day on a spit by Gerry Bunder. Gerry and his son Shaun, who is perhaps the only third-generation glider pilot in Canada, provided a tremendous amount of help to SOSA during the recent Nationals. We thank the club for providing us with them and their immaculate Pawnee. Back at Great Lakes, Gerry did a masterful job of carving, resplendent in a tall chef's hat. I hope they have a photo of that to put on the web site next to the shot of Mike Morgulis doing his Gilligan impression. See <www.greatlakesgliding.com>.

Like the Jaguar people, these guys think of everything. They even had a junior member running around on call with a battery powered pepper and salt mill, complete with built in flashlight. In order to make the kid feel useful, many of us kept eating until way after dark. I think we quit only when the battery went dead.

Just as Gerry was loading up our plates, we were treated to a lecture from a representative of the local Falconry Centre. This man had previously entertained us with flying demonstrations of gas powered, radio-controlled ornithopters. (Yeah, not only did I have to look it up, too, but it confuses my spell checker.) The guy had on his arm a hooded falcon, with a giant wingspan, a sharp beak, and a very hungry look in its beady eyes. (Okay, so I was imagining what the eyes looked like under the hood). We were given a talk on how, through the ages, birds of prey have survived by swooping in on likely looking food and swallowing it alive.

Now, the aroma of gently roasting beef had been wafting over the field since about seven that morning, making all of us very hungry. I could only imagine the effect it had upon the bird. Try to picture how I felt about protecting my huge slab of rare meat when the handler took off the hood and instructed the falcon to go hunt. As it made directly for me, I mumbled something about professional courtesy, and pointed towards one of the barn cats. Check out <www. falconrycentre.com> where they actually have a Live Image Bald Eagle Cam.

After dinner, I got to meet Mike and Cheryl Ronan, upon whose farm the club is located. Mike is an airline captain, and a fascinating guy in every respect, and they are both genuinely hospitable. I barely had to mention driving home when they offered me accommodation for the night, which meant I could continue snacking on the beef until quite late. Mike's interests include beach volleyball, aircraft, and all kinds of craftsmanship. He has fully equipped wood and

GLIPPER
RIDES
RIDE

metal shops, which he built, and he has supplied the club with an outhouse complete with seat belt, stick, rudder pedals, and thoughtfully, a drop down oxygen mask.

One of Mike's greatest abilities is that he can scrounge materials and fabricate anything from discarded parts. I think this is admirable, but may come back to haunt him or whoever buys his farm. We had a guy at our club like this, who, for example, built both our windsock frames from old car parts. They are both different sizes, and neither is standard, so we need custom made socks, which are difficult to get when you need one. Mike made his fifty foot hangar door from some square tubing and soffit panels. The operating mechanism, pulleys, chains, etc. were scrounged from an old combine. The solenoids, relays and some switches were sourced from a washing machine. Picture trying to find replacement parts for this when Mike is out of town at a beach volley-ball tournament.

Their 16 year old son Tim is a pilot, and has a band that did a creditable job of entertaining us all evening. It was amazing how, in order to tell stories, we kept asking the young lads to keep the volume down. *Mirror, mirror, on the wall, I've become my father after all.* Tim and the boys favoured us with a whole lot of rock from the sixties, which was greatly appreciated by our age group. I have taken the liberty to adjust the lyrics to a Joni Mitchell song of that era, which I think is appropriate to the theme, and I dedicate it to the whole gang at Great Lakes.

I call it Windstock:

I came upon a child of God, he was walkin', along the road.

I asked him, where are you going? And this he told me. I'm goin' on down to Ronan's farm, I'm going to join up with the Great Lakes band

I'm going to soar above the land, and try and set my soul free.

There is lift now, in the thermals And we've got to get ourselves up to the cloudbase.

Then can I fly beside you? I have come here to lose the herd

And to feel just like a bird, gracefully turning. Well maybe it's now the time to launch, or maybe we should hangar stack

Don't know if we can make it back, but life is for learning.

There is cumulus, that is forming And we've got to get ourselves up to the cloudbase.

By the time we got the task done, the lift was still quite strong.

On the radio there was song, and celebration. And I dreamed I saw the towplanes, riding shotgun in the skies

Turning into butterflies, above our nation. In the sunset, we are golden And we've got to get ourselves back to the pattern.

Postscript I wrote Mike Ronan to see if he wanted me to tone down my observations re scrounged parts. In fact he embellished them, specifying that it was ⇒ p18

No one gets lost these days!

Val Brain, from Convector

nostalgia for the bad old days

HEY SAY GROWING OLDER makes you nostalgic for the Good Old Days. Not me. I'm nostalgic for the Bad Old Days. No one today gets lost, even when told to. At least, no one with 100 bucks or so to spend on a WalMart GPS. For 100 measly dollars and \$3 of AA batteries you can be permanently and precisely *Found*, absolutely located to within about ten metres by our new guardian angels — not the stars in heaven but man-made satellites, artificial fixed stars that not only tell you exactly where you are, but also where you are headed, how far you have to go and how fast you're getting there — and also say "beep!" when you get there.

Hitch your GPS to an in-flight computer and it'll tell you how high you need to be to make it home or to the nearest airport, so you never again have to tell a farmer "the wind quit" and ask to use his telephone, borrow his tractor, or ask him to navigate the retrieve crew from the known world to Dogpatch via highways, byways and dirt tracks that have no names or markers. In other words, today one is no longer lost as in the bad old days, and gliding is thereby diminished by experience, adventure and adrenalin.

My cross-country seminars used to spend time on map reading and dead reckoning: how to plot courses and note landmarks and mark charts, how to locate an invis-

GROUND.. GIMME
A CONTROL COLUMN AUDIO
CHECK WILLYA? ... I SEEM
TO HAVE LOST THE
DAMN
THING!

BOURSOP

BOURSOP

ible turning point within a framework of roads, rivers and railroads, so that somewhere down there, there has to be a grass strip amid a thousand others where you must make a precise turn while pointing your wingtip at an aiming point identified by a fuzzy black and white image in a turning point booklet that is likely to be upside down. Today all you have to do is read the numbers and wait for the beep — about as close to navigation as microwave cooking is to haute cuisine.

What we have lost, fellow pilots, is the experience of being lost, the helplessness, the humiliation, the essential human angst of knowing only what you do not know, trapped in a goldfish bowl with an unfoldable chart, while trying to figure out whether the town beneath is really (A) Littlestown, or (B) Taneytown, or (C) Uniontown, or (D) Somewhere Else. If A, then the big highway is to the north, the river to the south, and the race track to the east. The airport must then be straight ahead where the road forks, but it isn't. So how about B, etc?

In danger of fluttering down like a wounded bird

Meanwhile the altimeter is winding down and the Anxiety Meter is rising to panic and one is in danger of just fluttering down like a wounded bird to flop into a field soon filled with people who all know exactly where they are. Sometimes this scenario is not confined to the private hell of the cockpit but broadcast for all the world to hear, as the ingenue pilot blurts out his predicament to a panel of would-be advisors who ask him, "Can you see the quarry?" No. "What about the power station?" No. "The bridge over the river?" What river?... and so on until an exasperated voice says "Cut out the chatter. This is a contest frequency," and the bleating of the lost sheep is finally silenced.

I speak with some authority because I was always prone to getting lost. On my first cross-country, back in 1957, which lasted six and a half hours, for the last six I was lost, staying up because I had no permission to come down—at least, not anywhere other than Lasham Gliding Society in the UK, where I had taken off. It was a perfect summer's day, and I was flying a red Olympia imaginatively called *Red O* to distinguish it from the green Olympia called *Green O*.

I took a winch launch and joined a gaggle of other gliders that climbed to 5000 before heading off and, of course, I followed them. A few miles on we all started circling again and I climbed up with them, except that when I got to the top of the thermal they had disappeared, and so had Lasham. For as far as I could see the trim cultivated fields of Hampshire extended to the hori-

zon. I had no radio, no chart. Fortunately lift was plentiful, so I was able to sport in this nowhere for another six hours before the sun began to sink in the west.

I had drifted to the outskirts of a large city and below was a huge church, a cathedral with its Gothic towers and flying buttresses, which I reasoned must be Winchester, not much more than 20 miles from Lasham to the south, or possibly the southwest, or even the west, which meant heading to the north, or possibly the northeast, or even the east, after due deliberation. In the end the matter was decided by landing more or less directly underneath according to the "flutter-down" principle, on a school playing field, by adroitly avoiding nets, goal posts and other obstructions. To my surprise, a horde of little girls in school uniforms surrounded the glider, followed by a tall and very severe schoolmarm who said loudly, "Don't touch it, girls. You don't know where it's been."

Actually the retrieve went smoothly and I was given only a mild tongue lashing (hence the name "Lash 'em") by Derek Piggott, who was clearly relieved I hadn't rolled *Red O* into a ball. When I discovered the New World in 1958 and bought into a 1-26 group with cross-country ambitions, I found it even easier to get lost. All the little American towns looked exactly alike and none had cathedrals, so I just had to keep going until I ran out of air. That's how I got my Silver distance.

On one flight out of Westminster (USA) I reached cloud-base at not much more than 2000 feet agl and headed east. Much of the flight was in cloud, using a turn and slip I had purchased while in England, and on emerging some time later looked down to see only water beneath. I was on the edge of the Bay, and landed at Weide Air Force Base, where a pilot obligingly flew me back to Westminster so I could retrieve myself.

Later, in the 1970s, I recall a 300 kilometre attempt while headed down to Culpepper, Virginia from Frederick in my Austria SH-1, when I encountered an enormous lake south of Leesburg which shouldn't have been there. Could I have overflown the turning point? Should I turn back? To heck with it, I pressed on and found the airport at Culpepper with its glider operation that I had visited only two weeks earlier while on vacation. I was able to take my photo and return to Frederick, and on landing I asked about the mysterious lake. The advice was: "Get yourself an up-to-date chart". The entire valley had been dammed and flooded. But for a while I was again lost.

Cruised for mile after mile, altitude bleeding away
In those days flying in a contest at another site was always a challenge, requiring charts to be studied and courses marked and landmarks noted. I recall once flying out of Harris Hill near Elmira over unlandable terrain running fresh out of landmarks with only the vaguest

idea of which direction to fly home. I was climbing slowly in what was likely to be the last thermal of the day, and when it topped out I headed into the murk on a compass course in the general direction of where the airport should be. The wooded hills stretched on as far as the eye could see in every direction, and I cruised on for mile after mile, altitude bleeding away.

Then, Halleluiah! At less than 1000 feet, the airstrip at Harris Hill, almost level with the horizon. My palms were sweating — 500 feet and a mile to go, then 200 feet. The airport boundary was approaching and at the finish line a crowd of onlookers were all waving — those good people!

I resisted the urge to wave back, dropped flaps and landed straight ahead on the runway. My satisfaction was short-lived: I had just grounded the tender belly of the glider on the most abrasive runway in North America. The grinding went on for an age, and a wisp of smoke filtered up into the cockpit.

I was quickly surrounded by helpful spectators uttering pleasantries about "Those who Had and Those who Will", but humiliation does not love company. The good news was that Tom Smith, the Pik dealer and glass-fibre repair expert, was on hand to work much of that night replacing three out of the four layers of glass left on the runway, so that by launch time I was ready to go again.

Three years ago I finally broke down and bought an entry-level Garmin 38. Designed for campers, it quit at 90 knots, which was unhelpful on final glides, but it introduced me to the new world of the permanently Found. My long-honed navigational skills eroded fast, and my charts were no longer marked with courses and turning points. But one day, on a task from Fairfield to York, Carlisle, and back, I followed the numbers out of York and some time later found myself approaching Three Mile Island — a land-mark as unmistakable as the Eiffel Tower.

Deceived by technology and abandoned to my own devices Suddenly I knew again the terror of the unknown, the awful truth of *Garbage in, Garbage out*, the mantra of computer programmers. My Carlisle coordinates were rubbish, and I was lost, lost, deceived by technology and abandoned to my own devices, my rumpled, and the lost art of dead reckoning. In fact, what I did was to change my GPS turning point from Carlisle to Roxbury Dam, a turning point in the same general direction, and follow the numbers until Carlisle hove in sight.

A close call. I could have fluttered down into a field near Dillsburg or East Berlin or wherever. With one difference — today you know exactly where you are in latitude and longitude, to three places of decimals, within ten metres.

And that's progress!

At 15, Val Brain took a gliding course in 1946 with the Air Training Corps in his native England, where he soloed by accident in a Slingsby Cadet towed rather too fast on a ground slide. He next soloed in 1955 at the London Gliding Club at Dunstable and then transferred to the Surrey Gliding Club at Lasham. In 1958 he visited relatives on a diplomatic mission in Washington, DC and managed not to return to the United Kingdom. A week after arriving in the USA he joined the Mid-Atlantic Soaring Association, where he still flies at their Fairfield, PA gliding field. He was for many years M-ASA's chief instructor and continues to conduct seminars on cross-country soaring. He wrote this article for the M-ASH newsletter, "Convector".

safety & training

Camera mounts on gliders

Steve Liard's recent photo contest win is to be applauded and his enthusiasm for doing this sort of thing is infectious. However in the heat of the moment he omitted to discuss "how to do it right". Hence below I show how you should go about getting the required Transport Canada approvals. It sounds like a rigorous process, but ensures that, for one, the glider insurance remains valid! I understand it is not all that difficult to get an approval.

And, of course, we should all be very cautious and must brief each other thoroughly before taking air-to-air photos from another aircraft. A recent incident in which the tow rope became entangled in the glider wing root area should not have occurred with careful planning.

There is a requirement to obtain approval whenever a "design change" is to be made to an aircraft. And mounting a camera on the outside of a glider constitutes such a change. While I thoroughly encourage photographing gliders in interesting situations, we must all remain vitally concerned lest safety be compromised. The rules that specify when a design change requires an approval are found in CAR 571.06. The rules and standards concerning design change approvals for type certified aircraft and products are found in CAR Part V, Subpart 13 and Airworthiness Manual Chapter 513.

To make a long story short it goes something like this. In general terms the objective is to show that the changed product continues to meet the design standards that the original, unchanged product met. The procedures are as follows:

- 1. Submit application form to local Transport Canada Regional Aircraft Certification Office. There is a fee to be paid ... not sure what it would be for a typical camera mount on a glider though;
- 2. Reach agreement with Transport Canada on applicable airworthiness standards and methods for demonstrating compliance;
- 3. Produce drawings, sketches, installation instructions, etc. to clearly describe the design change;
- 4. Perform necessary tests and analysis (testing may or may not involve Transport Canada personnel);
- 5. Prepare flight and maintenance manual supplements if required;
- 6. Prepare substantiation documents that describe (normally in a narrative or report format) how compliance was demonstrated for each applicable airworthiness requirement;
- 7. Submit data package to Transport Canada for review and approval.

Transport Canada has delegated certain individuals within the aircraft industry who can issue design approvals on behalf of the Minister. In fact TC encourage applicants to go to these delegates. A list of delegates can be found on the TC web site following the links to Safety & Security, Civil Aviation, Aircraft Certification, Delegations.

It is important to note that the ultimate purpose of the process described above is to ensure that design changes meet the minimum safety standards. The design standards are by and large based on accident history and they tend to be very well thought out. As long as the drawings and sketches (even annotated photographs) fully describe the design change configuration and the reports adequately describe what was done and how compliance was demonstrated, the requirements will have been satisfied. No long treatise is required! I suggest wannabe photographers start by calling the TC contact to be found from the TC web site, as above.

Early discussions with a delegate and/or the local Transport Canada aircraft certification engineer always pay off in the end. Remember our slogan "Safety Times Four"!

lan Oldaker Chairman, FT&S Committee

Drugs in aviation

At the June FAI AGM meeting, the medical section of the FAI focussed on the use of drugs in aviation. Usually drugs are used in sport to enhance the athlete's physical performance, but this is not a factor in aviation — so why look at it? This may be, in part, because soaring competitions may yet be an Olympic event, and a drug policy needs to be in place at the outset.

One paper presented referred specifically to a medication called NESP. This drug is uded to stimulate red blood cell production in people who have impaired synthesis of red blood cells. This can occur particularly in kidney failure where the build-up of toxins (which are not excreted) impairs the production of red blood cells. In the aviation setting, this could increase the oxygen-carrying capacity of a pilot in high altitude flight. The downside is that the drug can damage the urinary system, so it seems doubtful to me that this drug would appeal to soaring pilots.

Another paper dealt with stimulants, specifically amphetamine, which was used with disastrous results in WWII. The stimulant effect gives the pilot a false sense of increased capability. It wears off quickly and is followed by an "undershoot" effect — it is

also addictive. Soaring is a demanding sport and requires all the pilot's faculties be in an optimal state, especially in the functions of assessment and judgement. As amphetamine enhances physical performance, which is not a factor in soaring skill, it fundamentally may not appeal to pilots.

A similar drug called pseudo-ephedrine is a decongestant and a stimulant; it has stimulant effects similar to amphetamines. Pilots may use this to relieve cold symptoms, but they may not be aware of its adverse effects. It is possible to inadvertently use one of these over-the-counter medications.

Antihistamines are often sedating, though some are promoted as "non-drowsy", another way of saying, "Stimulating", although there are exceptions. A basic safe principle is:

If you need to take medication before you fly you probably shouldn't be flying.

Drugs do not seem to be the way to enhance a soaring pilot's performance.

Dr. Peter Perry Chairman, SAC Medical committee

Forum on getting the student solo

Getting the student solo involves teaching him two things: the mechanical skills and judgement. In the time close to solo, a student can "stall" on the judgement side of the training. Can a large part of this problem be the fact that the very presence of the instructor becomes a psychological barrier to further improvement in judgement?

Question Is there a point where getting the student on his own tells him that he can't rely any longer on the voice in the back — basically concentrating the mind and improving judgement thereby?

Tony Burton

Responses from internet I'm a human performance consultant, not an instructor, and have specialized in instructional design. First, "judgement" is a very difficult construct to pin down. Any pilot's ability to respond appropriately to an in-flight event depends (variously) on physical ability, the degree to which their actions are automatic, and the experience they have to draw upon. Judgement is mostly a resource born of experience. I'm not sure that instructors can teach judgement, but they certainly can nurture it, both inside and outside of the aircraft.

In the early stages of flight training, the instructor explains, demonstrates, then allows the student to practise. At that point, the value is in the instructor's direct feedback. The instructor also helps the beginner interpret feedback received from the glider as it responds to control inputs, surrounding air, etc. That early part of the instruction helps hone the physical part of the skills.

The judgement training comes from describing "what-ifs," drawing attention to important cues, relating personal experiences, and linking the events of one flight to any number of possible scenarios. Judgement, in essence, is the "thinking" part. It consists of assessing situations, selecting actions, and formulating possibilities. Needless to say, judgement also includes awareness of one's own limitations. Only an instructor can determine whether or not a given student has physical and judgement skills necessary for safe solo flight.

My experience and intuition tell me that the best instructors change the nature of their partnership with students as they progress toward solo. The scaffolding that supports learning is carefully taken away piece-by-piece until the student is essentially flying alone, even before leaving the instructor on the ground. If the student continues to rely on the instructor for judgement, perhaps too much of the scaffolding remains — there may be sufficient physical skill, but low confidence. Should you send the student solo anyway? It may get past one barrier, but I don't believe it would be a suitable catalyst for developing judgement. Some ways an instructor may avoid becoming an impediment to judgement and decision-making in the air is by:

- 1) making fewer statements and asking more questions,
- 2) posing more "what-if" scenarios.
- 3) saying less while encouraging the student to express thoughts aloud during the flight, and
- 4) providing meaningful alternatives and supportive feedback.

Nearing solo and within the bounds of safety, the instructor *must* allow the student to make and correct more of his or her own mistakes. Brief, measured feedback followed by a thorough debriefing on the ground will ensure the proper lessons are learned.

Incidentally, I have recently returned to soaring after a ten-year absence and have taken several hours of dual instruction over the past weeks. Naturally, I'm inclined to reflect on the nature of flight instruction — not to mention the degradation of my reflexes and psychomotor skills. I'd like to hear other opinions on the development of judgement in flight training. With some examples, perhaps we could come up with a few ideas about nurturing it during instruction (and beyond).

Carl Czech

One thing I want to see is how a pupil will cope when the work load goes up. There are lots of ways to get this; ending up out of position for the circuit, demonstrating something at the top of the circuit, sometimes just looking at the three gliders ahead in the circuit and doing nothing. What does the pupil do? Are her priorities correct? Will he happily land somewhere different? Does the handling stay good? If somebody sensibly copes with something more difficult then you can both be more confident about them going on their own.

Chris Rowland

There may actually be two questions at hand (when does it become non-productive vs. when does it become counterproductive). The immediate answer to both is simple: The presence of the instructor becomes non-productive beyond the point when the objective of his presence has been achieved, and counter-productive when it impedes progress toward that objective. The much larger and more complex question is: "What are the objectives of pre-solo training, and how does the instructor determine that they have been met?" You suggested initially that the point of non-productivity may have been reached when the process of transfer of responsibility for safe outcome of the flight stalls over the student's deference to the instructor's presence. However valid that may be, for the instructor to step out of the aircraft on that basis alone is not only irrelevant to the training objectives, but also a "sink or swim" proposition with a real potential of the student failing to "swim." Good question, though — it might supply the contents for a chapter too often omitted from instructional texts.

Eric Coleson

Directors & Officers

President/Ontario

Richard Longhurst 23 Lesmill Road, Suite 100 Toronto, ON M3B 3P6 (416) 385-9298 (H) (416) 540-3132 (cell) (416) 385-1580 (F) rlonghurst@look.ca

Quebec/Atlantic

Jo Lanoë 2511 Chemin Royal lle d'Orléans, QC GOA 3W0 (418) 829-0342 (H), 682-6627 (B) jlanoe @ qc.aibn.com

Prairie & VP

Howard Loewen 233 Lamont Boulevard Winnipeg, MB R3P 0E8 (204) 489-1148 (H) holoewen@home.com

Legal Counsel

Robert Wappel

Alberta

David McAsey 47 - 2300 Oakmoor Drive SW Calgary, AB T2V 4N7 (403) 281-7962 (H) (403) 281-0589 (B&F) mprsoar@home.com

Pacific

Martin Vanstone 3998 Bayridge Avenue W. Vancouver, BC V7V 3J5 (604) 926-1076 (H) (604) 926-2037 (F) mvanstone@ltinc.net

Exec Director & Treas

Iim McCollum 6507 Bunker Road Manotick, ON K4M IB3 (613) 692-2227 (H), 829-0536 (B) sac @ sac.ca

Committees

Air Cadets

Stuart Gregory 78 Kimbourné Avenue Toronto, ON M4J 4J4 (416) 466-7274 (H)

Airspace

Ian Grant 2954 Otterson Drive Ottawa, ON KIV 8Z7 (613) 737-9407 (H), 995-2031 (B) grant.i@atomcon.gc.ca members: Roger Harris

rharris@petrillobujold.ca Scott McMaster scott@mcmail.cis.mcmaster.ca

FAI Awards

Walter Weir 3 Sumac Court, Burketon RR 2, Blackstock, ON LOB IBO (905) 263-4374 (H) waltweir@inforamp.net

FAI Records

Roger Hildesheim Box 1351, Richmond ON KOA 2ZO (613) 838-4470 lucile@istar.ca

Flight Training & Safety

lan Oldaker "Willow Spinney" RRI, Limehouse, ON LOP 1HO (905) 873-6081 (H) oldaker@aztec-net.com members:

Dan Cook dt.cook@sympatico.ca Tom Coulson tcoulson@istar.ca gegb@home.com fkisil@ms.umanitoba.ca Joe Gegenbauer Fred Kisil Marc Lussier

Terry Southwood

Free Flight

Tony Burton, Box 1916 Claresholm, AB TOL OTO (403) 625-4563 (H&F) free-flt@agt.net

Historian

vacant

Insurance

Richard Longhurst 23 Lesmill Road, Suite 100 Toronto, ON M3B 3P6 (416) 385-9293 (H), 540-3132 (cell) rlonghurst@look.ca members: Doug Eaton

Keith Hay

keith.hay@attglobal.net

Medical

Dr. Peter Perry
64 Blair Road, Cambridge, ON NIS 2JI
(519) 623-1092 (H), 740-6547 (B)
member: Dr. WL Delaney

Sporting

Jörg Stieber Box 25. Plattsville, ON NOI ISO (519) 684-7372 (H), 662-2840 (B) joerg@odg.com members:

Colin Bantin ccbantin@sympatico.ca Walter Weir waltweir@inforamp.net contest Itrs: Al Schreiter alschre@ican.net

Technical

RR2, Mountain, ON KOE ISO (613) 989-1634 (H) pfortier@ottawa.com members:

Chris Eaves xu-aviation@sympatico.ca Herb Lach Glenn Lockhard glockhard@aol.com

Trophy Claims

David McAsey 47 - 2300 Oakmoor Dr SW Calgary, AB T2V 4N7 (403) 281-7962 (H), 281-0589 (B&F) mprsoar@home.com

Video Library

Ted Froelich 2552 Cleroux Crescent Gloucester, ON KIW IBS (613) 824-6503 (H) Ì 02375. I 6 I 6 @ còmpuserve.com

Web Site

Chairman: vacant members:

S. Kennedy

holoewen@home.com H. Loewen R. MacPherson rmacpher@nash.pubnix.net

M. Morgulis mike.morgulis@sympatico.ca

15

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

The following badge legs were recorded in the Canadian Soaring Register during the period 22 June to 8 September.

GOLD RADGE

298 Stewart Midwinter Rockies

SILVER BADGE

937 Max Fanderl Rockies 938 John Gruber Saskatoon 939 Ron Cattaruzza Edmonton

DIAMOND DISTANCE (500 km flight)

Norman Marsh **Rockies** 504.4 km Discus Invermere, BC

DIAMOND GOAL (300 km goal flight)

Stewart Midwinter Rockies 301.7 km Invermere, BC

1-23

GOLD DISTANCE (300 km flight)

PW-5 Invermere, BC Max Fanderl Rockies 301.3 km Stewart Midwinter Rockies 301.7 km 1-23 Invermere, BC 300.9 km Invermere, BC Art Grant Winnipeg Jantar

GOLD ALTITUDE (3000 m gain)

Henry Wyatt Edmonton ASW-15 3610 m Cowley, AB

SILVER DISTANCE (50 km flight)

Arthur East, ON Brian Laurence York 60.7 km 1-26 Max Fanderl Rockies PW-5 Invermere BC 154.0 km Mark Mozel Vancouver 51.6 km Grob 102 Invermere, BC John Gruber Saskatoon 51.6 km PW-5 Invermere, BC Edmonton 90.8 km ASW-15 Chipman, AB Ron Cattaruzza

SILVER DURATION (5 hour flight)

5:40 h ASW-15 Chipman, AB Ron Cattaruzza Edmonton Max Fanderl Rockies 7:39 h PW-5 Invermere, BC John Gruber Saskatoon 5:51 h PW-5 Invermere, BC ASW-15 Henry Wyatt Edmonton 5:23 h Cowley, AB Dennis Pizzardi Frin 5·11 h Pilatus B-4 Grand Valley, ON

SILVER ALTITUDE (1000 m gain)

16

Brian Laurence York 1265 m 1-26 Arthur East, ON Max Fanderl Rockies PW-5 Invermere, BC 1290 m Mark Mozel Invermere, BC Vancouver Grob 102 1560 m John Gruber Saskatoon 1430 m PW-5 Invermere, BC Richard Lewanczuk Edmonton 1320 m ASW-15 Chipman, AB Henry Wyatt Edmonton 3610 m ASW-15 Cowley, AB 1350 m ASW-15 Chipman, AB Ron Cattaruzza Edmonton

CBADGE (1 hour flight - 30 min if winch launch)

e brib 62 (Thour right So min'r Which durien)						
	2667	Brian Laurence	York		see Silver dist/alt	
	2668	Stirling Ward	Vancouver	1:13 h	Blanik L13	Hope, BC
	2669	Ron Cattaruzza	Edmonton	5:40 h	ASW-15	Chipman, AB
	2670	Max Fanderl	Rockies	7:39 h	PW-5	Invermere, BC
	2671	Mark Mozel	Vancouver		see Silver dist/alt	
	2672	Kazimierz Bulka	York	1:08 h	1-26	Arthur East, ON
	2673	Art Smit	York	1:02 h	2-33	Arthur East, ON
	2674	Justin Bunyan	Vancouver	1:14 h	Blanik L13	Hope, BC
	2675	John Gruber	Saskatoon	5:51 h	PW-5	Invermere, BC
	2676	Richard Lewanczuk	Edmonton	2:30 h	ASW-15	Chipman, AB
	2677	Richard Dunn	Vancouver	1:09 h	Blanik L23	Hope, BC
	2678	Henry Wyatt	Edmonton	5:23 h	ASW-15	Cowley, AB
	2679	Norman Marsh	Rockies		see Diamond distance	

SAC records

49 Maitland Street, Box 1351, Richmond, ON KOA 2Z0 (613) 838-4470, < lucile@istar.ca>

The backlogged records below have now been approved.

Pilot Trevor Florence (with Norman Marsh)

Date/Place 27 June 2000, Invermere BC

Record type 100 km Speed to Goal, Open multiplace, territorial

SAC record only FAI category Twin Astir, C-GVSX Sailplane type Speed claimed 105.1 km/h

Task completed Mt Seven HG ramp to 50°36.5'N-115°57.0'W Previous record 65.3 km, Trevor Florence (Ernst Schneider), 1999

Pilot Tracie Wark

Date/Place 29 Oct 2000, Julian PA

300 km out & return speed, Feminine, citizen Record type

FAI category SAC only Sailplane type ASW-20, C-GLTW 132.3 km/h Speed claimed

Task completed Wards Farm to Race Track Island and return

Previous record unclaimed in citizen category

Pilot **Tracie Wark**

30 Oct 2000, Julian PA Date/Place

Record type Free 3TP distance, Feminine, citizen

FAI category DOF 3.1.4c Sailplane type ASW-20, C-GLTW Distance claimed 592.6 km

Task completed Ridge Soaring to Wards Farm, Nisbet, Tussey Ridge,

finish at Lock Haven (east ridge)

Previous record unclaimed

Tracie Wark Pilot

Date/Place 30 Oct 2000, Julian PA

Record type 200 km speed to goal, Feminine, citizen

FAI category SAC only Sailplane type ASW-20, C-GLTW Speed claimed 129.1 km/h

Task completed Nisbet to Tussey Ridge, PA

Previous records unclaimed

Larry Springford

Date/Place 30 May 2001, Invermere, BC

Record type 100 km speed to goal, Open, territorial

FAI category SAC record only ASW-20, C-GVDO Sailplane type Speed claimed 125.1 km/h

Task completed Mt. Seven HG ramp to Swansea HG ramp

Previous record 118.7 km/h, Kevin Bennett, 1985

Pilot

19 June 2001, Invermere, BC Date/Place Record type Free 3TP distance, Open, territorial

FAI category DOG 3.1.4c Sailplane type LS-3a, N57SS Distance claimed 776.1 km

Task completed Invermere, Blaeberry TP, Elko, near Golden, return

Previous record 740.1 km, Tony Burton, 2001

Pilot Charles Yeates (with Kris Yeates)

Date/Place 9 July 2001, Marfa, TX

Record type 100 km triangle speed, Open multiplace, citizen

FAI category DOG 3.1.4h Sailplane type PW-6, SP3656 Speed claimed 102.7 km/h

Marfa, Mt. Livermore, GPS TP, return Task completed Previous record unclaimed in citizen category





Records - continued

The record file is now up to date. The only outstanding current claim remaining is one from Dale Kramer which requires a bit more research. Three 3TP distance record claims by Tony Burton and Trevor Florence in 2000 and this year (since superceded by Tim Wood) will be confirmed for historical purposes.

SeeYou[©] Flight Analysis Software

SeeYou is the most featured and fastest glider pilot's software available today.

· Free high resolution vector maps

Main • Comprehensive statistics report

Features • Multiple flights animation

• Fast, reliable flight optimization

Task planning

Check it out at < www.seeyou.ws > download a complete 2 week trial version

Exclusive North American supplier:

MZ SUPPLIES

5671 Ferdinand St, Osgoode ON KOA 2W0 (613) 826-6606, fax (613) 826-6607 e-mail: wernebmz@magma.ca Ulli Werneburg



the SSA wall calendar
Now in stock at SAC office: \$18 + \$5 p&h

Eagle meets falcon

from page 11

an Allis-Chalmers combine he used ... and you guys thought I made this stuff up. Also after this story was written, I was invited to COSA, near Omemee, Ontario, to assist with the Provincial Contest. I was in charge of parking cars. I feel that I must include COSA among the great places to eat while away from home.

These guys are obviously concerned with the gastronomy of gliding, because their web site, <www.centrlontsoarassoc.com> bears the instruction "Best Viewed With A Beer" — I

had an ex-wife who fell into the same category. More to the point, Melba Leger, Cheri Milner, Kathy Luxemburger, and Kathy Kocsis pre-pared and served some excellent meals. And, they were exceptionally cheerful given that they got stuck with all the dishes.

I was most impressed when they showed up at the flightline during a launch delay with sandwiches for sale. Timing is everything. While I am fond of ham and cheese, I think they should consider a unique offering, only available at COSA, that they could call either a Club sandwich, or a COSA NOSHTRA. Thanks, ladies.

Come and soar with the bald eagles! PEMBERTON SOARING CENTRE

Operating daily April to October in Pemberton, BC

- excellent mountain scenery with thermals to 12,500 ft
- camp at the airport, B&B, or stay in Whistler
- area offers a wide variety of summer activities

Glider rentals: DG-202, L-13 & Super Blanik, L-33 Solo, Vivat motorglider Instruction: glider pilot courses or book a number of lessons, X-C training/off-field landing practice, checkouts in side-by-side Vivat

ph (604) 894-5727, fax (604) 894-5776

e-mail: pemsoar@direct.ca webpage: www.mountain-inter.net/soaring/

SAILPLANES, 1920-1945

book review by Tony Burton

ISBN 3-98067734-6 US\$64.95 + \$12 p&h, from Raul Blacksten, PO Box 307, Maywood, CA 90270.

In 1986, Martin Simons wrote the bible for the world's vintage sailplane and model vintage glider movements, The World's Vintage Sailplanes, 1908-45. It set a high standard. In his new book, Sailplanes, 1920-1945, Simons follows the same format. Each chapter discusses gliders of particular import to the evolution of motorless flight, accompanied with photos of the glider in question, as well as Simons' outstanding coloured 3-views. Each glider discussed has its own 3-view and the size of the book was enlarged to enable their reproduction at a 1:50 scale. They are very good, often taken from production drawings, and include any modifications and the airfoil. The black and white photos included in this book are magnificent. Most have not been published before. Colour photos are used when available to illustrate gliders which are currently airworthy.

In this book, Simons begins with the 1920

Rhön Competition — the meet at which the sport of gliding and soaring really finds its origins. Here we were introduced to the dreamers and fools, as well as innovators such as Willy Pelzner with his hang glider and Wolfgang Klemperer with his Schwarzer Teufel (Black Devil). From the 1920 Rhön meet, Simons takes us through sailplane development up to the end of World War II. An interesting moment in the history is the invention of the variometer, and how its use was kept a secret in the competitions for two years.

More than half of the book is dedicated to glider development in Germany as that is where most sailplane development historically occurred. He also gives us 58 other significant gliders from twelve other countries with a chapter dedicated to each. A glider pilot for over fifty years, Simons has about a hundred glider types in his log book, including twenty of those in this book. He has also authored or coauthored five books on sailplanes and model sailplane aerodynamics. This is a book to delight everyone with an interest in sailplane development in general and vintage gliders specifically — I found it hard to put down.

MZ SUPPLIES

5671 Ferdinand St, Osgoode ON KOA 2W0 (613) 826-6606, fax (613) 826-6607 e-mail: wernebmz@magma.ca Ulli Werneburg

Exclusive Canadian dealer for the following outstanding aviation products:

CAMBRIDGE Aero Instruments Top of the line L-NAV and S-NAV flight computers, GPS Flight Recorders and Variometers incl. the new Palm NAV

SAGE Variometers

Simply the best mechanical variometers in the world.

SCHLEICHER Sailplanes

Manufacturers of the ASW-27, ASW-24, ASH-26, ASH-25, ASW-22, ASK-21, ASK-23 and the new ASW-28 Std class sailplane.

> RUSSIA Sailplanes AC-4c, 35:1 with a 12.6m wing! AC-5M motorglider

Solaire Canada

Ed Hollestelle (519) 461-1464 ph/fx solairecanada@sprint.ca

LX-100 Electronic audio vario with averager and 2 response settings \$495

ATR57 A new 2-1/4" panel-mounted 760 channel radio ready to install. \$1395

ATR720A 760 chan VHF with mounting tray and wiring harness. \$1695

ATR720C Same as above with LCD display and 10 channel memory. \$1995

SHM1010 Boom mike and wiring (as installed by most glider manufacturers). *\$175*

Colibri FAI approved recorder (the size of a small package of cigarettes) with navigation and data screen. \$1395

LX-5000 The ultimate GPS/final glide computer system with large graphic display, FAI flight recorder, and moving map with airspace and task displays. \$5995

DX 50 The newest GPS flight data computer/recorder, only 2 LCDs.

(special purchase) \$2995

FSG71M Dittel radio, fits 2-1/4" hole. \$2795

Payment US\$ checks or money orders only.

Also available:

"The World's Vintage Sailplanes, 1908-45" – same price and source.

Trading Post

Personal ads are a free service to SAC members (please give me the name of your club). \$10 per insertion for nonmembers. **Send ad to editor**, not to SAC office. (Address at bottom of page 5 masthead)

Ad will run 3 times unless you renew. Please tell me if your item has been sold sooner. Maximum ad length is 6 lines and subject to some editing as necessary.

single seat

Tern, CF-BWA, 195h, basic instruments, enclosed trailer. \$5000 obo. Walter Mueller (780) 539-6991.

Ka6CR, C-FRWO, Schleicher built 1964, 1900h, refinished Dec/89. Std panel with Delcom radio & boom mike, elec vario, Volkslogger, encl. trailer. Very nice Ka6 with red & white paint scheme. US\$8000. At SOSA. Call Les, (416) 693-0921 *phredfly@comnet.ca>*

Ka6E, 1,474h. Std panel, encl. metal trailer. Wings and fuselage recently refinished. Chute and fresh annual included in price. \$11,800. Based at Invermere Soaring Centre, BC, Call Ernie or Trevor (250) 342-7662 or 1688. <info@soartherockies.com> Photos under <www.soartherockies.com\classifieds>

Std Jantar 1a, C-GXTS, 540h, all ADs done, no damage, basic instruments, ATR 720A transcvr, boom mike, two total energy varios with audio, trailer and ground handling gear, wing & canopy covers, solar charger, turnpoint camera, chute. \$28,000. Al Sunley (780) 464-7948, <alsunley@freenet.edmonton.ab.ca>.

Phoebus B, 17m with trailer, ready to fly. Call Kurt Meyer. Cell (416) 804-0204, (416) 482-8558 (H).

HP14T, C-FAXH, 1450 h, good cond, elec vario, Delcom radio, chute, A8A O2 with 2 bottles, Scott mask with microphone, hydraulic disc brake, very complete package, easy towing trailer with new tires, construction drawings, excel value for this easy flying X-C sailplane, best built HP-14 in Canada. \$16,500 obo, Mike Thompson (604) 534-8863, e-mail <thompson_foundry@telus.net> Check these links: <www.soaridaho.com/Schreder/Construction/HP-14T_Hydraulic_Flap_System> <www.soaridaho.com/Schreder/HP-14/

<www.soaridaho.com/Schreder/HP-14/
 HP-14_ Construction_Index.html>
<www.soaridaho.com/Schreder/HP-14/C-FAXH>
<www.soaridaho.com/Schreder/HP-14/hp-14>

RS-15, C-GPUB, 2100h. Honest almost-Cirrus performance, Hollestelle winglets add large climb improvement. Cambridge & Filser varios, Oz, encl trailer, misc RS-15 plans & odds & ends. \$16,000 obo. Tony Burton (403) 625-4563, free-fit@agt.net. For fine photo, go to www.soaridaho.com/Schreder/.

Kestrel 19, 1380h, très bonne condition, instruments standard + directeur de vol Cambridge M-NAV, radio, remorque [trailer]. \$40,000. <pdaudin@total.net> (450) 621-2535 à partir de 17:30 h.

ASW 20, newly refinished with Simtec Prestec, flipup instrument panel like a 20B, new water ballast bags, Dittel ATR 720 radio, Filser LX4000 glide computer, Filser LX20 recorder, Komet trailer. \$57,000 firm. Chris Eaves: mail@xu-aviation.com or (519) 452-7999 days, (519) 268-8973 evenings.

ASW-20B, C-GGWW, full Cambridge system including L-Nav and GPS, Dittel radio, Cobra trailer, ELT, tow-out gear. A proven winner. Available 2 April after delivery of new ASW-27. \$45,000 obo. Walter Weir (905) 263-4374 or waltweir@inforamp.net>

Ventus B, 1000h, NDH. Ball vario, Ilec SB8, LX400 GPS flight computer, ASR/GPS, flap position lights, Dittel 760 radio, Security chute, Masak winglets, O2, Cobra trailer. US\$37,000/Cdn\$56,000. Can deliver. lan Sutcliffe. View at <www.lanSutcliffe.com>, details (416) 817-1787, <iands@attglobal.net>.

Strojnik S2A, C-FGBY, homebuilt motorglider, by master craftsman, excellent work. Basic instruments, ICOM IC-A3 handheld radio, Security 150 chute. Kawasaki 340 engine. Encl. homebuilt trailer. More info at http://lark.gawd.mb.ca/~sps/s2a \$16,500. Contact s2aforsale@lark.gawd.mb.ca or Bruce at (204) 783-4983.

ASK-14, motorglider, 910h, engine 145h, good cond. 28/1, launch for pennies. Gehrlein trailer. US\$14,000. obo. Willi Turpin, (250) 365-8378.

Mitchell Wing B-10, Self-launch ultralight glider, open cockpit, 24hp, 18:1, 24 mph stall. Like new, two tone blue, \$5000. Mark Johnston, (250) 754-3121 <*rambo@island.net>*



I'm always asked - see bottom of page 4/5.

XU Aviation Ltd.

major and minor repair and inspection in

- steel tube, and wood and fabric
- stressed skin aluminum composites

Chris Eaves, XU Aviation Ltd. 2450 Aviation Lane, London, ON N5V 3Z9

ph (519) 452-7999, fax (519) 452-0075 e-mail: *mail@xu-aviation.com* web site: *www.xu-aviation.com*

TC Approved Maintenance Organization 24-88

misc

Monerai, unfinished kit / glider wanted. Call Gregory at (905) 568-1280 or <o_sachs@sympatico.ca>

One man rigging system available. Call Larry Springford, <*larry_springford@hotmail.com> or* (519) 396-8059.

A14 regulators, diluter demand O2 regulator – serviced and pickled. Four avail. \$200 ea. Dave Fowlow, (403) 974-7541.

Winch, 350 cu in Chrysler V8, on one axle with trailer hitch. Will launch all the dath. Call Kurt at (519) 948-8227 eves, (519) 966-7300 days.

Radio, Delcom Air 960**3** ick1 upd. Size 3"x3"x10". Call Kurt, (519) 948-8227 eves, (519) 966-7300 days.

suppliers

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

MZ Supplies Dealer for Schleicher sailplanes and parts, Russia sailplanes, Becker radios, most German instruments, SeeYou flight software. Ulli Werneburg, 5671 Ferdinand St, Osgoode, ON KOA 2WO ph (613) 826-6606, fax 826-6607 wernebmz@magma.ca

XU Aviation Glider repairs in all materials. Chris Eaves *<xu-aviation@sympatico.ca>*. (519) 452-7999, fax (519) 452-0075.

Flying High Parachute sales, repairs, repacking, custom containers. Al MacDonald (403) 687-2225 < www.flyinghigh.net>.

Invermere Soaring Centre

Schempp-Hirth sailplanes, PW-5. Glider import and brokerage, glider rental, mountain flying instruction. Ernst Schneider / Trevor Florence, Box 2862, Invermere BC, V0A 1K0, ph/fax (250) 342-1688, cell (250) 342-7662, web site: kwww.soartherockies.com e-mail: <info@soartherockies.com>.

magazines

SOARING — the monthly journal of the Soaring Society of America. Subscriptions, US \$43 price includes postage. Credit cards accepted. Box E, Hobbs, NM 88241-2100. sinfo@ssa.org>. (505) 392-8154.

NEW ZEALAND GLIDING KIWI — the monthly journal of the New Zealand Gliding Association. US\$33/year (seamail). Private Bag, Tauranga, NZ. <*gk@roake.gen.nz*>

SAILPLANE & GLIDING — the only authoritative British magazine devoted entirely to gliding. Bimonthly. British Gliding Association, Kimberley House, Vaughan Way, Leicester, LE1 4SE, UK. US\$43 per year airmail, US\$33 surface. beyonder State Superscript

MOTORGLIDING INTERNATIONAL — bimonthly jointly published by the Soaring Society of America and the British Gliding Association. US\$34 per annum, (505) 392-8154. <info@ssa.org>

VOL À VOILE — une publication bimestrielle éditée par Aviasport. 300 F les 6 numéros. Tel 01 49 29 44 22 <info@volavoile.com>

19

return address: Soaring Association of Canada Suite 107 – 1025 Richmond Road Ottawa, Ontario K2B 8G8



Publication mail 02442256

Contract number 1653563





We are pleased to announce **Solaire Canada** as the Canadian representative for our line of competitive racing and club gliders.

- LS6 The LS6-c can be ordered with many wing configurations: 15 Metre, and now 18 Metre class with full 1156 lb wingloading, both with or without winglets, etc.
- LS8 The LS8 is not only a winner in the Standard Class, it can now be ordered with the 18m extension tips with about a 48:1 glide ratio at a very affordable price.
- LS9 The LS9 self-launching 18m glider has reached production status and will satisfy the self-launch crowd with unequalled performance and flight qualities.
- LS10 We anticipate the new LS10 as the new 15 Metre racer, also available in 18m wingspan in the spring of 2001, and are confident that it will meet or exceed your expectations.
- LS4 The well-known LS4 is still in production and more than 1000 are built now. The newest version LS4-b now has automatic control system connectors. This glider with its high performance, beautiful and easy handling qualities, together with a very affordable price, makes it the ideal glider for the private owner or clubs alike.



For more information, prices, options, and delivery positions, please contact Ed Hollestelle at:

Solaire Canada

4 Monteith Avenue Thorndale, Ontario NOM 2P0 ph/fax: 519-461-1464 or ph: 519-293-1132 solairecanada@sprint.ca