

# MUSINGS

When crocodiles are snapping, And your shorts are in shreds, You begin to wonder what life would be like If the coin had turned up heads!

A nonsense verse to begin a writing that has sombre elements. Humour sometimes offsets hysteria. Let me emphasize a few words on insurance:

• The abrupt change was unplanned. Al Schreiter, Jim Leach and I learned from Ron Wyatt on March 28 that there was no insurance because the insurer had, effectively then, pulled out. There still is no clear reason. We had three days to find an alternative.

• We did what we felt was best. Fortunately, Al's contact with Johnson-Higgins et al responded to inquiry and here we are.

• Because of our recent accident history we were faced with a \$2000 deductible regardless. The big change was the rates. From the point of view of the insurer, in part, the cost of labour and materials tends towards a constant value that is obviously a higher proportion of an inexpensive sailplane than it is of an expensive one. I also suspect they recognize that low time pilots tend not to buy state of the art, expensive aircraft. I'm not trying to build a case tor the insurer but I can see how, from their perspective, adjustment of rates had justification. Having said that, let me also say that your comments and criticism are not ignored but there are limits to what can be done when a contract is set. Nevertheless, keep them coming. Tony Wooler, your representative at Johnson-Higgins, Toronto, is anxious to develop a good relationship with us as clubs and individuals. I should mention too that because SAC is first and foremost an association of clubs, our priorities sort in that order. So far as I know all clubs saved money on the change in liability premiums.

• There are some real plusses. We all have 1 million dollar third person liability for SAC aircraft only. For the first time, so do our instructors. There is opportunity for low-cost ground liability coverage for clubs. A rebate formula is in place for good years. We also have clear rules of coverage for non-resident non-SAC foreign soaring association visitors.

Other details are covered in the information packages and policies that are in the process of being sent as this issue of **free flight** is being prepared. Read the policies, read the information packages, and if your questions are still not answered, please write or call your director or the National Office. They'll listen and do their best to respond.

I regret to note that business pressures caused Jim Carpenter to withdraw from our team at Hobbs. Following previous practice and the pilot's peers ranking, John Firth was asked to go. His work commitments did not permit the time. Peter Lamla was next and accepted the opportunity. Good luck and good fortune, Peter.

The most heart-rending event of these last two months was Jim Leach's resignation as our Executive Director on 15 June 1983. One of Jim's personal goals has always been to become the Executive Director of a resident sport (preferably an Olympic sport) within the Sport Canada environment. Consequently, when the position was offered for Executive Director of a resident Olympic Sport, the Canadian Fencing Association, Jim accepted. Rejection, for the third time, of our application to become a resident sport, the risks inherent in supporting a team at Hobbs and, I regret to say, the continuing hostility of some clubs and members to the role and expense of an effective National Office were contributory factors. Those of us who have come to know Jim over these three years have developed great respect for his enthusiasm, dedication and ability. We deeply regret his leaving. We wish him success in his new task. Bon chance, Jim.

Consistent with our belief in the value of a strong National Office, your board is proceeding to find a replacement for Jim. As well, we will be rethinking our criteria for the role of the National Office as a unit and our staff. Our goal is to sustain the standards of service and activity that have developed over the past three years. Linda is dedicated to fulfil her role to the maximum and Jim will help, as needed, in the transition period.

In the last issue Karl Doetsch raised the ancient Roman challenge "Quo vadis". I'm not ducking the challenge, and will say more in the next issue, as I think Ursula has her scissors snapping about now. So I'll muse more fully next issue.

Suffice to say I think of our goals as safety, better instruction standards and training, safety, better and broader competition, safety, more records and badges, safety, fun, safety, "nuff said"?

Fly well, safely, and often.

Bob

"We have seen others swallowed by crocodiles, and we have learned from their mistakes."

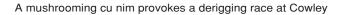
... the late King Sobhuza II of Swaziland

# free flight · vol libre

### 4/83 Jul-Aug

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

- 2 '83 significant flights / trophy claims
- 3 Opinions
- 4 1000 Brian Milner
- 7 Hobbs preview Wilf Krueger
- 8 Accidents & safety don't go together lan Oldaker
- 10 Oh no, not another spin article George Eckschmiedt
- 11 The morning after... Joe Somfay
- 12 Rules for homebuilders Tony Burton
- 13 Soaring is for the birds Bob Nancarrow
- 13 A.D. notes
- 14 Club News
- 16 Hangar Flying
- 18 Provincial Association news
- 19 FAI badges and records
- 20 Coming Events
- 21 Trading Post





George Dunbar

# HOW ABOUT YOURS?

### '83 SIGNIFICANT FLIGHTS

PETER MASAK (ASW-20) early April 450 km distance from Ridge Soaring, PA to 3 miles north of Roanoke, West Virginia (on his way to the Region 5 Contest in Chester, South Carolina)

DON HILL (Astir CS) 22 May 308 km triangle Invermere - Canal Flats - Golden (BC)

URSULA WIESE (Ka6CR) 11 June 309 km triangle Black Diamond - Claresholm - Crowfoot (Alberta)

RAINER ZIMM (Std. Cirrus) 11/12 June 349 km Black Diamond to Chipman (Alberta) to collect the Alberta Soaring Council "Boomerang" trophy 349 km Chipman to Black Diamond (return flight next day)



### **TROPHY CLAIMS**

George Dunbar, SAC Trophy Chairman

SAC Trophy applications received to 5 June 1983:

MIKE APPS (ASW-20FP) and DAVE MARSDEN (DG-202/17) 308.3 km triangle, April 17; Claresholm - Taber - Woolford 300.7 km triangle, April 23; Claresholm - Arrowwood - Vauxhall 304.5 km flown, May 7; Claresholm - Magrath - Alderside (triangle not completed)

TONY BURTON (RS-15) 300.7 km triangle, April 23; Claresholm - Arrowwood - Vauxhall

Please submit your claims early to me at 1419 Chardie Place SW, Calgary, Alberta T2V 2T7  $\,$ 



#### 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 Royal Canadian Flying Clubs Association (RCFCA), the Canadian national aero club which represents Canada in the Fédération Aéronautique Internationale (FAI, the world sport aviation governing body composed of national aero clubs). The RCFCA has delegated to SAC the supervision of FAI-related soaring activities such as record attempts, competition sanctions, issuance of FAI badges, and the selection of a Canadian team for the biennial World soaring championships.

free flight is the Association's official journal.

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, opinion, reports, club activities, and photos of soaring interest. Prints (B & W) are preferred, colour prints and slides are acceptable. Negatives can be used if accompanied by a print.

free flight also serves as a forum for opinion on soaring matters and will publish letters-tothe-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 SAC Zone Director. Directors' names and addresses are given elsewhere in the magazine.

All contributions to the magazine will be acknowledged on receipt. We will endeavour to say when it will be used. All material is subject to editing to the space requirements and the quality standards of the magazine.

The contents of free flight may be reprinted; however, SAC requests that both free flight and the author be given acknowledgement on any such reprints.

For change of address and subscriptions to non-SAC members (\$18.00 per year) please contact the National Office.

President R.I. Carlson Vice President H. Tilgner Corporate Treasurer D. Dunn SAC National Office Executive Director & Corporate Secretary vacant Secretary Linda Essex 485 Bank Street, 2nd Floor Ottawa, ON K2P 1Z2 (613) 232-1243

#### L'ASSOCIATION CANADIENNE DE VOL À VOILE

est une organisation à but non lucratif formée de personnes enthousiastes cherchant à protéger et à promouvoir le vol à voile sous toutes ses formes sur une base nationale et internationale.

L'ASSOCIATION est membre de "L'Association Royale Canadienne des Aéro Clubs" (RCFCA – Aéro Club National Canadien), représentant le Canada au sein de la Fédération Aéronautique Internationale (FAI, administration formée des aéro clubs nationaux responsables des sports aériens à l'échelle mondiale). Selon les normes de la FAI, le RCFCA a délégué à l'Association Canadienne de Vol à Voile la supervision des activités de vol à voile telles que: tentatives de records, sanctions des compétitions, délivrance des brevets de la FAI, etc. ainsi que la sélection d'une équipe nationale pour les championnats mondiaux biennaux de vol à voile.

vol libre est le journal officiel de l'ASSOCIA-TION.

Les articles publiés dans vol libre sont des contributions dues à la gracieuseté d'individus ou de groupes enthousiastes du vol à voile.

Chacun est invité à participer à la réalisation de la revue, soit par reportages, échanges d'opinions, activités dans le club, etc. Un "courrier des lecteurs" sera publié selon l'espace disponible. Les épreuves de photos en noir et blanc sont préférables à celles en couleur ou diapositives. Les négatifs ne peuvent être utilisés.

L'exactitude des articles publiés est la responsabilité des auteurs et ne saurait, en aucun cas, engager celle de la revue vol libre, ni celle de l'ACVV, ni refléter leurs idées.

Toute correspondance faisant l'objet d'un sujet personnel devra être adressée au directeur régional dont le nom apparait dans cette revue.

Pour chaque article reçu, nous retournerons un accusé de réception et donnerons la date probable de sa publication. Les textes et les photos seront soumis à la rédaction et, dépendant de leur intérêt, seront insérés dans la revue.

Les articles de vol libre peuvent être reproduits librement, mais la mention du nom de la revue et de l'auteur serait grandement appréciée.

Pour changements d'adresse et abonnements aux non membres de l'ACVV (\$18.00 par an) veuillez contacter le bureau national.

#### free flight PERSONNEL

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# **OPINIONS**

#### WASTE OR NECESSITY

The outgoing president's (Russ Flint) message in the March/April issue of free flight needs clarification. Whether the SAC Board has spent a disproportionate amount of its time and effort on contest flying is a matter of opinion. But Russ includes an illconceived statement which could easily lead the membership to believe that the team wasted team funds (donated money) to travel on a foreign airline when they could have travelled free on an Armed Forces flight. These are the facts:

- The SAC, through Sport Canada, tried to get an allocation on an Armed Forces flight. However, we were unable to get guaranteed departure or return dates. We could not even get a guarantee of departure or return for a given week.
- 2. The SAC, through Sport Canada, received a travel grant for the Team to cover return air fares to Germany. This was a restricted grant and could not be used for any other SAC or Team purpose.
- 3. In view of this grant and the uncertainty of the Armed Forces flights, I decided that the Team should travel charter class on commercial airlines. Some went on Air Canada, some on Lufthansa.
- Transporting the Canadian Team to the World Championship in Paderborn involved neither SAC funds nor donations to the Contest Fund.

I hope that the unfortunate implication in Russ Flint's message will not deter SAC members from donating to the current Team Fund. I assure you that money is badly needed and that it will not be wasted on luxuries.

A. O. Schreiter Team Manager

#### CAN FREE FLIGHT BE IMPROVED?

Generally speaking, I like to read about any and all aspects of the Sport of Kings, and I guess that is why I have tended to indicate mostly "more of the same please" [in the questionnaire]. I realize this is not much help for you in rationing the limited space that you have available in free flight, but maybe it's an indication of how I would like to see "our" magazine expand. With more pages, more items across the spectrum could appear, if only the hard copy and articles came your way! [editor's emphasis]. The situation as I see it is that most of the keener gliding types in Canada, the ones who might have interesting flights to write about, or those with special technical knowledge, management expertise, etc. to pass on, are already heavily involved in club or SAC affairs and simply do not get around to writing (and polishing) suitable free flight articles. Of those who do there are not many left after the non-writers are discounted.

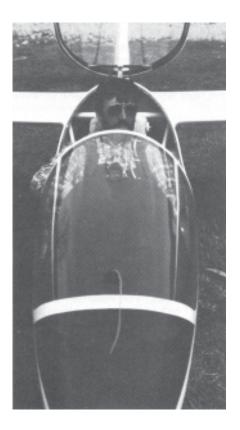
Maybe I could discuss the "competition" (SOARING, SAILPLANE & GLIDING) for a moment to explain what I see as the strengths of each. I subscribe to both and frankly much prefer the British publication.

SOARING: "from the workshop" column (the guy who talks about how to fix radios, make antennas, wire a sailplane, etc), the Johnson flight test reports, and the coverage of the US National and World Gliding competitions...S & G tends to have really excellent "how to improve one's technique" articles. For instance, I carried George Lee's two-part competition article around with me for some months, it had such good practical advice in. They seem to have a good number of excellent pilots who can explain "how they do it" with just the right style and approach. We have pilots, I suspect, who can fly but aren't as good about talking about it. The club news is about right and is what I would like to see in free flight; all you need is the correspondents, right? Their technical articles (about speed-to-fly theory, etc), are also good in that they hit about the right balance of mathematical theory, practical application and readability.

A few likes and dislikes I have found with the past few issues of free flight: I liked "The 1-26 and I", "My Diamond Adventure", "The Bluenose Astir". I really didn't care for the "historical" pieces, also much of the technical notes (on Kevlar for example) were a little too brief to be of much use. Piggott's two part article on "Sub-Gravity Sensations" was excellent and I note that it is a reprint from his booklet on the same. The article "The Other End of the Rope" was quite useful and hit most of the right spots for its purpose. Generally I have found the President's page and most of the committee chairmen's report to be well-written and informative ... Well, enough for the moment. All the best.

Jim Oke Winnipeg

Kawartha's CFI will get Canada's 1st 1000 km Diploma...



#### Brian Milner

The Allegheny Mountains were formed millions of years ago by the collision of two "continental plates" wrinkling the earth's surface. These mountains were originally over 40,000 feet high, but have been eroded greatly in the passage of time. The mountains are about 2000 feet msl at the north and south ends and about 4500 msl in the central region. Along the east side of the Allegheny Plateau, a series of almost continuous ridges and mountains run in an S shape from the northeast to the southwest, starting at Williamsport, Pennsylvania, as "Bald Eagle Mountain", and finish northeast of Knoxville, Tennessee, as "Clinch Mountain".

At Williamsport, the ridge runs east/west. In the centre section, the direction is about 030 and in the southern section, the direction is close to 070, with one 30 mile section running east/west. Practically, the best compromise wind direction for the whole ridge is between 290 and 310 true. While this direction is good for most of the ridge, it does not guarantee ridge lift all the way as there are numerous areas where the ridges bend and generate no lift, or indeed, severe sink. There are also some large and small gaps in the ridge system, which have to be crossed in thermals, or wave.

The Allegheny Plateau is, under the right conditions, a superb wave generator. Flights of 500 km and more have been made completely in wave and heights of 29,000 feet have been reached. However, the bad side to the wave system is that sometimes the down side of the wave is aligned over the ridge. The result is no ridge lift and severe sink in some areas.

Ridge Soaring Gliderport is at Julian, PA, on Route 220, south of Interstate 80. The gliderport is operated by Tom Knauff and Doris Grove, both world record holders of various distance and speed records. Tom and Doris are the two most enthusiastic glider pilots I have ever met They fly every day, training pupils, etc, and they will still get up at 4:30 am to tow someone like myself off, early in the morning.

Long flights at Ridge Soaring are defined as in excess of 500 km. They usually start at dawn to take advantage of the maximum daylight hours. Long flights here really are long! Ten hours is typical. Turbulence is usually severe and water is carried whenever possible to reduce its effects.

The weather requirements for a good ridge day are a NW wind of 15 to 25 knots. This usually occurs after the passage of a cold front. A low pressure area will typically pass north of Lake Ontario. As it moves into Quebec, the cold front associated with it will pass through Pennsylvania. For the south end of the ridge to work well, either the front must be very extensive, or a high pressure system should be located off to the SW, so that the air flow around the high assists the flow around the low to give increased wind speeds on the lower end of the ridge. On Sunday, April 24, I was travelling to Windsor, Ontario, to prepare for an early Monday morning appointment. The winds in southern Ontario were due north and had been increasing in strength all day. A big low had moved up the Atlantic coast, a high was developing to the west and in general, the weather was starting to look really promising for Monday (when I couldn't fly). In the evening I phoned Philipsberg FSS for the forecast winds for Monday. They gave me due north winds at 25 knots all day, with winds for Tuesday light and variable. With this information I calmed down and went to bed.

Monday morning the winds were howling out of the NW at 20 knots. Boy, was I mad! Anyhow, I finished my scheduled appointments, then visited the weather office at Windsor airport in the afternoon. The 24 hour prog chart showed the low still over the east coast, but a ridge of high pressure was moving in from the west. As this moved in, the winds were supposed to become light and northerly. The big question was "how fast will it move?" My hope was that the high would follow the same pattern as most recent systems had lately and not move as fast as predicted. If this happened, the winds should stay out of the NW for most of the next day (Tuesday).

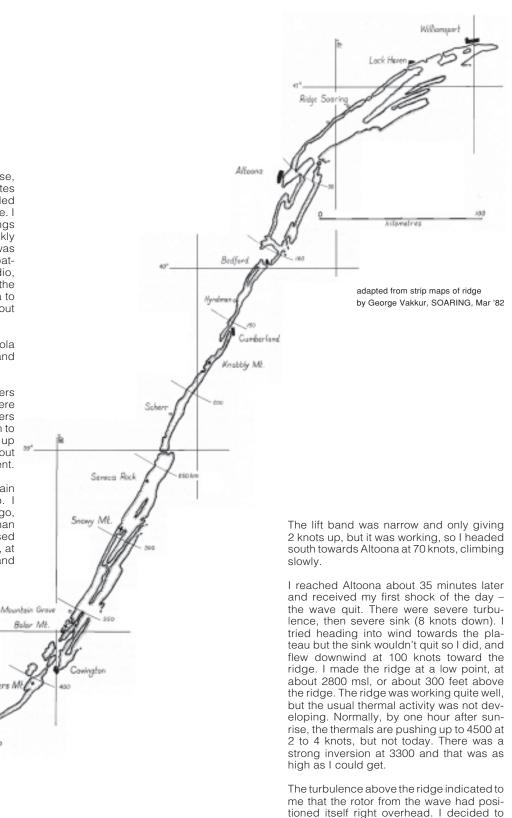
I decided to gamble and called my office to say I would not be in for a couple of days. I phoned Ridge Soaring to let them know I was coming and would phone Tom at 0500 in the morning for a tow if the winds were right. St. Catharines was reached at 9:00 pm and I phoned Toronto weather for the latest "prog" reports. The Tuesday 1200Z forecast was in and showed the winds to be staying NW, the high had slowed down, as I hoped. Things were starting to look good.

I was at Ridge Soaring by 0130 and setting my alarm for 0500, climbed into my sleeping bag. At 0500 (boy, it came quick!) I phoned flight service for winds down the ridge. They were 300 to 310 degrees all the way. Now, I started to get excited. Prior to this I had been building myself up for another disappointment. I phoned Tom Knauff. He had already arranged for Doris Grove to come to the field as my observer. She arrived shortly and I started to organize myself. First, fill the wings with water, find a hose, hook it up, then stand there for 20 minutes while it filled. The Jantar was assembled and tied down at the end of the flight line. I pulled the wing covers off, but the wings started to frost up so badly that I quickly put them back on. The temperature was about -5C, with no visible cloud. The battery went in and I checked the radio, okay! The ship is ready, how about the pilot? I took the barograph and camera to the office, to prepare them and make out my declaration.

I had a can of orange juice and a granola bar for breakfast, went to the bathroom and finally the pilot was ready!

I untied the Jantar, pulled the wing covers off and did the preflight. The wings were still frosting badly, so I put the wing covers on again and decided to wait for the sun to come over the ridge and warm things up a little. I had heard so many stories about frost on wings that I decided to be patient.

By 0730 the sun was over the mountain and things were starting to warm up. I pulled the covers off and was ready to go, an hour and a half late, but better safe than sorry. Take off was at 07:38 and I released at 3600 msl or 2800 feet above the field, at 07:42 EDT. I notched the barograph and immediately flew into weak wave.



take a chance and head out across the Altoona gap at 3300 rather than the usual

4000. I didn't head straight for the downwind ridge, because I felt that the down side of the rotor was just in front of it. So instead I headed out parallel to the plateau and found, as I hoped, that I was aligned with the up side of the rotor and went 4 miles into the valley, at 3000, then turned and dived for the ridge. I went through the sink area quickly and made the ridge easily.

Normally, the run from Altoona to Bedford, about 20 miles, can be run at rough air speed of 110 knots. Not today! The ridge really wasn't working that well. At 60 knots I was only 100 feet above the ridge and was getting extremely nervous. There were lots of fields to land in, but I was more worried about the forecast being wrong. Anyhow, I made the end at Bedford with no severe problems. I could see across the gap of 10 miles with no problem, but the brown haze of the inversion was still visible and the thermals weren't going higher than 3300 again. The thermals were very small and very turbulent. I decided to dump my water and try to get higher when the tanks were empty. It helped, I got up to 4000 feet

I tried the same trick as at Altoona and headed out into the middle of the gap parallel to the plateau. As I hit lift I slowed down, but didn't circle, as one mistake was more than I could afford. Three quarters of the way across, I didn't think I was going to make it and started to seriously pick fields. I saw a good ploughed field right at the base of the ridge and decided to try and fly the ridge half way down (which was the highest I could reach). The point here is that normally, once you drop below the ridge crest, the lift becomes very weak. Luck was with me, the ridge was working well at that height and I climbed to the peak with no problems. The run to Hyndman was good, the ridge was working really well on the south side of the gap. I think, in retrospect, that the down rotor was suppressing the ridge lift on the north side.

I reached the quarry at Cumberland and tried thermalling for altitude. The sun was shining directly on the quarry and it should have been producing "boomers", but it wasn't. I could get to 3500 and no more. I tried penetrating into wind, towards the plateau, but couldn't contact wave. Each time I had to dive back to the ridge. It became obvious that I wasn't going to get high in thermals, so to save time I decided to fly downwind to the next ridge by Cumberland airport, and ridge soar that down to the Keyser Knobblies. I reached the ridge okay and headed for Keyser. The section of ridge through Keyser is a 20 mile "nightmare". The ridge disintegrates into a series of bumps with triangular faces about 300 to 500 feet high. Ridge soaring these is definitely not recommended.

The back ridge by Cumberland was working well and I was maintaining 3500. I started to penetrate upwind to the Keyser Ridge and half way there ran into severe turbulence; it felt like rotor! I turned and flew parallel to the plateau and (thank you, Sir) ran into wave again. Weak, to be sure, but at 70 and 2 knots climb I started to relax. The wave took me safely over the horrible Knobblies and the low section of ridge at

Scherr at 5000 feet to Seneca Rock (250 km from Ridge Soaring). This was at 10:50 EDT for an elapsed time of 3:08 hours and a ground speed of 79.8 km/h, not good, but not bad, either.

#### **GETTING READY**

Preparedness: World record flight distances are so great that a pilot must have enough daylight hours to complete his task. For this reason, record season in the eastern United States is limited to early fall and late spring. Flights begin during the twilight hours, and sailplane preparation begins in the predawn darkness. Typical takeoff times will be around 5 am, so that pilot and crew will begin their tasks well before that.

A serious pilot will develop a disciplined regimen of very early to bed, very early to rise, exercise, and diet during the weeks before and during record season. Friends and relatives are understanding when it looks like a possible record day and pilots and crew go to bed at 8:30 and social engagements are broken the day before a cold front comes through.

In order to reduce the amount of time preparing the sailplane the morning of a record flight, the sailplane is kept assembled, antifreeze for the water ballast is measured, batteries are charged, warm clothing, maps, flight declarations, and any other advance flight preparations that can be made are done.

Weather: We watch morning and evening weather programs and keep a close watch on favourable weather patterns as they approach the eastern United States. If an especially good system develops, we go to the university meteorology department to look at the maps and data. The head of the department has even issued us our own key to the building so we can get in during hours they are normally closed.

The morning of a record flight begins at 3 am by listening to a weather alert radio. If this sounds promising, we then phone the flight service station to get the weather reports along our intended flight path.

All of the above is how it is supposed to work.

Tom Knauff Ridge Soaring, PA

Just past Seneca, the wave broke up again, so I headed downwind for the ridge. The ridge here is high and the thermals were starting, finally! I was able to maintain 110 knots to Mountain Grove and hold close to 5000 feet. The thermals, however,

were starting to generate **extreme** turbulence and I was beginning to regret dumping my water back at Bedford. Mountain Grove was reached at 11:30 EDT at 4300 msl and I stopped and started to thermal hunt. Distance 350 km, time 3:48 hours, average speed 92.1 km/h, getting better!

After Mountain Grove comes Bolar Mountain with a huge lake at its base and nowhere to land. It is very low and sometimes the ridge here doesn't work well. I stayed back at Mountain Grove and looked across Covington Gap, 30 miles to the southside (see sketch). I could just see the high part of Peters Mountain. Finally, I hit a booming thermal, 10 knots to 6000 feet and decided to head straight across the gap, lake and all! Good thermals took me across with no panic (for a change).

The ridge between Peters Mt. to Narrows, Virginia averages 3500 in elevation and can usually be flown at a high airspeed. The problem now was that thermal strengths 1000 feet above the ridge were 15 knots, so the turbulence was extremely severe. So much so, that I started involuntarily easing back on the stick and slowing down. The gap at Narrows is spectacular, also unmistakable, and from there you can see Bluefield – whoopee!

Beyond Narrows the ridge takes a sharp kink into wind at Jesses Knob, a renowned sink hole. Just before the knob I hit a "boomer" that took me to 5000 feet without turning. I turned out from the ridge and flew to the upwind side of Jesses Knob with no trouble. From there, I reached the Fincastle Country Club turnpoint at 12:54 EDT, took two pictures and relaxed for a couple of minutes.

Distance 500.4 km, time 5:12 hours, speed 96.2 km/h.

To tell you I was feeling good at this point would be an understatement. I had started out on this flight five times prior to this last fall and winter. Every single flight had been abandoned because of snow storms. So far I hadn't seen anything but blue skies and cu. As I turned and headed north, the enormity of this flight struck me – I had been in the air for over 5 hours, flown 500 km and now had to fly all the way back against the wind!

I had taken two cans of orange juice with me, some granola bars and a bag of humbugs. I celebrated by drinking one of the cans of orange juice and eating a granola bar. Humbugs were my staple diet and eaten continuously. The trip back was into a significant headwind component. The turbulence was again extreme. Twice my head hit the canopy hard enough to daze me slightly. This was no fun! However, to get back before sunset I couldn't afford to lose time at any of the gaps and had to fly as fast as I could stand on the ridge sections. Boy, was I sorry I had dumped my water now!

The south end of the Covington Gap was reached at 13:50 EDT and by thermalling, I cross the gap directly. This sounds easy, but in fact is **definitely** not the way to cross this gap. The right way and the safe one is to drop back one ridge, fly up to behind Mountain Grove, then penetrate into wind to get back on the main ridge. Bolar Mountain, as I mentioned, has absolutely nowhere to land, except the lake itself. Halfway across the lake I hit terrific sink, 20 knots down, and nearly had a heart attack. Fortunately, I was able to get into the associated lift and get a save. I still have nightmares about nearly landing in that lake. I reached Mountain Grove at 14:10, which was pretty good time for crossing the gap.

The ridge to Snowy Mountain worked well. Snowy is a well known generator of tremendous sink on occasion. I thermalled to 6000 msl just before Snowy, then went like hell through the sink zone to the ridge on the far side.

I was running into very strong sink as I ran north. It took me a while to realize that the sink was well organized into wide streets, while the lift was in broken narrow patches. Once it penetrated my thick skull, however, I made better time by going straight into wind as I left each thermal, then going fast at right angles to the sink streets. I guess that fatigue and lack of sleep was finally catching up with me and slowing down my thinking processes.

This technique got me to Keyser, where I ran into a sink hole I almost didn't make it out of. As a last resort I headed for one of the knobblies, with the intention of trying to ridge soar my way back to Cumberland. Just as I reached the front face of the "lump", and about 400 feet above it, I hit a piece of a thermal. This was the "saver" the beauty took me to 8000 feet, the highest point of the flight, at 10 knots up! From the top of this one I could guarantee to make Cumberland. It seemed that now I couldn't do anything wrong. I kept running into strong lift and ran "dolphin" style to Hyndman, a distance of 30 miles. Again in retrospect. I realized what had been happening. I had been struggling along, lined up with the down side of the rotor. As soon as I penetrated far enough into wind, I was in the upside of the rotor and, although the wave was definitely not working, the rotor was organizing the thermals and either boosting, or suppressing them, depending upon your location.

At Hyndman, I was down to ridge level again and ran to the south end of the Bedford Gap at 110 knots in severe turbulence. I reached Bedford at 1655 for an elapsed time of 9:13 hours, distance 785 km, and an average speed of 85.2 km/h. The speed drop was due directly to the problems I had getting through the Keyser area.

At Bedford, I tried half a dozen thermals before finding one strong enough to get me up high. From the top, I headed directly into wind and found that the thermals were definitely organized into streets. I penetrated about 5 miles directly into wind, before turning and heading for the north end of the Gap. I dolphined across the Gap without circling at all, which was quite a change.

The ridge to Altoona was working very well now, unlike this morning. At this point in the flight, I was beginning to worry about

getting back before dark, so was pushing my speed up on the ridge sections. I knew that all I needed was to run out of thermals at Altoona and I wouldn't be able to finish the flight. At this point that was just about unthinkable! I reached the south side of the Altoona Gap at about 3000 and used the same technique as at Bedford, that is, I waited until a good strong thermal came along that would take me above 4000, then headed straight into wind. Again, the streets were still working, although there were not many visible cu left in the sky. I penetrated straight into the Gap for about 3 miles before turning right and heading for the end of the ridge. I had had too many experiences of "sucker lift" at Altoona to risk turning in sink at this point.

Once I made the north end of the Gap, I relaxed somewhat, but was probably more conscious than at any other time of the potential pitfalls between Altoona and Ridge Soaring than on any other flight. I was so close to home, yet could still blow it very easily by being too confident. I decided to fly in the most conservative way possible. I flew at about 50 knots until I was past the bad spot at Tyrone, then speeded things up at about Port Matilda. Just south of Karl Striedieck's field, an irrational impulse hit me. I must confess, it did me good to beat his strip up at 6 feet and then slide back on to the ridge at 110 knots.

I switched the radio back on (it had been off for most of the flight to conserve the battery) and called to Ridge Soaring that Golf Juliet was 5 miles out and was rewarded with the most enthusiastic "all right!" from Doris Grove. It really felt good to hear the radio say that. Needless to say, I beat up Ridge Soaring before landing. Yes, I did my SWAFTS check and did put the wheel down – it's amazing what training and repetition do for you, isn't it?

After the landing, I did the first thing everyone does and checked the barograph. Yes, it had worked, but what were all those sharp "spikes" on the trace? They were the recordings of the turbulence I had flown through. The barograph was tied down tight and I had not heard it banging around in the back. It looked like someone had been throwing it on the floor for 10 hours! I, nor anyone else present, had even seen such a trace. I know that the turbulence I flew through was severe. I guess all the barograph did was record what actually happened. All I know is that I'm glad I fly a Jantar, it really is a strong sailplane.

My flight concluded two of the best days of weather that Ridge Soaring had had for a long time. The previous day had seen a 1000 km flight by David Noyes, an American; a 1100 km attempt by Alan Sands from Ireland, which he aborted after 950 km because of "snow"; and a NEW WORLD RECORD OF 1645 KM by Tom Knauff. That sure put my 1000.8 km flight to shame, but I didn't care, because

#### I FINALLY DID IT !!!

1000 8 km

94.7 km/h

10 hrs 34 min

Distance Air time Speed **HOBBS PREVIEW** 

#### Wilf Krueger

Member of 1983 Canadian Team

Recently I had the opportunity to visit Hobbs, the site of the next World Soaring Championship. 106 pilots from 25 countries will compete in Hobbs between June 21 to July 11,1983. The weather during my visit was in the 20°C range (end of March), and I was greeted on the first day by a sandstorm with winds gusting to approximately 50 km/h. The sandstorm influenced the visibility so greatly in some areas that I had to slow down driving on a highway. The sand was blown off from the desert or semi-desert surrounding Hobbs, a city of 35,000 people, 400 miles from Dallas, Texas and 90 miles from Odessa, Texas. Hobbs is located in the southeast of New Mexico.

The contest site is an abandoned World War II bomber pilot training base with four 9000 feet runways, five old hangars plus a 600 feet wide ramp, some 8800 feet long. The National Soaring Foundation, a non-profit organization, has a 25-year lease on the facility.

Because of the sandstorm on the first day of my two-day visit, the weather was not flyable. The next day however was a good soaring day. Since I was busy with hotel reservations, etc. for our Canadian team I had no chance to fly at Hobbs, but was able to collect the following information about the soaring conditions from local pilots:

good soaring from May to August		
average 800 fpm, lots of 1000 fpm and more.		
8000 - 12,000 feet above ground		
generally speaking good		
seems to be no problem		
good large fields are loc- ated to the NNE of Hobbs. Rough countryside in the southwest and west. Off field landings should be no problem.		

Hobbs has been the site of many U.S. national and regional contests. During U.S. national contests, tasks between 200 and 300 miles have been flown. Speeds vary between 60 and 85 mph.

One day, in the U.S. Open Class Nationals, a 290.5 mile triangle was flown with a top speed of 93 mph. The pilot who flew 75 mph came in 10th.

In summary, I believe Hobbs is one of the most promising soaring sites in the world and I look forward to flying there for the first time this summer.

# SAFETY

### ACCIDENTS & SAFETY DON'T GO TOGETHER

lan Oldaker Chairman, Flight Training and Safety committee

illustrations by Les Waller

Have you thought much of what the likelihood is of having something go wrong? What if your car brakes failed, for example? Well, if you have a modern car maybe it has a dual system, so that a failure of both at the same time is much less likely, and then you have the emergency brake too. But its correct use depends on the driver reacting in time and deciding to use it. Where is it anyway? What about on your friend's car that you borrowed recently; did you look for the emergency brake before you drove off? Of course you didn't, and it probably never entered your mind! Yet it could be the difference between running out of control down a slope and not making the next corner and coming to a controlled stop.

It is true that, given enough time and all the necessary information, we can and do make the correct decisions. Yet, when confronted with extra pressure and the need to make a quick decision, we often become flustered and pull the wrong lever or turn the wrong way! Imagine, you have been driving for say 5 hours and it is getting dark. You don't know the road, yet you feel your destination is close. You have been driving pretty hard so you are tiring and perhaps also hungry. You have a desire to press on, the gentle curves have lulled you into thinking that it is all easy. The cruise control has allowed you to cross your feet for comfort and to forget about speed, when without warning, as the road descends over a small brow, you see a warning sign ahead. You are going too fast for the curve, you go for the brakes but hit the accelerator....

Translate this into the cockpit environment and we have a potential, for example, for grabbing the flap lever instead of the spoilers or dive brakes. Pulling the flap handle instead of the dive brake handle is much more common than we realize. Add to this the fact that we may be flying this sailplane for the first time, or flying it on a crosscountry into a field we have never seen before. Stress? You bet! We behave in strange ways when under extra stress.

What can we do, then, to reduce the chances of having an accident? Fly more safely? Yes, but safety starts at home, not in the cockpit. Alas, many of us don't develop a safety pattern in our early flying. Yet it is on the very first few flights when we must instill safety habits - call it airmanship - into our new student pilots. As members of a club, as pilots and as instructors, many of us have the chance to influence a new pilot's approach and attitudes to flying. The first things learnt are the most indelibly retained. Unsafe prac-tices such as the "oh we don't need to do a pre-take-off check for just a passenger" will spill over into a similar unsafe attitude in the observing student. After all, "if the instructor doesn't do it why should I?" The walk-around inspection of a 2-33 I used to fly revealed the safety pin missing on the elevator push rod (the club no longer uses

clevis pins and safety pins here and elsewhere, but bolts, castle nuts and split pins). The driver who gets into a new car usually carefully reviews where all the knobs are, though standardization helps to eliminate the fumbling for the right one. Not so in higher performance sailplanes that are equipped with extra levers and knobs for retractable wheels, flaps, perhaps also a chute and/or water ballast. Pretty complicated compared to a 1-26. What does all this mean?

It means that a very thorough knowledge of the new ship's flying manual is needed before we take-off in it, in addition to becoming very familiar with the cockpit layout and even the more reclining seating position, reach, and "feel" of the stick before even attempting a take-off. In Denmark, the pilot converting to a new ship, has to fill in a questionnaire using the manual. What use is that you may ask? I can tell you that it is partly responsible for their low and declining accident rate, but it is also accepted as a good safety approach to getting into a different glider – the attitude is one of unhurried safety.

I would like to think that we are all deliberate and are developing a pattern toward safe flying. Where does it start? In soaring we can think things through at home, and en route to the field. Get into a flying frame of mind before arriving at the club.



...an attitude of unhurried safety.

Many coaches are now teaching the mental "thinking through" of a shot such as a penalty throw; the athlete is taught to think of his shot actually going in – then to take a deep breath and do it. The deep breath relaxes the muscles, the mind has already imagined the successful shot, and now the action more likely than not, succeeds.



Remember that flight last week with the awkward circuit?...

for Canada. Until these become available what can we do?

When we become involved with new student pilots (and we don't only have to be instructors!), we should take the opportunity to show our new member how to be safe on the airfield, how to safely handle the gliders, tow ropes, winch cables, the hazards of the towplane propeller, and the necessity for an unhurried, deliberate approach to flying. This includes daily inspections, walk-arounds, positive control checks, pre-take-off checks and the need for a positive constructive atmosphere among the people who fly. I can think of no one attitude more conducive to poor airmanship than a critical desire to find things wrong. Let's be positive. On the way up to first solo we should emphasize the benefits of further training after solo. At first solo or even at licence, many pilots might feel that they "know it all". Not so, we continue to benefit from a working relationship, not a dependence, on our instructors. The early solo pilot develops much of his or her soaring airmanship when solo (by a series of frights!). At this stage these pilots can benefit from an analysis of how others managed, how others handle situations. An open approach to discussion of incidents teaches everyone a lot here.

Cross-country skills cannot all be selftaught. Much advice can and should be given by senior instructors, by those experienced at cross-country, particularly with respect to off-field landings, eg. field selection, heights for decision making, etc.

Remember that flight last week with the awkward circuit? Think it through, and in your mind get it right. It is amazing what this does to one's peace of mind. I think it is directly applicable to the off-field landing. Imagine your circuit and landing even before you start into the downwind. Maybe you can detect the wind direction and speed by seeing the wheat bending in waves in the next field; now think through the upcoming approach, then imagine successfully flying over them and making a good held-off landing. Chances are that your actual approach and landing will be as good as you imagined.

This technique can't be used on your first off-field landing, it has to be practised. Safety starts at home, as I have said earlier. In fact the development of good airmanship which translates into a safe and safety-conscious pilot starts when we first start to fly.

Although the Instructors committee and the Safety committee can write, berate, and cajole for all they are worth, it won't help unless there is an emphasis within all clubs. To assist in this we might be able to produce some safety "packages" of film, slides and notes that could be used by clubs for workshops or ground school type events. At the recent meeting of National Coaches in Reno there was a good deal of discussion of safety programs, and we saw one or two slide presentations developed specially for clubs. These are going to be circulated around the different countries and I am hopeful that we can develop some

One hazard...is failure to take control in time.

One hazard that instructors are unaware of, or oblivious to, is related to failure to take control in time. This is an essential part of educating pilots to be instructors, as many of us are unaware of the problem until it happens to us. Accidents in gliding seldom happen due to technical or structural failure but more often than not due to human factors.

Dealing with us is what should exercise our minds if we want to improve flight safety and reduce our insurance premiums.

# OH NO, NOT ANOTHER SPIN ARTICLE

Inadvertent stalls most frequently occur when the pilot is distracted from his primary rote of controlling the glider.

#### Barry Schiff

The truest characters of ignorance are vanity, and pride, and arrogance.

#### Samuel Butler

#### George Eckschmiedt

CFI Vancouver Soaring Association

Many articles have been written about the spin. We have all read them, done the maneuver, yet the accident statistics clearly show that not all things were covered in the articles. All of them emphasize the importance of early recognition (did you know the meaning of the word "incipient" before it became associated with spin?). and the "opposite rudder - pause - stick forward" routine. A short list of the most important or available literature is given at the end of this article. What is missing from them is the importance of quickness and/ or the efficiency of recovery from a spin. It may be mentioned but is certainly not emphasized enough.

Most everybody I have flown with, experienced pilots or not, expressed a degree of displeasure of and reluctance to spinning. Spinning is not a pleasurable experience for everybody, it can be downright uncomfortable. But is it dangerous? Not the spin. The spin is a neutrally stable maneuver. But the very reluctance to go into a spin very often results in the pilot not fully stalling the ship, and forcing it into a spiral dive – and that is a dangerous maneuver. It usually results in recovery with very high speed, lots of altitude loss and excessive G forces on pull out. Verrry uncomfortable.

The student/pilot is no less scared and is further disenchanted. We all know that the object of all this is the simulation of the event of the spin sneaking up on us. The sneaky maneuver is usually the true spin and that is what causes us trouble.

Saying that we must teach the recognition of incipient spins because then we will never be in a full spin, is like saying, "let's do away with the pill – we all know when to stop." The available evidence disproves that theory! I agree that prevention is very important, but we must learn the course of action when we have failed in the prevention.

So the spin sneaked up on us. Again, there is plenty of literature to explain why and how it happened, and to explain the technique of basic spin recovery. The principles have been hammered into us time and time again. But are the various personal interpretations correct? I quote, word for word, a very experienced pilot:

"Every time I take it out of a spin, I have full stick forward, almost break it off, almost break that stick and bend it almost if it's metal and take it out within 1/8 of a turn and my speed is maybe a few miles above stall when I come out." Note the emphasis on the stick motion. But at 1/8 of a turn the wing is just starting to drop (an incipient spin), and the correct action is recognized. But is such drastic action really necessary?

Another quote (see Bibliography Stall/Spin Awareness): "Once a cross-controlled glider stalls and begins to yaw into a spin, a pilot then must be prepared to avert the maneuver by lowering the nose and aggressively applying rudder to prevent the yaw associated with the spin." Please note that the previous paragraph in the article was referring to incipient spins, but in this one the author says, "into a spin". Then he proceeds to recommend the motions exactly opposite to the classical ones of opposite rudder pause - stick forward for recovery! He also faces the dilemma of referring to control motion vs aircraft attitude. In a spin the nose is already down; no matter how far down, it is still stick forward motion that is required! This seems to be one flight condition where reference to control motions would cause less confusion than to aircraft attitude

Never mind the over half a century of knowledge available on the subject, we still have controversy about it. We have to face some facts: an incipient or a full spin can sneak up on anyone. You in the gaggle, me on the slope. We all want to recover from it with the minimum loss of height.

The minimum loss of height concept is included in most literature, but its importance is always overshadowed by the description of the basic technique of recovery. Most people I flew with know the basic spin recovery. But oh, how they execute it! With 90 to 100 knots indicated speed in the Blanik being quite common, and after only half a turn. Why? Because of the "stickbending" method of recovery. I will not repeat what countless numbers of authors wrote on spin recovery. Please review them yourself. I would only like to mention the second most important point after "opposite rudder-pause-push stick toward" which is, "push stick steadily forward until spinning stops".

If the spin has stopped, why have the stick full forward, why keep on diving? It only results in excess speed, excess G's, and **excess loss of height**. Never mind that the height can be regained during pull out. Not, if you just lost all you had or did not miss the glider below you. Do some pilots think that they must come out of a spin with high speed because if they don't they may fall into a secondary spin? The object of spin recovery is to come out of the spin and resume flying with a minimum loss of height, and not to go into another spin!

There is only one way that spin-related events (call them what you wish) will be mastered. Practice. Try it high up in the trainer, then in your own glider. If you consider it below your hot-shot dignity to fly with the instructor available at the time, fly with someone else whose opinion you can accept. Surely someone must be around. But do practise efficient recovery. If you do everything else right but for the excessive loss of altitude in recovery, I suggest you never, never fly slower than your best L/D speed. Not only for your own sake, but also for the sake of those below you.

If you want to master anything, first you have to tame it. The spin is no exception. Think about it.

This article is written in memory of those who could not come out of a full spin efficiently and survive.  $\hfill \Box$ 

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#### MSC POST-SOLO TRAINING WORKS

The recognition of the seriousness of the high accident rate the last couple of years received a lot of emphasis at the 1983 SAC AGM, and also by the Safety and Instructor committees. The disturbing result of these accidents is the fact that finding a carrier to back the SAC insurance plan is most difficult and will no doubt fail next year if this accident rate continues.

It is interesting to note the low accident rate of the Montreal Soaring Council, which to a large extent is attributable to our training program and in particular the after-solo training. If one harks back to the first years of the LS-1 in our club, there were numerous "incidents" and less use of the aircraft. Now with the introduction of the Astirs providing an easier step up in performance and a structured after-solo training program, the number of flights per member has gone up by 50% and the number of "incidents" has fallen. It is essential we don't become laurel-sitters and slack off on the various stages of our training and safety program.

Gordon Bruce, from Downwind

# THE MORNING AFTER...

If you are a student or a new pilot, this story is definitely for you.

from Soar Tales

#### Joe Somfay

The anxious solo student pressing the instructors for that first lonely flight may be interested in this experience.

5 Sept 82, a breezy day with little significant lift was the scene for my six flights between 10:00 and 16:00. I have been showing signs of improvement in my flying, felt comfortable in the 2-33 finally, planned circuits reasonably, and did a couple of embarrassing cross-wind landings. I had the confidence of my instructors and felt elated and confident myself.

It was suggested to me that a "full spin check in a 2-32" might now be in order if I felt ready for it and was briefly warned about the higher stall speed, sensitive controls of the new ship. I had never been in a 2-32 before. I had spun a 2-33 several times and recovered, in fact I began to like the sense of emergency control.

The plane was ready, Blain said 'go' and John Kollar was in for 'another one'. The tug was on its way for us, I got in hurriedly, had to adjust the rudder pedals, (fiddle, sweat, fiddle, hell I'm in a hurry, fiddle) hurried through the cockpit check and only barely noticed the new position of the instruments (and, of course doing the familiar tap, tap routine). The tow rope was on (I released it not knowing John had already hooked on, and embarrassed I went through the routine again).

Okay to go, we rolled off, John took us about 20 feet and had me flying the tow.

Uneventful as the tow was, the ship was heaven to control, a sports car vs a sedan. I noticed how small the movements were (one almost thinks them and voilà) different cockpit visibility and attitude to the horizon.

John was briefing me on spins and I nervously answered with what seemed a dozen errors. I was embarrassed as hell, why? I did this before (cool down, relax, I yelled at my head, my aching muscles and my heart) why so nervous? John was also aware of my tight condition and did his best to put me at ease, 3000 feet arrived only too soon, we bid adieu to the tug and immediately I turned off too slow trying to gain a few extra feet by climbing out. No stall, but I swear I felt a ripple in the lower wing. Off we went to our position in the sky.

John verbally demonstrated and then actually went through a full spin. Looks easy,

feels faster than a 2-33, a bit more nerve racking, but why shouldn't I do it now? Okay John, we're here, I think I'm ready (maybe).

So down into the spin we go. Exciting, terrifying, now let's see, what did John say? How did he do it? How did I do it before? Where's the altimeter and the ASI anyway?

I remember John saying, "Look at the ASI to the left, it's only at 40 mph," it took me another precious eternity to find the damned instrument, and boy we're slow.

I remember kicking the rudder full opposite and centre (or was it John), I remember feeling the rush of speed while facing various crops and farm implements, straight down. Holy moley, this is not a 2-33, it's going down FAST! Something about the steps for correction flashed into my adrenalin-soaked brain (full opposite rudder, stick central, stick back, assuming you still had the stick in your lap).

I wasn't spinning any more, just going for Mother Earth. I didn't notice my elevators were already central. So in my fright, not having achieved the desired results and not thinking to pull back the stick naturally and for whatever other hidden ancestral bio-engineering reasons, I threw my head back (maybe to check the horizon for one last time) and pushed the stick forward as far as my hands could reach. I recollect in a somewhat hazy manner that my peripheral vision shut off so much that only a small cone of vision in front of my eyes seemed important. I distinctly remember the feeling that an upside down recovery was going to follow (if I didn't die of fright or premature impact with the ground first).

John's yell and probable assistance resulted in a rapid stick back action and a view of the sky again. After a couple of negative 'g' ups and downs and a couple of John's smooth wing-overs, we came in to land and off to the blackboard for a view of the sad events.

My intellect understood the mechanisms involved in bringing on the spin, its correction and recovery, but my body and reactions did not accept the actuality of the occurrence. I really felt crushed for having erred so seriously, but I felt thankful that we had done the exercise at a generous altitude. Slowly the object lesson and the potential seriousness of the event settled into my gut and brain.

As John pointed out, the most likely time for a spin will be in the turn from the base leg to final, before landing. **Too low, too slow**.

If I had been alone in the 2-32 and found myself too low, I probably would have to

fly too slowly and – who knows – probably spun it in.

My ego is still bruised, I have a week to recollect this event before (weather permitting) I try to fly again, but let's go over the situations that culminated in my errors and a potential tragic accident. John and I went over these on the ground after the events, and I clearly understand them to be:

- I had six flights that day, and was active on the field for at least six hours and I was over-tired.
- I hurriedly hopped into an unfamiliar aircraft without adequate knowledge or experience of its critical flying characteristics and limitations.
- I was overly nervous, both because of the anticipation of a "test", fear of "failure", unfamiliar cockpit surroundings and a new instructor. (I do not fear John, nor should any student; I respect him and need I say appreciated his presence).
- I was surprised about the sensitivity of the aircraft but not physically **ready** for its need for higher flying speed. I did not, in other words, adjust my actions to match the needs of the machine.
- I did not listen closely enough to John's instructions (perhaps my nervous disorientation) while flying a new set of controls.
- I remembered textbook instructions without applying the context. That is, full "opposite rudder", "stick centred" when ready for "stick back". I was out of step, etc.
- The maneuver, despite my previously successful efforts, was not yet natural to me. I certainly would not have anticipated the moves well in an emergency.
- Earlier in the day I had trouble at speed control.

The above situation and history was pregnant with the makings of a tragic accident. At 2300 feet altitude turning onto final for the first time in a new type of aircraft, and given my other conditions, the situation might easily result in a serious accident or death.

I am still here because of the safety precautions taught and practised at YSA and because of the vigilance and care practised by the instructors. I am now appreciative of the need for safety, both on the ground and in the air. I will be happy to solo when I am told I'm ready, but if my guts aren't ready, the extra couple of flights with the instructor will be worth the time.

# **RULES FOR HOMEBUILDERS**

#### compiled by Tony Burton illustrated by Gil Parcell

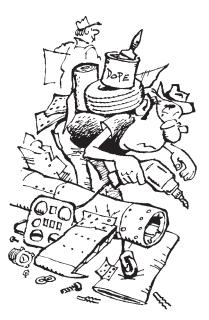
...and bad luck has nothing to do with it, there is a natural order to the act of construction, in part delineated below.

You always find a tool in the last place you look.	Boob's Law
If you take something apart and put it back together enough times, you will eventually have two of them.	Rap's Inanimate Reproduction Law
A carelessly planned homebuilding project takes three times longer to complete than expected; a carefully planned project takes only twice as long.	Golub's 2nd Law of Homebuilding
Experience varies directly with material ruined.	Horner's Five Thumb Postulate
If all you have is a hammer, everything looks like a nail.	Baruch's Observation
When the need arises, any tool or object closest to you becomes a hammer.	Bromberg's Law of Tool Use
The one who says it can't be done should never interrupt the one who is doing it.	The Roman Rule
The first 90% of a project takes 10% of the time, and the last 10% takes the other 90%.	The "90-90" Rule
The easier it is to do, the harder it is to change.	Eng's Principle
If you fiddle with a thing long enough, it will break.	Schmidt's Law
The nut won't go on until you utter the magic word.	Bungey's 1st Law
When you're about to use the magic word, children will be present.	Bungey's 2nd Law
The first place to look for a dropped washer is the last place you expect to find it.	Law of the Search
Any horizontal surface is soon piled up.	Ringwald's Law of Workbench Geometry
You can make it foolproof, but you can't make it damn foolproof.	Naeser's Law
Assumption is the mother of all screw-ups.	Wethern's Law of Suspended Judgement
If you drop something, it will never reach the ground.	Femo's Law of Homebuilding
When you do not know what you are doing, do it neatly.	Prissy's Rule
There are two kinds of tape: the one that won't stay on, and the one that won't come off.	Teleco's 2nd Law
There are some things that are impossible to do, but it is impossible to know what they are.	Jaffe's Precept
No two identical parts are alike.	Beach's Law
Save all the parts.	First Rule of Intelligent Tinkering





Boob's Law



Ringwald's Law



## SOARING IS FOR THE BIRDS

#### **Bob Nancarrow**

Wait a minute. Don't think I'm putting down our favourite sport; the only point I want to make is that birds really do it better. Oh, maybe we can go higher and faster; but watching birds soar is an enjoyment glider pilots probably appreciate more than the average bird watcher.

One warm August day last summer I was becalmed while sailing near the southeastern shore of Georgian Bay. It was quiet and comfortable lying in the sun waiting for the wind to freshen. When I glanced up at the masthead fly to see what the breeze was doing, a flash of wings in the sun caught my eye. Overhead, so high I could barely see them, were about a dozen gulls wheeling in graceful circles. They seldom flapped their wings and as I watched they seemed to rise even higher until they were mere dots against the bright blue cloudless sky. I reasoned that they were picking up thermals rising from the bare rocks on the nearby islands and as I lazed in the sun, I dreamed of soaring an amphibious glider towed off by a motor boat. The wind sprang up and the boat started to move again and I was busy for a few minutes. When I next looked up, the gulls were gone.

I remember another day seeing gulls at over 3000 feet near the York Soaring glider field. As I recall it was a blustery sort of day with some cumulus but the lift seemed ragged and ill-defined. You would just nicely find a thermal and start to climb, then suddenly fall out the edge and lose several hundred feet before finding it again - if indeed it was the same one. At York it is not unusual to see six or eight gliders soaring near the field but this day there weren't any others close by at my height. Suddenly I saw a flash of white. It startled me for an instant until I realized it was a herring gull guite close and when I looked around, there were several others within a few hundred feet. I moved closer and at once the vario moved upward increasing my climb rate by a couple of hundred feet a minute. After that I promised not to use the expression "bird brain" again, at least not in a derogatorv sense!

The very first time I saw a soaring bird while flying was from the front seat of a 2-33 near Tottenham, Ontario. My instructor saw it first and flew toward it. It was a red tailed hawk and I still remember the rather angry look it gave us as we intruded in his airspace. I also recollect the frustrations that summer trying to stay up for at least a half hour. The best I could manage was twentysix minutes until one day I spotted three hawks getting lift from a quarry to the northeast of the field. I moved toward them and started to circle under them and of course that's where the lift was. I can still see them in my memory, the wing feathers stretched out and the reddish brown tail feather fanned in the sun. We circled together for quite a while and reached 4000 feet which was the highest I had ever been alone. My fifty-seventh flight shows an hour and a half duration and I often wondered how long I would have lasted without the hawks to mark the lift that afternoon.

When we think of soaring birds, gulls and hawks come to mind. And there are the condors of California and South America and the albatross with its dynamic soaring ability over the oceans. But pigeons? It was early November and cool, but bright sunshine gave the feeling that winter was really still a long way off. There was a fairly stiff southwest wind blowing and it was shortly after noon. Several blocks away from my home I noticed some pigeons flying off the roof of a four storey apartment building. Now pigeons are not a particularly attractive bird to me. I know there are pigeon fanciers who seem to derive great pleasure out of driving away from home half the day and racing their pets back to the roost. Most city dwellers however only see the bad side of pigeons, that noisy mob of birds that make dandruff for the statues in the city squares all over the world.

**Vayne Roberts** 

Well, the particular pigeons I saw that day were not behaving in usual pigeon fashion at all. One would strut to the edge of the roof facing south and spread its wings launching itself into the rising air. It would hover without flapping its wings, penetrating slowly as it rose above the roof top. After about ten or fifteen feet the lift appeared to be lost and the bird turned downwind into the circuit and was quickly back on the roof. Then the next one had a turn. I think there were five in all although it was difficult to tell because most pigeons look alike. I never saw two go at once and as far as I could tell they took turns in the same sequence for the few minutes I watched them. It was an extraordinary thing to see; I have never seen anything like it before or since.

None of these observations or bird behaviour seemed to be related to the search for food, the urge to migrate or the bird's mating ritual. The only reason I could see for their activity was the pure enjoyment of soaring. What better reason to soar? No speed task, no goal, no record flight – just soaring for the fun of it. Maybe that's why I noticed these birds; we have something in common.

#### A.D. NOTES

Foreign Airworthiness Directives and Mandatory Modifications

BE-005/36/81 Cobra 15 SZD36A Extension of the overhaul life.

BK-015-81 Jantar gliders Securing the instrument panel cover.

LTA-82-221 Schleicher ASW-15 and 15B Inspection for possible fatigue failure of the elevator actuator bell crank. LTA-82-220 Messerschmitt-B-B Phoebus A1, B1 and C Inspection procedure for increase of service life to 6000 hours.

Club Astir III Serial number to 5569

Club Astir IIIb Serial number to 5568-Cb

Standard Astir III Serial number to 5564-S

Subject: Pedal unit

Reason: The slides (No. 103-4208.10) of the pedal unit might break when overloaded.

Action: Action to be accomplished in accord with Grob Technical Information TM 306-22 and Repair Instructions No. 306-22 to TM 306-22 of April 6, 1983, which becomes herewith part of this AD and may be obtained from Messrs. B. Grob Flugzeugbau, D-8939 Mattsies, West Germany.

Action to be accomplished by a skilled person and to be checked and entered in the sailplane's log by a licensed inspector.

# **CLUB NEWS**

#### IDEAL AIRPORT BOSS RETIRES

At the end of April 1983, Vancouver Soaring celebrated an event of considerable significance at Hope airport. After 13 years of service to VSA, Eric Newman retired as Airport Manager at Hope airport.

In 1970, when there was danger of the Hope airport being shut down, VSA entered into a management contract for the airport with Transport Canada. Since that time, VSA has operated Hope airport under the terms of the contract. Eric Newman, who was hired on as Airport Manager by VSA in 1971, has been the key figure in the upkeep of the airport. His high standards have brought national recognition to it as one of the two finest grass strips in Canada.

We were very fortunate that Eric and his wife Mary were visiting Hope in 1971, after Eric's retirement from the Armed Forces, and that he noticed a small advertisement for an Airport Manager in the "Hope Standard". He was selected as the ideal candidate and proved to be exactly that.

Apart from maintaining the airport to the highest standards, he also allowed free use of his tools and equipment (many of them personal property) by the club members, when they needed them.

On 16 April, VSA recognized Eric's years of service at a retirement banquet in Hope. His presence around the airport will be missed.

Lloyd Bungey

#### **PINKY – AN AUTOBIOGRAPHY**

as told by Len Douglas & Al Smith

I was born on that wild assembly line in Oshawa, back in the days when we still had Sam McLaughlin, Studebaker, and Four-Cent Postage; and the only difference between a Chevy and a Pontiac was the name on the hub caps.

Many moons and ninety thousand miles later, after the kids had learned to drive on me, and the salt had rotted my beautiful hardtop body into a leprous scab, I found myself being trundled ignominiously to the Wreckers' Yard... this must be the end of life!

But, no! Some smiling gentlemen dragged my still-good 283 cubic inch heart, lungs, and rear axle from the pile of rust, built a new concoction of angles and channels around me, and I heard myself being referred to as a Winch. After a period of training, I found myself enjoying the sunny weekends parked at the end of a large field. With occasional calls to pull hard, I would see a large bird climbing into the sky towards me...Wonderful me! The rest periods were ecstatic at this time; I lived in a large shed in warm luxury with some of the birds that I had been helping to fly.

But, alas! This life of bliss could not last; seven thousand launches later, I found myself struggling harder to make the birds fly, my pulse became laboured, my breath turned into a funny blue haze. Once again, I started to hear the dread words "clapped out". Finally, it was my transmission that failed, I was unable to make the birds fly any more. Lots of conferences about my future, and some different smiling gentlemen began talking about a School Bus... ???

Now all is happy again; my transmission had a multiple by-pass operation, I was given a rebuilt 327 cubic inch heart from an old school bus. I'm back to helping the big birds to fly again, with rests in the big shed.

Oh, I almost forgot to tell you... the gentlemen mixed up all their odds and ends of paint; now I wear a lovely new pink dress ... come up and see me sometime at 44°16N, 79°55W.

#### **KIWI NATS INVITATION**

We have received news from New Zealand that their Nationals in 1984 are to be held from January 15-28 in Alexandra. The N.Z. Gliding Association is inviting interested cross-country pilots from overseas to participate. So far they have representatives from Switzerland, Australia, Germany and the U.K. and possibly the USA. We are told that "pilots should be prepared to fly in front, waves, thermals, ridge and one or two unnamed phenomena." Top height recorded in Alexandra is 36,500 feet. Anyone interested should contact the Contest Director as soon as possible so that a glider can be found for him/her.

Alexandra is in the heart of the fruit growing region of the South Island of N.Z. The Central Otago Flying Club there have new clubrooms with a control tower on top, big BBQ and a swimming pool (a big asset in January which is mid-summer "downunder"). So if you would like to tie in a vacation in beautiful New Zealand with some interesting competition flying, contact the Contest Director: Don Lament, 40A Station Street, Alexandra, New Zealand.

Anne Pickard Bulkley Valley Soaring Club



This is our recently completed Pioneer II homebuilt (C-GFJW). My son Roland and I spent 2600 hours and 6 years building it. The picture was taken over London Soaring Society's field at Embro, Ontario, Sept 19, 1982. The pilot is CFI Kurt Hertwig on Juliet Whiskey's second test flight. The performance equals or exceeds our expectations to date although we have only flown eight flights for a total of five and-ahalf hours. Flying conditions the past two years have been awful.

Paul Chevalier

#### 2-33 CANOPY CAUSES FIRE

Recently, we had an incident which could have resulted in a disastrous fire. In corroboration with local fire officials, it was found that a couch was set on fire by sunlight refracted through the canopy of a 2-33 temporary stored on top of it.

Fortunately, the smoke was spotted early, resulting in only minor heat damage to the edge of the canopy and the loss of a couch.

We hope that by sharing this incident, a more serious fire may be prevented elsewhere. Always keep the canopy covered, or away from direct sunlight. An ounce of prevention is still worth a pound of cure.

Alberni Valley Soaring Association

#### TOUGHER CHECKOUTS AT BLUENOSE

As a result of the loss of our Astir, we have instituted a cross-country course with six ground school classes during the winter. Evidence of skill at short landings will be required, a map showing local landable fields, and some cross-country soaring in our K7, so that we can assess whether the student knows his location, what he can reach from what height, and whether he can recognize landable fields from the air. Navigation and circuit procedures over unknown fields are conducted in Chris Purcell's Cub.

We've had some good soaring already, and most members are checked out and current. This is another area we've tightened up. Three flights in the last three weeks or back to dual. Also for non-XC pilots, the angle of view back to the airfield must be more than 20°. We have a forbidden zone of unlandable "Alligator" territory – a \$20 fine to fly over it – \$500 if you crash beyond the line!!

Dick Vine Bluenose Soaring

#### **NEW SPIRIT AT KAWARTHA**

Kawartha Soaring Club in Omemee opened its 1983 flying season with 15 paid-up members, and a highly motivated membership drive that was made successful through the enthusiasm and team work of the new elected directors, executive and their members.

On March 28 to April 2 Kawartha Soaring Club held a display at Oshawa Shopping Centre which was a terrific show stopper. About 5000 pamphlets were distributed at the Oshawa Centre and to numerous businesses like the Library, municipality buildings, police stations, dentists, doctors, car dealers and retailers. Our ground school opened at Oshawa airport on February 6 with five students. Six new students were recruited from the Oshawa display making a total of eleven.

In spite of the fact that it rained non-stop on our 'Open House' weekend, prospective members still turned up and joined our club. Our goal is to enrol 35 members for '83.

Our enthusiastic members have redecorated and refurnished both our clubhouse and our bunkhouse, which was previously built by members and contains eight bunk beds and a washroom. The clubhouse is equipped with stove, fridge, tables and chairs, a washroom and a shower. This was built to encourage members who come from as far as Toronto to stay and fly on Saturday and Sunday, from May through October. Camping facilities are available. There is also a pool which we all appreciate after a busy flying day.

For our flying pleasure we now have two Blaniks and a rented Grunau Baby. Our towplane is a Wilga. Two Jantars and two Cobras are privately owned. There is a possibility of the new two-seater Puchacz being available for demonstration flights at our gliderport this summer. We recently purchased a worn-out lawn tractor which one of our members rebuilt completely and is being used as a tow vehicle.

As a climax to our flying season, each August we celebrate at our gliderport with "pig on a spit" (see advertisement in Coming Events this issue). Our goal for our pig roast this year is to sell 100 plus tickets. Last year it was a success with live music, delicious foods, and a joyful day with visitors from other clubs. The music and bonfire continued until the early hours of the morning.

Omemee is situated between Lindsay and Peterborough. Omemee has some fine handcraft gift shops, and Lindsay is quite a busy little town, so a day spent in Omemee to go flying is well worth it. In fact a weekend would be better.

We are proud of our CFI Brian Milner who became the first Canadian to fly 1000 km. We wish him every success in his future endeavours!

A successful and a safe flying season to everyone!

Hardy Matczynski Editor "News Release"

#### GEORGE BLUNDEN

"We are sorry to report the recent death of George Blunden. George was an active member of the Cu Nim Gliding Club for a number of years, holding the position of Chief Flying Instructor and President at various times, and participated in a number of National Soaring Meets. Although not active with the club in recent years, he maintained his interest in flying. Our sympathy is extended to his wife and members of his family."

George Dunbar



#### Vern Keats

It is with deep sorrow that we must advise of the passing of Vern Keats on March 25, 1983. He leaves many friends from coast to coast.

Flving had been one of the constant factors in Vern's life since his early days when he owned a Piper J-3. He joined the Winnipeg Gliding Club in 1965 and quickly became an enthusiastic member. His record of service to the club since then is exemplary as he was either a member of the executive or on a committee almost continually until he resigned as a Director some eight weeks ago. He was also instrumental in organizing partnerships to bring the Bergfalke, C-FUVO and the RHJ-8, C-FAJS into the club and always enjoyed honing his skills on these gliders. His cross-country flying always seemed to be a low priority, as the well being of the club would take precedence and inevitably you would find him in the back seat of one of the trainers instead, where he sat for many hundreds of hours, passing on his knowledge and love of flight to countless students.

He had deep insight into people and problems and was an able mediator, keeping the "gung-ho" group contained without dulling their enthusiasm while still managing to get the "project-ofthe-moment" completed successfully. There weren't many major decisions over the years when Vern wasn't involved. In my mind, the biggest is probably the purchase of a home for the WGC in 1967. Vern 'found' Pigeon Lake, negotiated the price and mortgage conditions and when that was completed, he got on the tractor and proceeded to prepare and seed the runway. This last operation was done in the middle of an unseasonal snowfall. He wasn't a one-man show, he was just always available.

His unassuming manner, his extremely congenial personality fronted by his broad grin, his thoughtfulness and consideration, his skills and experience, his modesty, the friendship and the firm handshake, all are now memories – very cherished memories. He won't be forgotten though. As they say, the true test of a man's life is to be found not in his wealth and material possessions but by the extent that his mere presence has enriched all who have known him. May I say simply that he passed the test.

Fly free, my friend.

Dave Tustin

# HANGAR FLYING

#### NEW O & R WORLD RECORD

Tom Knauff, operator of Ridge Soaring Gliderport in Pennsylvania, is claiming the world out and return distance record from Karl Striedieck. On Monday, 25 April, he flew from a remote start point at Williamsport, PA to Little Flat Creek Church (just north of Knoxville, Tennessee) and return for a total distance of 1645 kilometres. The flight time was 10 hours and 36 minutes for an average speed of 155.3 km/h (96.55 mph). The flight was conducted in ridge and wave lift and at times was threatened to be cut short by heavy snow showers on the return leg. Tom reported that he flew at "a cautious 100 knots" on the south end of the course. He said, "it was an extraordinary day, perhaps the best I have seen in the 18 years I have been flying the ridge.'

#### BORDER CROSSINGS BY SAILPLANES

US Customs officials have continuing instructions for the handling of border crossings by gliders when making distance or record flight attempts.

Gliders which are carried [flown] into the United States of America, when making distance attempts in Canada, are covered by the regulations for emergency landings in section 6.2(h) of the Customs Regulations requiring that the pilot contact the nearest port of entry [usually through the local State Police] and report the circumstance. Arrangements should be made to have the gliders checked out of the United States.

Flights to the south which are in effect destined to the United States, may also be handled under the emergency landing procedures. Such flight attempts are unpredictable so that prior notice and prearrangement of Customs clearance would not be feasible.

These instructions cover Customs requirements for gliders or sailplanes only, and do not cover Immigration requirements.

Official Memo from the United States Government Dept of Treasury United States Customs Service

#### SAFETY & INSTRUCTION JOINED

At the SAC Instructors committee meeting in November 1982, we brought together representatives from coast to coast who had collected accident statistics from their areas. We discussed these and came to a number of conclusions – mostly of concern to the Instructors committee because of actions that we can take, and instructing techniques and situations that we need to consider, that will I hope lead to fewer accidents in the long run.

SAC has had a separate Safety committee whose membership has not been large, and whose terms of reference have not been too well known. I have proposed, and all members of the Instructors committee have agreed, that the two committees be amalgamated and be called the "Flight Training and Safety Committee". The Board has accepted the proposal, and planning is underway to accommodate the broader mandate of the new committee.

lan Oldaker

#### MANPOWERED SAILPLANE FLIES

A group of West Germans, Wolfgang Huetter, 73 (who also designed the H301 Libelle), Franz Villinger, 75, and Wilhelm Schuele, 74 have designed and built a new manpowered aircraft to compete for the third Kremer Prize of £10,000. The flight must be witnessed by the Royal Aeronautical Society in England and the same regulations apply as for the first Kremer Prize (a figure-8 course of one mile length), except that it is only open to non-USA pilots and aircraft. The first prize was won by Dr. Paul MacCready with his Gossamer Albatross, and the second by the Gossamer Condor's flight across the English Channel.

#### 16.6 m VENTUS

The Ventus b will now be available with wingtip extensions for a 16.6 metre span. The sailplane can be delivered with all necessary connections for the wingtips, or modifications can easily be made afterwards because of the built-in provisions.

Mounting of wingtips: automatic connection through spring-loaded safety bolts, automatic connection to ailerons.

According to flight tests, best L/D is just below 47.

#### **DG-300 MAIDEN FLIGHT**

On 27 April 1983 the DG-300 took to the air on its maiden flight. The first flights proved to be a hit. Controllability and flight characteristics were superb – well coordinated and easy to fly. This ship seems to be even nicer to fly than the DG-100.

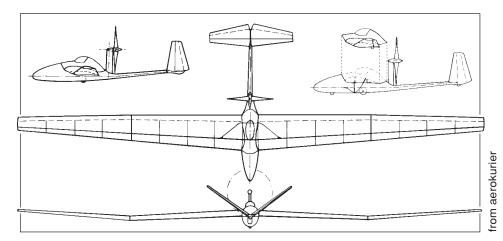
Exact performance data are not available at the moment, but a comparison flight with a flapped 15 metre class ship showed the excellent performance of the DG-300.

Series production has started and four DG-300 will compete in the World championships at Hobbs.

The HVS has the appearance of a modern sailplane and makes extensive use of carbon fibre in its construction. The Vee tail is constructed of balsa wood, and its control rods are thin carbon fibre tubes. Power is transmitted from a pedal drive in the nose to the pylon mounted propeller by a steel cable.

The wing span of 16.16 m can be enlarged to 18.4 m and consists of four parts. A Wortmann profile FX 63-137 was used.

The wing loading is 7.7 kg/sq.m. (1.6 lbs/ sq. ft) and the L/D is 36:1 at 34 km/h. The "relatively" high wing loading allows the HVS to be flown in non-calm conditions.



#### BREAKING THE SHACKLES OF THE SLOPES

It was 65 years ago during the 1928 Rhön contest that thermal lift was discovered. One of the first pilots using thermals consciously for height gain and long distance flight was Edgar Dittmar. He celebrated his 75th birthday on 6 Feb 1983, when he reminisced on this first world altitude record established on 8 Aug 1928; he gained 775 metre height over the Wasserkuppe and flew to Bad Kissingen. This flight marked the era of cross-country flying.

In 1926, Max Kegel was the first to fly 55 km distance, using a thunderstorm for height gain. Unfortunately, absolute height was not registered. The glider pilots on the ground witnessed this exciting start and realized that the pilot was quickly grabbed by huge forces, lifted, then finally sucked into the thundercloud. There were hours of fear, until finally a landing notification arrived.

The next goal was to find the way from slope soaring to thermals. On 6 Aug, Robert Kronfeld flew around a mountain, the Himmeldankberg, about 6 to 8 km from the Wasserkuppe, and landed again at his starting point. A barogram showed that he probably "regained height" away from the slope lift.

On 8 Aug 1928, Edgar Dittmar flew his glider "Albert" along the slope as usual. Some cus were scattered about the blue sky. The slope lift on the west side gave him only some 200 m height gain, however, he realized that there was also "something else beside the slope lift". Soon a huge cu approached the west side of the hill, and Dittmar decided to fly toward this cloud away from the slope and risking an outlanding. His altimeter indicated no loss of height, but rather a continuous climb. Looking back to the hills he saw the other aircraft far below. "The closer I got to the cloud, the more I felt the climb with the seat of my pants, and the needle of my altimeter moved faster.

Searching and circling he drifted with the cloud back to the hill. After about 15 to 20 minutes he had reached its base and penetrated somewhat into the cloud. This adventure gave him tremendous joy. The cloud dissipated above the peak and he flew southward to another cloud on the Himmeldankberg. He arrived there after 400 m (1312 feet) loss of height. However, he knew already what to do and soon reached cloud base again. Meanwhile he had decided to fly over to Bad Kissingen. Crossing over the Kreuzberg he made a long glide to his goal where he arrived about

600 to 700 m agl and enough time to attract sufficient attention to this big and quiet gliding bird above the park. After more than 3 hours in the air he landed on the new race track in Bad Kissingen.

The exact height calculation was done by a special crew of the competition director using a theodolite. Thus this flight gave the first internationally recognized height gain record of 775 metre.  $\hfill \Box$ 

#### **INSTANT FLYING**

#### by W.W. (Bill) Taylor as told to Lloyd Bungey

Bill Taylor joined the Victoria and Island Gliding and Soaring Club in early July 1945, two weeks before his 16th birthday. He had watched the club's activities for a couple of years, as they flew two primary gliders at Lansdowne Field in Victoria. He had even watched the gliders crack up a couple of times, but even this had not deterred him. He wanted to fly.

From 1942, when the first move which led to the formation of the club had taken place, the principal driving force behind the club had been Jack Taylor (no relation to Bill). When Bill joined the club, Jack was the President, club manager and Chief Instructor, as well as being the most experienced pilot. It was the coincidence of surnames which was to lead Bill to experience "instant flying".

Here is the tale in Bill's own words: "The other fellows, including Jack, had been out in the morning. They were not getting satisfactory launches on the winch and Jack was pretty annoyed about this. He was convinced that Ken, the winch operator, was not giving them full power and that this was why they were not getting up. This attitude did not please Ken, who was a bit of a hothead in those days."

"In the afternoon, they would often bring the beginners in and give them one try in the Dagling (a single seat primary glider). It was two weeks before my 16th birthday, and on that afternoon, they told me, "That's close enough [to 16]. You've been hanging around for quite a time. It's about time you had a go."

So I sat down in the glider and they fastened the seat belts around me and gave me some brief instructions: "You move the stick to the left and that puts the left wing down. You move it to the right and that puts the right wing down." As with all first tries, the intention was that they would tow me along the ground at 15–20 mph and I would try to keep the wings level. The whole exercise was to learn the use of the ailerons." Well, down at the winch, Ken looked at the list and saw that "Taylor" was to get the next launch. It never even occurred to him it was "Bill Taylor" not "Jack Taylor". If it was Jack Taylor that he was launching, then Ken was going to give him full power right from the word "go". He had had enough of a chewing out at the lunch break."

"They rocked the wings of the glider to signal all was ready, and Ken gave it all there was. Boy, I can tell you how it is on a winch launch when you get full power right from the start. Even though there were spoilers on top of the wings, my 100 lbs was not enough to keep that plane down. I had no previous flying experience, although I had flown models as a lead-up to gliders as I knew a little about it. I had not even been a passenger in a power plane though, so I didn't know the sensations."

The glider shot forward, much faster than it was supposed to be going. "I managed to keep the stick forward, which kept it on the ground, but bouncing like crazy on the skid for a couple of hundred feet; then it must have hit a hump. 'Swoosh... all of a sudden I was airborne. Now I had problems. How the heck was I to keep the thing level. How was I to... Well, you know, in a situation like that, you really smarten up in one heck of a hurry. I learned a lot about flying really fast."

"I suppose I was only about 10 feet up in the air, but it seemed a lot higher. I was wondering how I was going to get the thing down. My eyes were streaming with water. I don't know what the speed was but it must have been over fifty, because Ken was wondering what the heck was the matter because he was giving it everything he could and the glider wasn't going up. He was sure he was going to get unholy hell from Jack if he didn't get that glider up. Finally, he realized that something was not right and cut the power, which resolved the situation."

"That was my first time ever in an aircraft. It was two weeks before my 16th birthday and there I was, all alone and flying. It was the start of a lifetime of involvement in flying."

[Bill Taylor is currently a civil servant in Victoria, BC, and an active power pilot. He was a founding member of the Victoria Gliding Club in 1957, which became the Van-Isle Gliding Club in 1963.]

#### CROCODILE CORNER

ZILCH NOUGHT

keep it

that way!



# PROVINCIAL ASSOC. NEWS

#### ALBERTA SOARING COUNCIL

To paraphrase the opening line of a famous novel: it was a dark and stormy day. This year's annual May Meet of ASC, held at Innisfail, Alberta from May 20–23 and hosted by the Edmonton Soaring Club, was hampered at the start by the inclement weather. Due to the high winds, the low cloud base, the squall systems and other acts of nature too numerous to mention, there were no competitions on Friday, the first day. Only those pilots experienced enough to contend with the conditions, and those being air-towed in, were up flying that day.

Saturday dawned clear and sunny. With the prospect of good soaring weather occuring as some very good cumulus built up, a wide variety of ships from glass to wood were rigged and at the pilots' meeting contest director Dave Marsden presented the tasks for the day. Open class: 196 km triangle to Olds, Rimbey and return. Sports class: 135 km O&R to Rimbey.

Sunday also started off as a good day. The tasks for the second day: Open class: 315 km triangle Rosedale, Stettler and return. Sports class 156 km triangle Trochu, Delburne, return. Due to a large area over cast moving in on the third legs, there were a fair number of outlandings in both classes, even among experienced pilots.

As the lift was late to develop on Monday, tasks for both classes were shortened from those that had been originally proposed. Open class 158 km triangle to Caroline, Didsbury and return; Sports class 97 out and return to Caroline.

Results for each of the three days of competition were mixed, depending a bit on when a pilot got off, but more importantly on how a pilot was able to adapt and adjust to the ever-changing conditions aloft.

Special thanks to George Dunbar and his computer for compiling and tabulating contest information and results.

This year, in addition to the traditional starting gate arrangement, a ground clock, using light, was tried, but was unsuccessful.

Congratulations go out to Mike Apps (ASW-20FP) who was overall winner in the Open class with a total of 2733 points and the Poldaas/Jonkers team (B 4), winners in the Sports class with 1903 points.

About 15 pilots flew in the Open class (Open, 15 Metre, Standard) and 5 pilots in the Sports class (Std. Austria, B 4, Ka6/8). For those who didn't get a chance to come to the meet, CBFXT in Edmonton is producing a video tape story of the meet. Stay tuned for when it will be shown on 2 Sept '83, 13:30 hours (French channel) to see what you missed. It includes a wave flight with Tony Burton in his RS-15 on the evening of the last contest day, and editor Ursula had been talked into some French comments.

Paul Ravelle Edmonton Soaring

#### BC SOARING SOCIETY

Representatives from the Alberni Valley Soaring Club, ASTRA, VSA, and the Bulkley Valley Soaring Club gathered together in Smithers on 23/24 April for the AGM of the BC Soaring Society. The choice of Smithers as the site enabled members of the most northerly BC club to meet with members of the longer established southern clubs. Also, the delegates from these clubs were able to enjoy and assess the soaring conditions in the Bulkley Valley, thanks to the generosity of the host club which made its Blanik and Pilatus available to them.

Bruce Nicmans of VSA had trailered his IS29 Lark to Smithers early and was to sample Hudson Bay Mountain soaring conditions at its finest on four days.

Doug Carson of Bulkley Valley Soaring Club was re-elected President of BCSS and Christine Timm of ASTRA re-elected secretary.

The first major flying event of BCSS for 1983 was the two week Invermere camp held 14-27 May. During the first week the flying was somewhat disappointing, but late in the second week some spectacular flying was possible. Ten sailplanes and 19 pilots attended. The majority was there for local soaring only, or for short tasks, so few real long flights were flown. In spite of the lift not starting until late (2-3 pm), flights of over 300 km were made on 22, 23, 26, 27 May and it was generally believed that the last two days were good enough for 500 km.

The Rocky Mountain Trench from Golden south to Elko offers very spectacular flying with long stretches of dolphin soaring possible. At last year's camp, the first 300 km ever flown in BC was achieved. This year four more were made and the whole of the 500 km route from Elko to Golden was explored. Hopefully, next year someone will manage to string it all together and, finally, get BC cross-country soaring properly underway.

Lloyd Bungey

You could be flying the best Standard class sailplane in the world: the Rolladen Schneider



Your dealer in Canada: Jim Carpenter 20 Scollard Street Toronto, Ontario M5R 1E9 (416) 923-7150

# AI BADGES

#### Boris Karpoff 24-1/2 Deloraine Avenue Toronto, Ont. M5M 2A7

(416) 481-0010

The following badges and badge legs were recorded in the Canadian Soaring Register during the period January 26 and April 30, 1983.

### GOLD BADGES

194 Peter Schwirtlich				
SILVER BADGES 645 George Graham	Bluenose			
DIAMOND ALTITUDE Bernard Palfreeman Paul Chalifour Stephen Weinhold Fritz Bortenlänger	Ariadne Bulkley Cu Nim Cu Nim	5364 m 6126 m 6550 m 5601 m	PIK-20 Pilatus Kestrel Jantar Std.	North Conway, NH Smithers, BC Cowley, Alta Cowley, Alta
GOLD ALTITUDE Peter Allen	Erin	4253 m	Pilatus	North Conway, NH
SILVER ALTITUDE Monty Gray Hozi Patel	Cu Nim Erin	1690 m 2573 m	2-33 Blanik	Cowley, Alta North Conway, NH
SILVER DURATION George Graham Kerry Kirby Fritz Bortenlänger	Bluenose Air Sailing Cu Nim	5:30 5:02 5:04	Austria Ka6 Jantar Std.	Stanley, NS Belwood, Ont Cowley, Alta
C BADGES Monty Gray Kerry Kirby Madeleine Marier James McCollum Fritz Bortenlänger	Cu Nim Air Sailing Rideau Rideau Cu Nim	1:15 5:02 1:25 1:08 5:04	Ka6 2-33 2-33 Jantar Std.	Cowley, Alta Belwood, Ont Kars, Ont Kars, Ont Cowley, Alta

# Campbell

Printer ad, Ottawa

# **1983 NATIONALS**

# RECORDS

#### **Russ Flint**

#### 1983 RECORD CLAIMS PENDING APPROVAL

Speed 1000 km Goal and Return (Citizen) 93.5 km/h, 26 Apr 83, BRIAN MILNER, Kawartha Soaring, Jantar Std 2, flown from Ridge Soaring, PA to Fincastle Country Club, W. VA, return.

Speed 500 km Goal and Return (joint record) 90 km/h, 27 May 1983 MIKE APPS, Edmonton Soaring, ASW-20FP DAVID MARSDEN, Edmonton Soaring, DG 202/17 Chipman, Alberta, North Battleford, Sask, return

Speed 300 km Goal and Return (Citizen) 171.3 km/h, 10 May 1983 PETER MASAK, ASW-20

Kettle Reservoir, PA to an island turnpoint on the Susquehanna R, return

#### **15 METRE/OPEN CLASS**

Hosted by Cu Nim Gliding Club under the auspices of the Alberta Soaring Council to be held in Claresholm, Alberta, 120 km south of Calgary, on Hwy 2. For further information, contact:

Practice days Saturday to Monday 9 - 11 July Contest days Tuesday to Thursday 12 - 21 July

Hans König, Contest Manager 33 - 2323 Oakmoor Drive SW Calgary, Alberta T2V 4T2 (403) 244-9727 (B) (403) 281-7048 (H)

#### STANDARD CLASS

Hosted by Montreal Soaring Council at Hawkesbury, Ontario, between Montreal and Ottawa, near Hwy 17. Contact

Practice days Saturday to Monday 16 - 18 July Contest days Tuesday to Thursday 19 - 28 July

Gerry Nye, Contest Director 67 Portland Place Beaconsfield, Quebec H9W 3P3 (514) 695-8378

George Couser, Contest Admin. 735 Rivière-aux-Pins Boucherville, Quebec J4B 3A8 (514) 655-1801

3/83 issue showed contest dates interchanged. I apologize for any inconvenience from this printing error. Ursula

- Jul 12-21, 1983 15m/Open Class Nationals Claresholm, Alberta. Host Alberta Soaring Council/Cu Nim.
- Jul 16-Aug 14, 1983 Kawartha Flying Weeks at Omemee airport.
- Jul 19-28, 1983 Std. Class Nationals , Hawkesbury, Ontario. Host Montreal Soaring Council.
- Jul 24- Aug 1 Cowley Summer camp, Cowley airfield, Alberta. Host Alberta Soaring Council. Contact Ken Palmer, 23 Baker Cres. NW, Calgary, Alberta T2L 1R3 (403) 284-1396 (H).
- Jul 30-Aug 7, 1983, Flying Week, Pigeon Lake G/P

- Aug 13-20, 1983 Western Basic Instructors School . Host Winnipeg Gliding Club.
- Aug 30, 1983 Kawartha Pig Roast, grande finale to the Flying Weeks. Contact John Alty (416) 668-7562 H or (416) 292-1481 B, or write 7 Muir Cres. Whitby, Ontario L1P 1B5.
- Sep 11-16, 1983 Eastern Basic Instructors School. Host SOSA, Rockton, Ont. (the course in June had to be postpned).
- Oct 1-2, 1983 SAC Directors Meeting, Moncton, NB. Host New Brunswick Soaring Association.
- Oct 8-10, 1983 Cowley Wave camp, Cowley airfield, Alberta. Host Alberta Soaring Council.

### XU Aviation

ad

### NEW (?) FACES



Gordon W. Bruce Director-At-Large

20

Born in Calgary long ago. He learned to fly in a Gypsy Moth In Lethbridge, Alberta during his last year in high school. He then went to the University of New Brunswick and served in the Canadian Army throughout World War II and up to 1974. He joined the Montreal Soaring Council in 1971, was their Aircraft Maintenance Director for a couple of years and has been the President since 1976, SAC Instructor of the Year in 1974 and Contest Director for the 1977 Nationals.

Gordon has encouraged MSC to continue its strong financial support to Canada's World Contest Team. He loves everything that flies - especially birds, beautiful sailplanes and intriguing devises like the Lazair. He has great admiration for the various SAC committee chairmen who have advanced our sport so well in the past years. He cringes from government overregulation, but believes we must develop and insist on thorough after-solo training as part of the awesome training responsibility assumed by SAC on behalf of Transport Canada.

He believes in a strong SAC, able to negotiate from strength to counter any unnecessary federal moves to restrict our sport.

Trading Post and back page omitted

### SAC DIRECTORS & OFFICERS

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PAST-PRESIDENT Russ Flint 96 Harvard Avenue Winnipeg, MB R3M 0K4 (204) 284-5941 (H)

EXECUTIVE DIRECTOR

& SECRETARY

vacant

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Alex Krieger Chris Purcell Manfred Radius Al Sunley Ed Sliwinski

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FINANCIAL Gordon Bruce Bob Carlson

HISTORICAL Christine Firth 542 Coronation Avenue Ottawa, ON K1G 0M4

INSURANCE Al Schreiter 3298 Lone Feather Cres. Mississauga, ON L4Y 3G5 Brvce Stout Mbr<sup>.</sup> Bill Mather

4-4889 Dundas Street W

Islington, ON M9A 1B2

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Dr. Wolf Leers

#### Karl Doetsch FAI AWARDS Boris Karpoff 24-1/2 Deloraine Avenue Toronto, ON M5M 2A7

3920 Aspen Drive West Edmonton, AB T6J 2B3

Mbrs: Jim Carpenter

SPORTING

Dave Marsden

 FAI RECORDS Russell & Hazel Flint 96 Harvard Avenue Winnipeg, MB R3M 0K4

TECHNICAL George Adams 12 Hiawatha Parkway Mississauga, ON L5G 3R8

**TROPHIES & CLAIMS** George Dunbar 1419 Chardie Place SW Calgary, AB T2V 2T7

WORLD CONTEST vacant