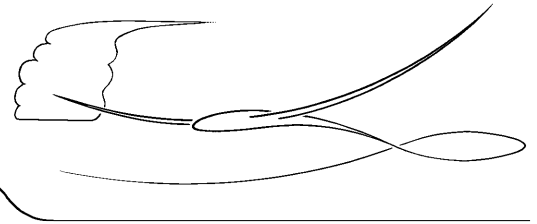


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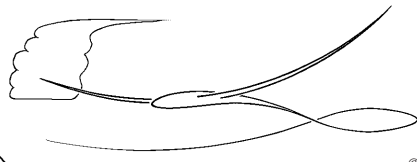


Summer 1991

Journal of the Alberta Soaring Council

ASCent

Summer '91, Silver Anniversary Year



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cover A very well-used turnpoint in Invermere, the bridge over the Columbia River at Nicholson, just south of Golden, BC.
photo by Tony Burton



editor Rick Zabrodski typing Ursula Wiese
layout Tony Burton printer Dave Puckrin

Editor's Notes

I hope you have all had some good flights this spring. May and June in Calgary have been "less than memorable". Cu Nim inches even closer to becoming landowners — hopefully before the end of this century!?

Some great flying in British Columbia — a sample is described in the story told by Jay Poscente, and new changes in medical ratings for glider pilots are included in this issue as well as some "medical facts".

Innisfail was a washout on the Victoria Day weekend only because the forecast was awful — but it seems the rain ended just north of Calgary somewhere. Could the glider gods be telling us something? Ah, well — next year. The fall issue will tell how the contest went at Black Diamond.

Good luck to valiant knight, Kevin Bennett and his young squire, Dave Fowlow — may the air currents be with you in Texas!

See you at "sunny Cowley".

Rick Zabrodski



. . . from our president

I like the look of our new ASCent (but I neglected to tell Rick, or Tony, or Ursula or Dave Puckrin until now, as did most of you). Let's give them some feedback! We need a good newsletter to keep our sport healthy. The people who are mentioned therein feel wanted and affirmed in the soaring family. So congratulations Rick and company on an excellent first revised issue of ASCent.

Would you help Rick produce our future issues by sending in more soaring stories? They don't all have to describe back to back 700 km flights, as Tony does concerning his recent Invermere valley adventures. They can be almost any adventure or misadventure that helps to put a human face on soaring. (That Shell commercial might have you believe that those fabulous sexy sailplanes fly all by themselves).

How lucky we are sitting astride some of the most varied and interesting soaring terrain in North America. From west to east, we have the Invermere valley (admittedly in BC), now producing 700 km flights; the Cowley wave area, one of the best and most beautiful on the continent, and the wide prairie inviting more three province-wide tours such as Dave Marsden and Mike Apps did a few years ago. And how lucky we are to have a pool of very talented and experienced pilots, towpilots and instructors in Alberta, and a large number of excellent sailplanes available to take advantage of our terrain. (Of course a major aggravation is finding enough time to take full advantage of our best conditions.)

We need to continue finding ways of getting new people involved (at a time when costs are rising

sharply). Edmonton is making some strides here by trying to get a winching program going, with the hope of reducing training costs. Our ASC Grob and Scout towplane have done some valuable ambassa-

dorial work for us lately. Kerry Bissell, Al Sunley and John Broomhall of ESC have flown them to "fly in" breakfasts at Westlock and Lacombe recently, providing numerous familiarization flights and publicity. I think a pool of new soaring pilots must exist in the power pilot com-

munity. Let us work at luring them away from their propellers!

Tony Burton has done some excellent development work on a new province-wide promotional brochure, which we should give wide distribution if it could be attached to some "Tourism" dollars perhaps!

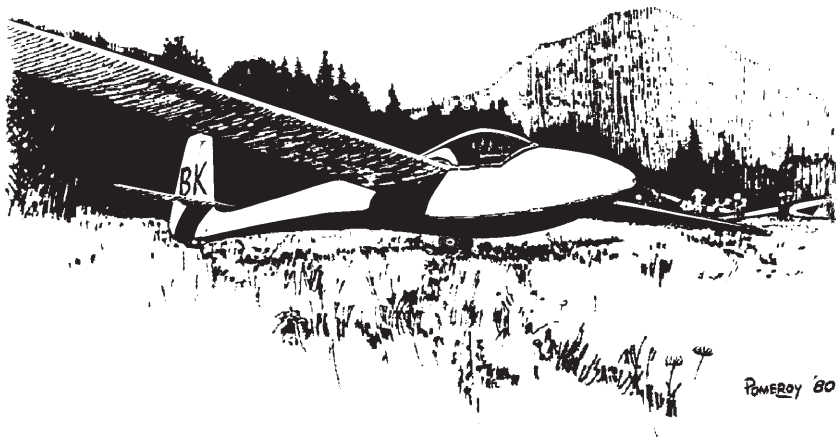
It has been great to hear of the new enthusiasm at Cold Lake and of the adventures of Bingo Larue, George Szukala and cohorts! There have likely been dozens of other flights and incidents, that written up in ASCent could give us all a chuckle and a boost, so write them up.

Remember, like in the cereal commercial, soaring is good for you, so if it's good for you, do it as often as possible and be good at it!

Hoping to see many of you at the Cowley Summer Camp!

Cheers and good flying,

Garnet Thomas



Back to back 700s

Tony Burton
Cu Nim Gliding Club

On arriving at Invermere with the BC Soaring Safari group Wednesday evening May 29, the prospects for decent soaring weather were getting rosier and rosier. The previous four days on the road with the BC Soaring Safari featured quite unstable air, bringing afternoon rain showers of diminishing extent and fierceness as the week moved on. On the first soaring day at Invermere a ridge was moving in over the Interior to dry things out, but there was still a chance of getting wet.

Everyone rigged and launched to see what the day offered. I flew up to the Nicholson bridge turnpoint first (103 km north). That is a very convenient and well-marked feature just 8 kilometres south of the Golden airport which is close to the ridge so that little height is lost getting a picture. On the way south it was evident that showers were building on the mountains in the Fairmont area and blocking any soaring further south. Back at Invermere I decided to do another O&R up the valley and repeated the flight for a total of 412 km. The soaring was all in thermals off the line of the ridges as there was almost no visible movement to the cloud shadows — 5 knots westerly at the most. The cloudbase was around 9500 feet, giving some soaring room above the ridgeline as their average height is around 8500-8800 feet msl.

That evening when everyone was telling gliding lies for the day, I mentioned to Joe Gegenbauer, the safari CFI, that I thought I would declare a 500 for the next day as the forecast had no rain in it (The "house 500" is Invermere/Nicholson bridge/Elko Highway 3-RR bridge/Invermere for 503.4 km.) Joe said, "Why not go for a 750?" That set me back on my hind legs for a few seconds — then I thought well, why not, all that can happen is I run out of day and land out in the valley somewhere. So I started measuring things on the map and thought Invermere/Nicholson bridge/Elko/Golden airport/Invermere would do the job.

The next morning, 31 May, I was on the line at 1100 waiting for the raggedy little cumulus to look like they were real — it usually doesn't begin to work well on the ridges until the sun comes around and warms up the west slopes a little. But things were developing okay and Don Hill offered to launch in his DG-400 motorglider and be the sniffer for me. He roared off just before 1130 and reported a steady 2 knots at 6000 feet (3100 agl) on the south face of the hilltop directly opposite the runway. Good — at 1137 I was off.

Cloudbase was below the peaks at 6500 - 7000 for most of the flight north, and initially very messy, but the lift was there even though a lot of ridge running was necessary. It took an hour and a half to make the turn. Heading south again after 1300 the cloudbase began rising and looking decent as the slopes started warming up properly, and it took only an hour to make it abeam Invermere once more at 1407.

The high ground curves a bit westward south of Invermere at Fairmont then the Kootenay River breaks the chain at Canal Flats and there is a 10 km eastward shift of the main ridge. On a high day one can glide straight over, but it's all forest and clearcut underneath for the unlucky. Instead, I slowed down and picked my way south over some smaller mid-gap hills closer to safety, and finally got back onto the ridge 15-20 km to the southeast about 1000 feet below the top. No worry though, as there was a lot of rock face to work with and every few miles a good thermal would be concentrated at a point that was well oriented to the sun and had an extra long talus slope downhill to soak up the heat. I had to crank around in tight 55 knot figure-eights a few times until there was clearance for full turns.

The main ridge goes straight south about 50 kilometres from Canal Flats before turning southeast again. The view outside was spectacular — still a lot of snow on top. The largest rock faces are Mt. Fisher at 9300 opposite Fort Steele and the Steeples at 9000 a bit further south. Cloud base was a bit below 9000 at this point, and running along a couple of wingspans out from the rock and under the cloud was magnificent.

It was around here that a first in my 24 years of gliding occurred, I was able to take a pee in the cockpit! Toilet trained at last — oh what a relief it is — though half way through the ritual I thought that perhaps I should be flying a bit further away from the mountainside.

At the south end of the Steeples the ridge again turns a corner eastwards at a small gap carrying the Bull River. I was surprised to see the cloudbase drop abruptly at this point a thousand feet (I have no idea why, though perhaps it's because the ridgeline is 1500 feet lower), and for a while I was gliding beside the cumulus.

Elko was a further 30 km down from Bull River and I topped up just to the north before going in for the picture at 1602 hours. 251 km from Nicholson in 2:56 for 85.6 km/h. Half done in a little under four and a half hours.



Looking north up the Beaverfoot Range towards Golden from near Spillimasheen.

photo – Tony Burton

Retracing the flight up around the Steeples again, the cloudbase on the ridgetops was still rising and a thousand feet higher at 10,000. This allowed for more direct peak to peak soaring on the high ground and sped things up a little as well as lowering the intense concentration required for rock polishing. It was here also that the faint blue end of the mountain chain south of Golden became visible 190 km away, and I thought, my, my, what a long way I still have to go!

The Canal Flats gap got crossed a little easier and I finally saw some company from the sailplanes flying locally. Abeam Invermere once more at 1811 and 222 km left to go, the cloudbase was now 11,000 feet. Even though the cu were thinning out, they remained well-formed and were giving 5 knots. One of the things I was learning on this trip was that there was no point to going off the ridge for a cu even though the ridge was blue for a space. First because there was weak lift or zero sink along extended patches of the ridgeline, and second because there were stronger thermals at intervals which were blue because the air off the rock faces was so dry.

The last mountain before Golden is called Seven because of the shape of a feature on it (I never noticed a seven anywhere). Up to the top and a 10 km glide out to the airport for a picture at 1901. 258.4 km in 2:57 hours for 87.6 km/h. Gliding back to Seven, I saw the hang gliding launch point lower down a bit to the north. Seven has a

guaranteed thermal — as I curled into its bowl below the top it was there, and a hand of turns had me above it and on my way again.

The final run back was mostly dolphining along the ridge at 55 to 60 knots to maintain height and then a final glide to the airport from north of Edgewater, landing at 2012 after 8:35 hours of soaring. It felt wonderful to climb out of the cockpit after the longest flight of my career over such remarkable countryside. I was beat and noticed for the first time that my jaw muscles were aching and my neck was stiff — I hadn't realized how much I had been tensing up during the trip.

After the handshakes and congratulations were done, Joe told me he didn't think I had gone 750 km. Sure enough, a more careful check of the distances showed I had gone only about 720 (a later great circle calculation made it 722.9)! I was sort of ticked off. Well, the forecast for the next day put the Columbia Valley deeper under the ridge of high pressure with probable higher bases, so let's do it right this time.

The new task would extend my Elko turnpoint down to the Roosville border crossing and use Nicholson bridge twice — guaranteed distance, 771.2 kilometres. Dave Baker, flying an ASW-20CL with tips, coincidentally also chose a 771, but with the Golden turnpoint extended northwards 25 km to Donald (civilization and its landout fields disap-

pear for glider pilots north of there. Everyone else with a sailplane also seemed to be planning for badge flights of one sort or another.

I was ready again ASAP the next morning. At 1000 I was chafing at the bit because the cus were getting consistent already — remarkably early for Invermere — and all the towpilots were still eating breakfast in town! Arrrrghh. At 1050 I got my tow into the same 2 knotter as the previous morning, did two turns, and realized the barograph was off. Arrrrghh again! I peeled off and dove for the runway and beat the towplane back. Dave launched, and I got off at 1121. I only saw him once for the rest of the day.

I really had difficulty getting above ridgetop for a while, even though cloudbase was up and I should have had fewer problems than the day before. It took 18 minutes longer to get up to Nicholson (at 1309), which was a bit depressing, and I thought that I better get me into gear. Back at Invermere again an hour later. A look at a map will show you that the mountain range is well formed going northwards, and becomes a single ridge half way up at Spillimasheen (see photo). This is the only way to go in the morning or to finish off in the evening, times when conditions are less certain.

Cloudbases were indeed higher and I was able to spend much more time over the high ground. The cloud movement indicated that there was about a 10 knot westerly, not half enough for consistent ridge lift, but it was helping out the thermals. A quicker trip across the Canal Flats gap (still taking the "chicken route"), and a no sweat run southwards got me over Elko at 15:46 and to the border Customs buildings at 1613 (282.5 km in 3:04 hours for 92.1 km/h). Halfway done, seven minutes later than yesterday. When I was returning, about 10 km south of Elko, Dave radioed he was making his turn at Elko, and it now became my mission to try and catch him up.

Another thing I learned today was that the thermals on top were always slightly east of the ridgetop. That seems obvious in a light westerly, but I always tended to turn away, or to the west to stay away from the lee of the ridge, and then promptly fell out. When I changed my tactics to turn east first, I usually stayed centred — but this is still not good policy, of course, if the wind is strong or if one is close above ridge height.

By the time I was up to Canal Flats a little after 1700 wisps were still forming at 11,000 but it was clear from the thinning clouds and radio reports that the day was dying early. Abeam Invermere once more at 1811 and 206 km to go it was time to shift into survival mode. Dave had flown off the high ground to take a picture of Invermere airport and nail down his Diamond distance leg then struggled to regain height. It was imperative now to stay on the high back ridge and use everything available. Dave said he was prepared to land when I reported in at 11,000 and was proceeding north, and that he was then goaded on to see what more could be done.

As long as one could stay above, or at least not much below ridge top, it was possible to tip-toe along dolphining near best L/D and lose height only slowly. Then every 15 km or so, a little concentrated thermal would give 3 to 4 knots and another 1000 feet could be banked. I don't think I've ever flown as carefully or as miserly. Dave was always a little ahead and the performance of the ASW-20 was really counting now, but the prospects were getting thinner by the minute. We both called our crews to hook up and head north. Dave made the turn at Nicholson bridge and as I was turning the corner around Seven to get a look at it too, he came in about 800 feet over me and trickled off south. I made the bridge at 1938 and got back onto the rocks with only a little to spare. Then a few more kilometres along I was saved by a hawk — the only one I had seen all day. A couple of knots all the way around above a ledge half way down the mountain was good for 1500 feet and got me up to creeping-along height again.

I couldn't get above the ridge anymore, so I was cruising along the rock as close as I dared and milking every last puff coming up. Over on the west side of the valley, I saw a brand new forest fire break out with flames and smoke expanding up the slope — why couldn't it be over here about now? Slowly the landmarks went by. We were able to hold the crews closer to Invermere one town by one. Finally Dave announced a final glide and I only wished I could say the same.

About 40 km north of Invermere I dropped down to the treed level of the slopes and the game was up. Now I just cruised south on a final glide looking for decent fields along the way. Where was that late evening valley lift people talk about? Approaching Edgewater from the north, I told Ursula where I was and she said that's where I am too. As soon as I looked down to the highway, there she was going past a few hundred feet below. I told her to look out the pickup's right window and then find a place to turn around. Just south of the village I saw a relatively flat dirt field and landed — 20 km short of home. It was 2045 and I had flown 751 km in 9:25 hours.

Now comes the interesting part of the story — like the Chinese curse, "May you live in interesting times". Another first for me — up stormed the angriest and most belligerent farmer I have ever seen! He was in my face; and really irate over trespass, the sanctity of private property, crop damage, and the valley going to hell with tourists and all. My "toy" wasn't moving until I paid him \$200 ... It was my bad luck to land on the property of a man who was notorious in the area, who had had incidents with hang glider pilots (he punched out the second one to land there) and whose house had been entered by non-locals (unfortunately for them he was in the basement at the time and chased them off with a handgun, shooting out their rear tires as they fled). I heard these tales two days later from people in Invermere when I was talking to them on other matters — but when I mentioned that I had landed south of Edgewater the other day, they said, "you didn't land in Smith's field, did you?"...

Waves beyond reach?

Peter Brown
Anchorage, Alaska

The author of this letter heard of the book, "Stalking the Mountain Wave" from a brief mention in SOARING magazine and it looked interesting, so he decided to invest a few dollars as he is very interested in the potential for wave flights in northern latitudes. Here is his response:

Although I have a reasonable amount of bush plane time, I only have about 36 hours of glider time, all of it acquired recently, mostly at Air Sailing, just north of Reno, Nevada. I just got back from a week long wave camp there where I had hoped to get some wave experience. Unfortunately, there was almost none the whole time I was there except for a bit of tertiary that appeared one evening. It was smooth as glass at 13,000 like the books said but only 300 fpm. The sun was setting and I couldn't explore. It was great fun nonetheless but the lack of real wave was a bit of a disappointment because I needed the education.

Here in Alaska, there is very limited soaring but not for lack of conditions. There are only two flying gliders in Anchorage (about half the size of Calgary) and they are both operated by the Civil Air Patrol, the US equivalent of the Boy Scouts of the air. As of this date, our single 2-33 has yet to fly and the Blanik still has not had its annual. Our summer is short and we have missed about a third of the season ... but that's another story. There is one other glider,

a 1-23 that is airworthy but the owner has not flown it for a number of years and doesn't seem motivated to fly it or sell it. It has been driving me nuts to see it collecting dust.

Since early April when I began to keep an informal record of wave activity, we have had a good seven days of visible wave activity when the local chinooks blow in from the SSE over our Chugach mountains. The waves this year have been well defined but frequently consist of a series of waves rather than one long arch spreading perpendicular to the wind direction. From the ground, to my untrained eye, it looks somewhat like a few pictures I have seen of the waves in the Alps. I have no idea if they are soarable and neither does anyone else here but I can't wait to try. I am running into some resistance from the CAP members as none have any wave or oxygen experience and seem most comfortable in our gentle New England like thermals.

I know the potential is here as about ten years ago I rode my old 65 hp Taylorcraft up to 14,000 with the engine turning only fast enough to keep the oil from freezing. The lift was still strong, about 500 fpm, when I had to descend.

I hope that I can learn some more from your book. Edmonton and Calgary are probably more like Minden and Reno in their relationship to the mountains and prevailing winds but I am going to continue to explore here and read what ever I can. ❖

Back to back 700s — concluded

All I could do was say sir at least twice in each sentence, point out that I had liability insurance for such an unfortunate incident, and agree wholeheartedly that the RCMP should be called immediately to sort out the details. Meanwhile, Ursula had stopped on the highway about 300 feet away at the top of the field and was lying low after she began to suspect what all the arm-waving was about.

In due course the law arrived and she took down all my particulars and then cooled out farmer Smith. I agreed to get rid of my toy by carrying the bits out of the new alfalfa crop, and Ursula headed back to the airfield to recruit a couple more bodies while I stripped tape and moved the small stuff up to the fence. The whole episode didn't depress me a bit — I was just sorry he wasn't in the mood to hear about great achievements in powerless flight and the joy of soaring! Anyway, it was an amazing two days and eighteen hours of flying.

We got back to camp about 1145 and then went down to the Lakeside Inn for two of their finest hamburgers. ❖

Sky Fever

I must go back to the sky again,
To a soaring nomad's life.
To the hawk's way and the eagle's way
Far from the daily strife.
And all I ask is a street of cu
'Til the long trek is over,
And a gentle glide at the set of sun
To a soft field of clover.

An adaptation of
John Masefield's, *Sea Fever*, by J.M. Field

Answers to 00 Quiz

1a, 2c, 3a, 4d, 5a, 6d, 7c, 8d, 9b, 10b, 11b, 12a, 13b

13 More Badge Questions

Here's some more teasers for the OOs and badge pilots. Under each question there are usually two references; the left hand one refers to the FAI Sporting Code, the right one to the "Guide to FAI Badges and Records", 5th edition. Give it a try, then go to your books if you're stuck.

1. On the completion of a declared straight flight of 510 km, the pilot can claim:
 - a) a Diamond distance, 5.2.3
 - b) a Diamond distance and a Diamond goal. 3.8b
2. On a badge flight over a triangular course, the shortest leg must be:
 - a) at least 28% of the total distance,
 - b) at least 25% of the total distance,
 - c) there is no minimum distance requirement for a badge leg. 1.4.3 3.7c.4
3. A barograph calibration graph must be sent in with the barogram to the Awards Chairman on a Silver height claim if:
 - a) the gain was less than 3800 feet and the claim was not homologated by a club Senior OO,
 - b) the graph is required to be sent in at all times. 10.4d
4. On a declared goal flight of 325 km, the pilot decided to photograph the goal rather than land, then proceeded onwards for another 180 km. The pilot can claim:
 - a) nothing – the flight wasn't completed as declared,
 - b) Diamond distance and Diamond goal,
 - c) Diamond goal,
 - d) Diamond distance. 1.7.3.1 / 1.4.6 3.10b
5. Can a different OO at the end of a badge or record flight open a camera which had been sealed by another and continue the verification procedures?
 - a) yes 2.2.7.3b
 - b) no 8.3
6. A vertical feature showing in a turnpoint photo is useful because:
 - a) it is easy to identify,
 - b) it is a guide to determining the glider's position,
 - c) it is always good to use as the turnpoint itself,
 - d) all of the above. 2.2.7 9.2
7. A Great Circle distance calculation is not required for:
 - a) the individual legs of a triangle flight,
 - b) an achieved 304 km on a Gold distance flight,
 - c) a distance of less than 100 km on a straight flight. 1.7.7 6.4a
8. Which of the following locations is an acceptable turnpoint:
 - a) the centre of an airfield,
 - b) a small town,
 - c) a remote road intersection,
 - d) none of the above. 1.6.1 / 2.2.7 4.2h / 16.1
9. For a multiplace record attempt:
 - a) the pilot and passenger must be licenced pilots,
 - b) the passenger must be at least 14 years old,
 - c) the passenger must weigh at least 40 kg (88 lbs). 2.2.2
10. A pilot on a Silver distance flight will try to reach an airport 77 km from the club. Assuming that both takeoff and landing heights are the same, the pilot must release below:
 - a) 2000 feet AGL,
 - b) 2500 feet AGL,
 - c) 3000 feet AGL. 2.2.8 13.2
11. A pilot has declared an out and return Diamond goal flight, releasing at a point 10 km from the takeoff point in order to take advantage of good early soaring conditions at that location. The pilot flies around his declared turnpoint and lands back at the airfield. Has he properly completed the goal flight?
 - a) yes 1.4.2
 - b) no 3.10b.2
12. A pilot has declared a speed to goal flight and elects to start the flight from the time of release rather than time of crossing a start line.
 - a) the pilot must still photograph the declared start point with a time back camera from the correct sector, or be observed to have crossed a start line over the declared start point,
 - b) the pilot's point of departure may be the release point providing it is on the opposite side of the course line. 3.10c
13. The OO must retain "control" of film used in a badge or record attempt. Is control lost if the pilot fails in an attempt on one day after having exposed a few frames, and takes off the next on a different declared task using the same sealed camera?
 - a) yes 8.2
 - b) no

You will find the answers on the previous page.

Tony Burton, Provincial OO Coach

Soaring in the Mountains

My 1st Cross-Country

Jay Poscente
Cu Nim Gliding Club

14:15 The vario needle whacks the bottom peg — more than 15 knots of sink! My first reaction is to dive and accelerate out of the sink, but the jagged mountain peaks and snow 500 feet below suggest otherwise.

Time to head for the escape route. A narrow valley between the peaks and ridges leads back out to the Invermere valley to the west. By contrast, the pine forests of the valley seem a welcoming sight compared to the barren rock cliffs and snow.

Creaking and groaning, the Mini-Nimbus shudders as she penetrates massive lift while in a 90 knot steep left turn. Again, the vario's scale proves inadequate as the needle is pegged on the stop at 15 knots up. The rate of the frantically beeping audio matches the rate of my heart beat pounding in my ears. Six to eight knots was the best the day had offered until this! Perhaps this is an example of the "ridge lift assisted thermals" I had heard talk of this morning. I aim the glider back at the ridge and slow down in the turbulent lift. Who needs a vario? I can easily see the rate of climb as the cliff disappears below and the view expands into a panorama of vast mountain ranges and blue sky punctuated with popcorn clouds as far as the eye can see ... *Relax, Jay, reduce that death grip you have on the stick, try to breath normally. You'd better decide where you are going next in case this lift stops as suddenly as did the last thermal. I bet that mega-sink goes right to the rocks, too. Why can't you relax?! This is one hell of a place to be attempting your first cross-country, you fool. You should be at the Invermere beach with Kirby and the kids. If Kirby (my wife) saw this, she would ground me for sure...*

The thermal I am in is topping out at 11,300 feet and I am well over the lee side of the range. Everyone who briefed me said, "do not get caught in the sink on the lee side of the range, there is nowhere to land in the valley to the east." I have not been thrilled with the limited choices in the valley to the west either but at least there are a few scattered farms ... *just keep them within reach, Jay, definitely no room for sloppy judgement today.*

This looks like the last cu enroute. Ahead lies 60 km of cloudless sky and the Beaverfoot mountains between me and Golden, my first declared turnpoint. Forest in the valleys to the right and left, no "visible" lift ahead, and

behind me is no picnic either. My palms break into a heavy sweat. Straight down is definitely out of the question so plan escape routes to the west and press northward.

The next mountain face looks ideal for lift. It is a big bowl facing a hot sun. The lift I am in now has a nice cumulus cloud above it, so why are there no clouds ahead? The lift starts to die so I set off into 12 knots of sink. There is sure to be lift when I reach that bowl. In fact, there should be lift by now ... where the !@#\$% is that lift? I'm starting to feel religious. Please, please let there be lift! If there could just be enough lift to ... BOOM, here it is! Wow, 15 knots again, up and up and up! What a relief. Okay, there is lift out here in the blue, so it's northward to Golden.

16:00 I can see my turnpoint at Golden airport, but it is way out into the valley. I hope I can get back up onto these mountains with some FAI legal turnpoint photos. The thermals have definitely weakened. As I venture out over the valley, it occurs to me that everything is calm and I have been climbing steadily for five minutes in straight flight at 70 knots. Could this be mild mountain wave? Whatever it is, it sure is welcome.

16:15 I must look like a wounded duck as I flounder with the turnpoint picture taking. Finally, I have lost enough altitude that I no longer care if the photos are any good. It is back to the wave for another helping of lift.

16:30 The trip back south is a lot more relaxed. I reason that if I got here, I should be able to get back, right? What about that haze coming in from the west? Where did all the cumulus clouds go that were over the southern section of the course? Is the air stabilizing?! Speed and efficiency barge to the forefront of my overcrowded survival priority list. Speed master Kevin Bennett's dolphin flying lessons suddenly take on new relevance.

17:10 After 40 minutes of strict MacCready flight, slowing in lift, speeding through sink and only circling in the very best lift, it occurs to me that my time on the return run is at least four times better than on the tentative trip north, despite the weaker conditions. In fact, the flight has got almost comfortable, even graceful. I must be getting the hang of this. Even with no clouds, analyzing the terrain ahead is yielding lift where I expect it. I've stopped fighting the sailplane and it reacts consistently and efficiently. At times I forget that I am operating the bird. I am just con-

centrated thought, travelling through space, witness to the outcomes of decisions based on the moving mountain scenery around me. A good shot of unexpected turbulence drop kicks me back into my body. Over the radio I hear the first anxious call to gliderbase announcing an imminent outlanding. The air continues to stabilize, the radio chatter takes on a melancholy tone as more pilots are forced to end their airborne adventures.

I am too close to my second turnpoint, Canal Flats, to head for home now, and I am still finding sufficient lift on course. I hear familiar voices on the radio. They belong to Dick Mamini and George Dunbar flying in the Alberta foothills. I wish they were here, and it occurs to me just how much comfort there is in flying with the soaring wizards of the Cu Nim club within landing distance of the strip at good old Black Diamond.

17:20 Struggling to find lift now, I begin to feel alone and exposed without my instructors. If Bruce Hea were here, he would calmly coax me towards making good decisions, Dave Fowlow would rebuild my wavering confidence with encouraging words, and Al Stirling's humour would take the hard edge off the realities of the decaying conditions.

The swelling loneliness is abruptly checked by Tony Burton on the radio announcing his intention to carry on with his attempt at 770 kilometres! Is he serious? After six hours of soaring, Tony still plans to fly another 250 kilometres! I am such a greenhorn. Here I am sweating bullets on the last 40 km of my first 300 km flight and Tony is calmly committing to flying an additional 250 km in the same conditions that have shot down half of the other pilots in the region. I begin to fully realize just how much experience lies between me and the real glider pilots.

18:00 Tony's message has dispersed the butterflies and the last 40 km to Invermere ticked by effortlessly. I am in no hurry to land since given a few more minutes aloft, I will have my Silver/Gold duration of five hours. So with 7000 feet agl to spare in the calm evening air, I unwind by carving broad, graceful, relaxing turns over the picturesque Invermere valley for 20 minutes as Kirby and the kids beg me over the radio to get down for a late supper.

What a day! In my wildest dreams I never imagined soaring offering so much visual, emotional, physical and spiritual stimulation. The apron strings have been cut in grand fashion. I now understand how the risk of the occasional outlanding is far outweighed by the sheer joy of soaring cross-country. ❖

Thank you, Ursula Wiese, for putting up with the work and responsibility of being my Official Observer for this flight, and to the organizers of the BC Soaring Safari who made the Invermere Mountain Soaring Camp possible.

Glider Pilot Class 4 medical rating

Over the past year the requirements for physical exams involving glider pilots have changed. If you are only flying gliders, are not an instructor, and can sign the declaration, a visit to the medical examiner is not required. Note that the responsibility falls on the pilots to be honest with themselves in making this declaration. I would suggest that 20% of "healthy" glider pilots might need an exam to clarify possible "grey areas" in their medical history.

Quite separate from this requirement is the legal issue of liability as it applies to the instructor making the certification and as to coverage flying club gliders under a group insurance policy. For this reason the policy at the Cu Nim Gliding Club is to require a medical for all pilots who fly club equipment solo to carry passengers. I wonder just how "legal" (ie. – enforceable) this policy actually is, but I agree that it may be prudent at least until the liability issues are more clearly understood. What are other clubs doing about this? Your thoughts on this matter would be appreciated!

On the following two pages is a slightly reduced reproduction of the DoT application for licence and medical declaration (the two sides of a single page form).

Rick Zabrodski, MD, Aviation Medical Examiner

Excerpts from the DoT Medical Handbook

General Health While piloting an aircraft, an individual should be free of conditions which are harmful to alertness, the ability to make correct decisions, and rapid reaction times. Persons with conditions which are apt to produce sudden incapacitation such as epilepsy, serious heart trouble, uncontrolled diabetes or diabetes requiring hypoglycemic agents, ... cannot be medically certified ... Conditions such as acute infections, anemias, and peptic ulcers are temporarily disqualifying. Consult your Aviation Medical Examiner when in doubt about any aspect of your health status, just as you would consult an aviation mechanic when in doubt about the engine status.

Specific Factors — Fatigue Fatigue generally slows reaction times and causes foolish errors due to inattention. In addition to the most common cause of fatigue — insufficient rest and loss of sleep, business pressures, financial worries, and family problems can be important contributing factors. If your fatigue is obvious and marked prior to a planned flight, don't fly. To prevent the effects of fatigue on long flights, keep physically active by making ground checks, etc. and remain mentally active also.

More medical excerpts will appear in future ASCents.

DoT application form
for pilot licence.

DoT application form
for medical declaration.

Notes from 14 June 91 ASC Executive Meeting

ASC Safety equipment Two 20 lb ABC fire extinguishers, one first aid kit with three burn dressings, and one first aid blanket have been purchased and will be available at ASC events at the flight line.

Towropes & weaklinks AI has made 12 new towropes and 25 Tost weaklinks to be available at ASC events. The additional rings will be stored in Claresholm.

Cowley mandatory site checkflights A two-seater will be made available at Cowley for site checkflights for visiting pilots. Preferably, this will be done in the quiet morning hours.

Waiver for visitor flights ASC will print a waiver for visitor flights, as we should make visitors aware that a flight involves some risk.

Cowley Operating Guide The operating guide has been a helpful paper to guide pilots at our Cowley camps. The first 200 copies, printed in 1989, are used up and a new print run is necessary. Ursula and Dave Fowlow have prepared

an updated version for hand-out to every pilot in 1991. 500 copies will be printed on recycled paper (with symbol).

Cowley runways Tony to contact Bill Odland, Pincher Creek airport manager on the progress of rolling runways.

Cowley telephone charges Several non-ASC long distance calls (total over \$40) could not be traced for payment. Tony is to have AGT change the phone to prevent "dial 1" calls. Individuals may claim legitimate ASC calls.

Towplot-only club members Such members in clubs do not have the privilege of flying the ASC Grob as P1 or instructor at clubs (since they cannot fly other club gliders). At ASC events however, such club members may fly the Grob.

Expense claims should be handed in when the event occurs, or shortly thereafter. Claims received after 31 December of that year will not be honoured.

Ursula Wiese, ASC Secretary

Odds & Ends

Tony Burton
ASC Program Coordinator

- By the time you have this issue in hand, the World contest in Uvalde will be near. Three persons from Alberta will be on the team — Kevin Bennett will be flying his Ventus in the 15m Class, and Dave Fowlow, Cu Nim's CFI, will be his crew. George Dunbar will be the team manager and, unbelievable as it may seem, will not be doing any scoring (he will probably feel undressed without a computer in front of him). Kevin did very well at the pre-Worlds last year, and we all wish him even better results this time.

- On a call to the Pincher Creek airport manager to see if any runway rolling at Cowley was going to be done, he came up with a zinger — Rec & Parks was taking over the campground (with rumours of fees, etc.) as part of a general process of consolidating all provincial parks and campsites under one department. Ursula, Bruce Hea and I had a meeting with a Pincher Creek area park ranger to find out what was happening. It turns out that it may be nothing. After we bombarded him with all our documented history (especially the bit about the province not owning the airport — it's leased from the feds), there is a good chance that Rec & Parks will drop it. Nothing is to change this year — more later.

- The provincial contest was called off for the Victoria Day weekend as you all know — too bad, as Jerry Mulder told me it looked soarable for at least two days at Innisfail. However, since the weather forecast for the weekend as of Thursday was abominable, and major moves of equipment and people were going to begin Friday, AI Sunley and I made a command decision to cancel and started fanning out the phone calls. There's always someone who doesn't get the message though — this time it was Dick Mamini looking up at the sky at Innisfail airport wondering where all the pilots were. Innisfail was off for the rain date as it was being used by Air Cadet flying courses so Black Diamond offered to host it. I hope it went off okay.

- The low that was anchored in northern Alberta for over a week in mid-June ruined the ASC Cross-country clinic at Chipman. Twelve pilots signed up, but only the Monday offered any soaring at all. The last four years haven't been good — perhaps we should try scheduling it off the annual precipitation maximum for Edmonton! On the last Saturday I held an OO seminar in the clubhouse after their barbecue. After seeing new cross-country pilots blow perfectly good badge legs on the BC Soaring Safari because the most obvious procedures hadn't been followed, rule #1 is *be prepared!* (Did you know it's possible for a pilot to fly a 300 km triangle and not earn the Silver distance leg — it happened in Invermere.)

The Viking 104

Kerry Bissell
Edmonton Soaring Club

The Viking project was conceived in the late 1950s by an enthusiastic and dedicated group in the Edmonton Soaring Club. Paul Tingskou spearheaded developing the design concept while Oscar "Pete" Peterson tackled the construction. The structure was not totally of fibreglass reinforced plastic (FRP) since the wing and empennage incorporated wooden spars and ribs. Nevertheless, it was state-of-the-art in its use of FRP for glider construction and the technology as applied to the aircraft industry generally grew around the experience gained in designing gliders built with this material. Efficient use of FRP required that a prototype be constructed in hand-built molds which is a time consuming, costly process. Subsequent production models would then be more economically completed using the molds. The Viking design incorporated a molded fuselage, and all exterior surfaces of the wings and empennage were of molded skins.

The prototype Viking, serial number FLS-1, was registered CF-RCR. The glider was a cantilevered midwing single seat machine with a neatly faired fixed main wheel and nose skid. Scissors-type spoilers provided effective glide path control. Following test flying of this glider a decision was taken to redesign the fuselage in an attempt to reduce the empty weight. The original wings, stabilizer and elevators were fitted to a new fuselage which incorporated a neatly swept-back fin and rudder. The design objectives remained the same — the creation of a glider having docile, stable handling characteristics which would afford an easy transition from the current crop of two-seat trainers (the Edmonton club had a TG-2, a TG-3, a Pratt-Read and a 2-22 in the early 60s). The Viking was to fly as easily as a 1-26 or a 1-23, but have much higher performance.

The second effort produced a very attractive glider — serial number FLS-2 and registered as CF-REF in February 1962. The glider was test flown by John Pomietlarz and Ross Grady in March and April. The test reports indicated a slight reduction in the stall speed — still high at 48 mph and a tendency to roll to the left. John made 20 flights up to the end of 1963. Flight characteristics were still not up to expectations and the project faltered. Paul Tingskou became employed by Bristol Aircraft and moved to Winnipeg. The Viking did not fly in 1964. In late 1964, it was purchased by Kerry Bissell and Walt McKinnon and based at Penhold, Alberta. Kerry flew the Viking regularly and completed 98 flights in the seven year period during which he shared ownership — 1966 to 1973. During this period four flights exceeded 5 hours, one 20,000 feet (one a Diamond height climb to 27,200 ASL in the Cowley wave).

The Viking was sold again in 1973 but it was not registered by its new owner nor was it ever flown again. It was abandoned by the new owner and literally shunted from hangar to barn to field. It was scavenged of its trailer, wheel, instruments and canopy.

In 1990 the Alberta Soaring Council moved to undertake the acquisition and restoration of the Viking and Canada's Aviation Hall of Fame in Edmonton agreed to provide a "home" for it in their museum. Through contact with Air Cadet personnel in Penhold the glider was located in the Olds area. Members of the Edmonton Soaring Club, largely through volunteer effort, brought the glider to Edmonton and restored it for display purposes.

The Viking glider symbolizes the pioneering spirit with which advanced technology was applied to the design and construction of sailplanes in the early 60s — a technology which has been refined and developed to be state-of-the-art in the 90s. ❖

Club news briefs

Cu Nim The airfield and campground at Black Diamond are now surrounded by an electric fence, which is great for keeping the cow flop off the runway, but there's nothing to fill the gopher holes with now. The club is really becoming serious about selecting and buying property for its own with various quarter sections being inspected in the High River area. With the decision to equip club ships with radios, success with their use depended on solving the problem of keeping batteries healthy and charged when everyone always expected someone else to do it — now, pilots flying club equipment buy and look after their own personal battery and install it before flight.

ESC Edmonton has a fine new Super Cub towplane, and a refurbished winch they plan to do conversions with. They are experimenting with an accounting system with direct billing for towing based on release height instead of using tow tickets. There are a few bugs to work out — such as how to handle visiting pilots. Keep us posted.

Cold Lake The weather hasn't been prime for soaring recently, but they are putting in a lot of time on their new club Lark which they bought from Jerry Vesely. Since 31 March, 120 flights for 61 hours have been racked up. In July the members are going to be conducting auto tow trials with a 1/2 ton truck — an 11,000 foot runway really helps! Bingo Larue has been busiest with northern cross-countries.

ANNUAL MAINTENANCE REQUIREMENTS

The sailplane owner's responsibilities

Jerry Vesely, AME
Cu Nim Gliding Club

The following information on maintenance requirements was made available by DoT Western Region, and applies to privately registered, non-pressurized, fixed wing aircraft under 12,566 pounds. All of the applicable Canadian regulations may be briefly summarized as follows:

- 1 The owner will *prepare an itemized checksheet* which will be made available to any AME performing scheduled maintenance on the aircraft. *(The AME is under no obligation to work on your glider, and cannot legally sign off an annual, if you yourself have not listed everything that the AME is to inspect – consider it one of your winter projects.)*
- 2 This checksheet, in its simplest form, will be made up for each aircraft as follows:
 - a A copy of the A/C manufacturer's most current check sheets applicable to this exact make and model of aircraft. Identify by registration on the cover page.
 - b An addendum to this checksheet which includes:
 - i inspection of any items listed in Appendix A of Chapter 571 of the Airworthiness Manual (AWM), but which may not have been included in the manufacturer's checksheet.
 - ii Any items called up in the "airworthiness limitations" section of the manufacturer's instructions.
 - iii Any special Canadian requirements as may be applicable (ie. annual compass swing, 24-month pitot static check, annual ELT check).

- iv Inspection of special equipment or modifications as may be installed on this particular aircraft.
 - v Replacement schedule for life-limited parts if they are specified in the aircraft TA or TC.
 - vi All repetitive, applicable Airworthiness Directives.
 - vii A listing of all applicable documents (ie. C of A, Annual Aircraft Inspection report (MIR), C of R, weight and balance, etc.)
 - viii Several blank lines for remarks and parts list, etc.
 - ix The following, or similarly-worded statement: "A 100 hour annual inspection has been completed in accordance with the AWM Chapter 571 for aircraft registration C- . The maintenance described above has been performed in accordance with the applicable standards of airworthiness, subject to a satisfactory test flight."
 - x A signature block for the AME's name, licence number, and date.
- 3 The above meets the minimum requirements of Chapter 571 of the AWM for keeping a C of A in force on privately registered aircraft in this category. These requirements became optional on January 01, 1989, and will be mandatory as of January 01, 1990.
 - 4 It is the responsibility of each owner to familiarize himself fully with Chapter 571 of the Airworthiness Manual which covers the above in detail. ❖

Coming events

INTERNATIONAL EVENTS

<i>World Soaring Contest</i> – Uvalde, TX	19 Jul - 11 Aug
<i>Montana Soaring Safari</i> – Thomson Falls	3 - 10 Aug
by Seattle Glider Council, call 206-242-7686	

NATIONAL EVENTS

<i>SAC Western Instructor course</i> – Starbuck, MB	18-24 Aug
<i>SAC Board of Directors meeting</i> – Calgary	19 -20 Oct

PROVINCIAL EVENTS

<i>Cowley Summer Camp</i> – Cowley airfield	27 Jul - 5 Aug
<i>Cowley Fall Camp</i> – Cowley airfield	12-19 Oct
<i>Winch Launch training</i> – Chipman	on request

<i>Power Pilot Glider Conversion</i> – Chipman	5-9 Aug
<i>1992 first Planning Meeting</i> – Edmonton	24 Nov

CLUB EVENTS

Cold Lake	
<i>Air Cadet Fam Flying</i>	March-Oct
<i>Medley Days Display</i>	September
ESC	
<i>Edmonton area Fly-in breakfasts</i> – Stettler, etc.	summer
<i>ESC Xtravaganza Weekend</i> – Chipman	31 Aug- 1 Sept
Breakfast & BBQ	
<i>ESC Awards Dinner</i> Edmonton	23 Nov
Cu Nim	
<i>Cu Nim 40th Anniversary Banquet</i> – Calgary	

Return address
Box 1916, Claresholm, AB T0L 0T0



- Who is planning to go to the SAC instructor school in Winnipeg?
- Is your club doing something other Alberta pilots could participate in?

Please contact Tony Burton soon. Thanks.

ASC tickets are necessary at all official ASC events and are available at registration. A camp fee of \$5 per pilot will be levied beginning this year.