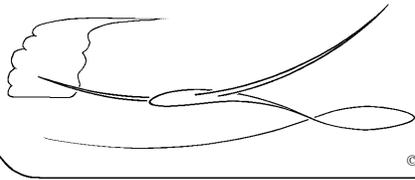


AScent

Journal of the Alberta Soaring Council

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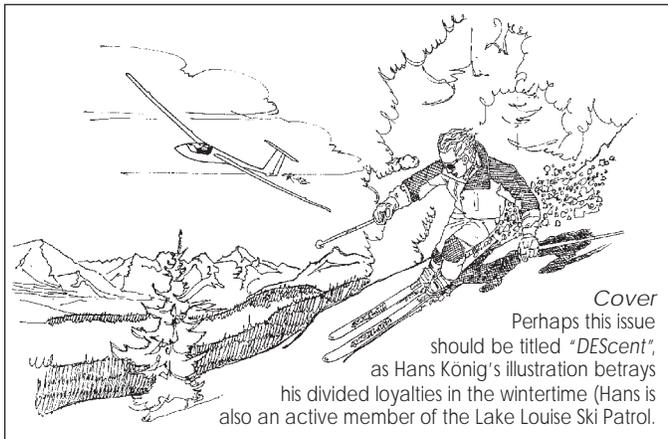
Fall/Winter 1992



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Cover
Perhaps this issue
should be titled "DESCent",
as Hans König's illustration betrays
his divided loyalties in the wintertime (Hans is
also an active member of the Lake Louise Ski Patrol.

Editor's notes

Now the last issue of the year is out of my hair, let me take this space to wish you all the best of the holiday season, and express the hope that next summer will see you often airborne and working on your personal soaring goals. It really doesn't matter whether they are grand or prosaic, as long as you're getting better at the sport and enjoying it.

Be ready — gather all your forms, make a list of flight courses, and give something a try when the big day arrives. You can't be madly thrashing around smoking the barograph at 11 o'clock when you should be sixty kilometres downwind already!

I hope the weather allows some decent soaring, the long range forecast is for a couple more years of cool summers as a result of volcanic ash in the air.

I have a small story here written by a student at Cu Nim, Mike Morgan. It's rare to get the early pilots putting down their impressions of the sport. After a few years, us old timers forget most of what we found tough sledding or just completely mysterious at the time. So don't look through the students on the field, and be ready to pass your know-how and enthusiasm on to the new faces you see before you launch.

Jay Poscente has also written a fine cautionary tale of what can happen to anyone if they stop paying attention to the task at hand. "How-I-screwed up but-survived-anyway" stories are also hard to get because self-esteem generally gets in the way, but they are absorbing reading because they remind every pilot that they can learn from an experience they would rather not have themselves.



. . . from our president

WE DIDN'T KEEP A RECORD of ASC trophy winners until 1989. The book is still not complete, but after a few years of collecting flight data and other honourable mentions for pilots, we have a lot more historical information. We call now update the winners plates on the trophies that have been around for a long time but which had no engraving on them from 1973 to 1981 — why is still a mystery.

The Bruce trophy (winner of the May Meet) will be completed and presented to the winners of those missing years at this year's annual general meeting in Nisku Inn.

With more data on hand, we will be able to complete two more trophies, and give the pilots all the credit they deserve — even at this late date! But the last call goes out to you. Please check your logbooks, and your memory and notify Ursula immediately at 625-4563, followed up by flight data if you think you received one of these two ASC trophies in the years now blank (the equivalent SAC trophy recipient is mentioned, but ASC and SAC winners are not necessarily the same pilot in any year)!

Best flight of the year

Best five flights of the year

<i>Carling (ASC)</i>	<i>BAIC (SAC)</i>	<i>McLaughlin (ASC)</i>	<i>Canadair (SAC)</i>
1972 Bruce Hea	Bruce Hea	1972 Bruce Hea	Bruce Hea
1973	Dick Mamini & Dave Marsden		Dick Mamini
1974	Steven Simon	1974	John Firth
1975	Klaus Stachow	1975	M. Gordon Smith
1976	John Firth	1976	Dave Tustin
1977	John Firth	1977	John Firth
1978	Dick Mamini	1978	Dick Mamini
1979	G. Geyer-Doersch	1979	G. Geyer-Doersch
1980	Jim Oke	1980 Mike Apps	Jim Oke
1981	Dave Hennigar	1981 Tony Burton	Tony Burton
1982 Hal Werneburg	Hal Werneburg	1982 Kevin Bennett	Kevin Bennett

I hope that as you look back on your season, you do so with the satisfaction of knowing some of your goals were accomplished. It's also a good time to think about next year. Are there parts of your flying you really feel good about? Are there some areas you should work on? Are you ready to start stretching your capabilities — perhaps become an instructor, start cross-country or contest flying, complete those badge legs, move up to a higher performance ship, or become involved with some aspect of your club's executive, etc. (you had to know I would sneak that last one in!).

Take time to think what you would like to accomplish next year — you will be better for it.



MY FIRST SEASON OF GLIDING

Michael Morgan
Cu Nim Gliding Club

AS A YOUNG and inexperienced pilot, almost every day at the flying field offers new opportunities and challenges.

My introduction to flying started a while ago. My father is an avid glider pilot and it was his interest in the sport that brought me to the flying field. Eventually I started to wonder why in the world anyone would want to spend most of their free time in a piece of metal that didn't really do anything but takeoff and land.

I decided to take an intro flight with Ursula Wiese. That flight turned out to be the first hour flight of the day. We flew in a Blanik, with Ursula in the front and myself in the back. For those of you who haven't flown in the back seat of a Blanik, the view is not terrific. However, it was the first time in my life that I flew in an airplane that was missing engines.

From the takeoff onwards, everything that happened was new to me. For one, I learned lots of new glider expletives like "We're scratching", and "This thermal's dead", and "Look, that hawk flew away!" The flight took us back and forth over the club field as we desperately tried to maintain altitude. I remember that the landing circuit was actually a circuit. You could see the runway on the turn to final instead of, as in a jet, finding that you are final for the last fifteen minutes. Shortly after we landed most everyone was lining up in the hopes of getting a good flight but none did. As it turned out, I think my intro flight was the longest of the day.

There were many a Saturday or Sunday that I was dragged out of a nice warm bed (far too early in the morning) to go to the flying field in the middle of nowhere. After a second intro flight I decided that I wanted to start flying and was promptly put into ground school by my father. In hindsight it was the best route.

I was very relieved when I found out that the instructor was someone I knew. I still knew very few of the people at our flying club and knowing anyone was very comforting. I had to miss the first class as I had a conflict with a band concert. However, when I did show up for the second class I was showered with information. This information package was extremely useful: not only did it teach the fundamentals of flying (at least in theory) but it provided information on hypoxia, hypothermia, navigation, and meteorology. For a student who didn't know the difference between a C pin and a Diamond badge this information was, and still is, invaluable. (For the longest time I thought that the flying community had run out of expensive minerals for badges, so adopted letter pins for greater and greater achievements!)

As I spent more weekends at the field, I very quickly learned that most people flying were older than me. They were much older than me. In fact, they were as ancient as my dad. Any parent knows that it is next to impossible to understand their child's friends, and the same is true in reverse. It was extremely unnerving to be surrounded by people my dad's age who would greet me with a cheery hello. Over time, though, I developed friendships with many of the club members. Since then, the pilots seemed to get younger and younger as I began to feel more comfortable. (Note this: the elixir of youth is flying!) And at the same time, things started to make sense to me: a chinook became a wind over the Rockies not a shopping mall in Calgary; Cowley was no longer a village but a Diamond badge mine; dynamic stability is no longer a test for stereo quality, and a static source no longer puts snow on a TV. There is still a large age gap at the flying field, but it doesn't worry me any more.

Despite my low experience, I have had several memorable flights. One of the best occurred at the annual Cowley summer camp. Normally, continued on page 10



COWLEY WAVE CAMP

Tony Burton
Cu Nim Gliding Club

AS I WRITE this report (which is an expanded version of what appeared in the last *free flight* issue), it is grey, dull, and cold, and has been that way for a few days — thank God we moved the event ahead a week this year!

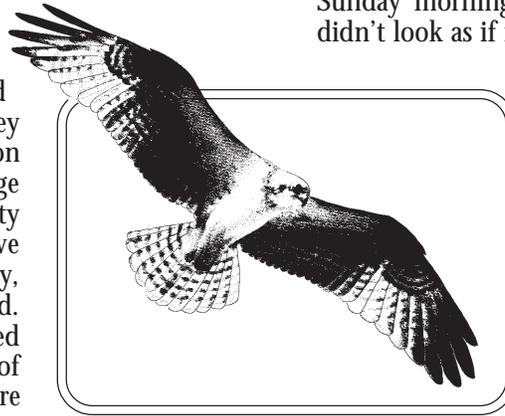
It was a successful camp with forty-eight registering, and there was a strong turnout from Cold Lake regulars (Grant Humphrey kept most of the towing operation going mid-week, and George Szukala acted as the camp safety officer). Many pilots got wave climbs on the Thursday, Friday, and Saturday end of the period. That was a relief because it started out looking like another one of those, “You should have been here last week” soaring event scenarios. Then it was finally Indian Summer in southern Alberta with some gorgeous lennies over head and one day provided a classic Chinook Arch.

The high moved out on Friday, the 2nd of October when I moved onto the field with the equipment. Not a soul showed up after work as I had expected, so I went to bed feeling like the Maytag repair man until Darwin appeared after dark with the Grob trailer. He was hoping to get a ride back with his son who had never been to Cowley, but he never arrived. However, I had seen a car driving along the road to the west just before dark which came to a halt for a while with a flashlight sweeping around, then it carried on. Indeed, that had been him. Cowley can't be found in the dark by strangers, folks.

Saturday morning the Grob 103 and a Blanik arrived from Cu Nim behind NJK and PCK. A bunch of the boys from Cold Lake had been around for days taking their leisure at the Beaver Mines bed and breakfast. The morning was dedicated to getting organizational details out of the way, setting up the fuel, and repairing some badger holes on 21. The afternoon saw a few flights done and there was a little wave. Bob Mercer, a 747 driver and RS-15 pilot from Hudson, Quebec was on hand, our

most distant camper. The RS-15 will be staying in Cold Lake with his son Dave. Bob plans to commute to Alberta irregularly to fly the -15 at ESC and elsewhere.

Sunday morning was pretty much clagged over and didn't look as if it had any promise whatever so I went home for the day. There were some training flights in AUK however, and there was enough lift by mid-afternoon for Mike Glatiotis to eke out a 1:17 hour flight in “Fruit Juice”, the Cu Nim Jantar.



Monday was the same only worse and there were a half dozen flights made just for something to do. The morning pilot meeting in the cook shack was habitable with the stove full of burning wood. Bingo managed to waft around in some zero sink grey puffs under the 7000 foot overcast to extend his glide to 25 minutes.

Chris Herten flew over from Golden in a 182 in the morning with his girlfriend, and for a while it looked questionable whether he would be able to fly back through the pass which was almost socked in.

Tuesday morning was cold and it had snowed everywhere but on the field overnight (the snowline on the hills had come down to about eye level). Tenters had stayed comfortable by taking only their shoes off before crawling into the sack. Karin Michel stayed toasty in the back of her car inside two sleeping bags.

The day had only 2500 foot bases but it was unstable enough to provide small cu with tiny thermals enticing enough to sucker everyone aloft but not good enough to sustain one for long. (At least you could see the tops of the Livingstones.) Most pilots managed to hang in for 25-30 minutes, and Bob Mercer was the day's scratchmaster with a 75 minute flight. Most of the entertainment that afternoon was watching the mighty George Szukala try to shoehorn himself into Fruit Juice. He just managed with no seat, no chute, and just enough foam to keep the O2 regulator from excavating his right shoulder blade.

I thought he would have done a little better if he had taken off his army boots, though.

Wednesday. A high had built in but the upper winds were a fairly light 40 knots out of 320-340°. The morning pilot meeting ended with Mike Glatiotis videoing every one seated along benches in front of the cook shack doing the “Cowley wave”. Flights got going after lunch when a stiff wind right out of the west allowed some careful but consistent ridge soaring to 2000 agl back on the Porkies. Bingo was so far back for a while he was disappearing behind the bumps, and we radioed up what kind of pizza we expected when we had to retrieve him. He got back though, after a flight of almost two hours.

Thursday. A Pacific cold front had gone through and the forecast was decidedly better — the winds were 270° all the way up although below 40 knots. The high for the day was even going to allow us to peel off a layer of clothes. The major admonition at the meeting was, DO NOT outland the Blanik because we have no trailer (readers are invited to read up on the story of the two day retrieve of the ESC Blanik last year after Deirdre Duffy and Hugh McColeman landed out on the south end of the Porkies)...

The Blanik landed out a few miles west of the airfield. Deirdre and Elaine Friesen took the honours — their barograph trace looked something like a pyramid, a 5000 foot tow followed by a dive to the ground after missing the wave and getting back into the rotor. This time the ship was aerotowed off into a stiff west wind blowing straight down the field.

We got some decent wave flights finally, with Bingo getting to 25,000 feet in the Dart, Marek to 28,000 in Fruit Juice, I made 30,300 in EE, and Don Matheson finally got his Diamond climb to 25,400. His barograph failed last year, robbing him of that badge leg. Climbs were slow past about 27,000 through a hazy layer of thin cirrus which topped near 31,000 feet.

Dave Mercer tried a cross-country using the wave but found it a bit thin south of the pass, and he also landed out in the RS-15 just east of the Waterton reservoir. We finally found that out after flying shut down around five and we went to sit by the phone for our missing pilot. He eventually got retrieved by the light of car headlamps. Fifteen pilots ate at the Swiss Alpine in Pincher Creek that evening, many meals subsidized by the outlandings.

photo no longer
available

The midweek wave crew. Top row left to right: Mike Glatiotis, Karin Michel, Elaine Friesen, Tony Burton, George Szukala, Jan Bialik, and Don Matheson. Front row: Deirdre Duffy, Bingo Larue, Grant Humphrey, Edmond Duggan, Dave Mercer. Sitting on ground: Marek Wakulczyk.

Another visitor from far away appeared on the field in the morning, Eric Durance from the Windsor club. He was in Calgary on business and was able to scrounge a day off to experience Cowley. George gave him a great two hour ride in the Grob around the valley and into the bottom of the wave.

On Friday the upper winds were not that favourable for wave, being out of the northwest, but they were *howling*— 56 knots at 18,000, 82 knots at 24,000, and 109 knots at 30,000! At the meeting the pilots were warned of possible high winds coming down to the surface, and DO NOT land the Blanik out.

The Blanik landed out — having no trailer seems to be the kiss of death on hopes for contacting the wave. This time it was Marek Wakulczyk and Peter Clare. As you might expect, the rotor gave a wild ride today, and Marek said a moment of inattention got such a large loop in the tow rope a release was mandatory, and down they went into a field northwest of Cowley. Don Matheson also got shot down landing his RHJ-8 in the same field the Blanik did yesterday.

There were lots of wave climbs with Mike Glatiotis (Fruit Juice) and Dave Morgan (HP-11) getting Gold climbs. The wave was 10 knots up low down but petered out in the mid-20s. Deirdre got to 22,500 in the ESC 1-23, I got to 23,500, Mike - 23,300, Bingo - 27,500, Chester Zwarych - 23,800, Karin Michel and Marek - 17,000 in the Blanik (after it got aerotowed once again), Dave Morgan made 20,000, and Dave Mercer reported 27,200. It was a happy day, and campers crawled into bed under pearl-edged moonlit lennies.

On Saturday morning a few of the Calgary pilots returned to a fine sky with a vague Arch and surface winds gusting over 35 knots which shut the operation down for a while. The upper winds had moved a bit more westerly and eased off considerably (62 knots at 30,000 feet). The wave length was unusual with only two waves in the valley rather than the normal three and quite rough rotor, and the Arch high above slowly drifted eastwards until it was 40 km downwind by 6 o'clock. Uwe Kleinhempel arrived from Golden with a group of his students and their Blanik (finally, a trailer).

Bingo was first off at 1130 and worked himself up to 30,200 (the first of several to exceed 30,000 this day). The wave was 10+ up at the bottom, and on my flight with Uwe in the Grob to give him his wave and site check, we had to fly at over 100 knots to keep down to a reasonable no-oxygen altitude. Mike Glatiotis and Dave Morgan resmoked their barographs and improved their Gold climbs of yesterday to Diamond with flights to 28,000 each, Edmond Duggan from Cold Lake got a Gold climb to 23,000 in the 1-23, and Deirdre

Duffy improved on her feminine altitude record of last year by climbing to 30,900 feet in the 1-23.

Unfortunately, Deirdre can't claim the record because the Sporting Code rule requiring an FAI sporting licence to be held by the claiming pilot is being enforced this year by the Aero Club of Canada.

I shouldn't have mentioned to Jay Poscente that the current *height-du-jour* was my 30,300 feet — that gave him the incentive to scramble up to 31,300 to take away this year's SAC wave trophy in all likelihood. Dave Mercer reported getting a bit higher than that but he can't prove it. Chester Zwarych contacted the Arch when it was behind the Porcupines, the only one to do so. The front face of the Arch is not usually visible from the ground as it normally sits further west giving one only the lower leading edge to see. Now, layers upon layers of solid stacked cloud laminations could be seen — a remarkable sight from the ground and probably even more remarkable from a Chester-eye view.

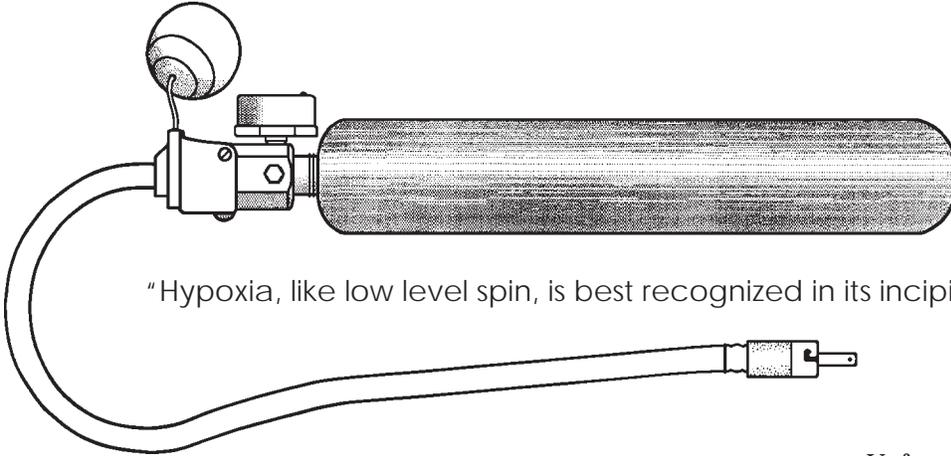
Someone thought that the total altitude achieved today by the fifteen wave flights would add up to a BIG number — yes — well over 300,000 feet, counting the tows.

Sunday morning started clear even though it looked sort of clagged in to the north — Calgary was reporting rain. The upper winds were favourable and the bad weather wasn't supposed to arrive until late afternoon, but during the morning meeting a solid cloud deck condensed out of midair and the Livingstone peaks disappeared. As it seemed permanent, decisions were made to derig and the camp began to dismantle early. Mike drove his camper down to the flightline and boiled up much appreciated hot chocolate on demand. By early afternoon, only a half dozen souls remained to visit the Castle Haus Inn B&B in Beaver Mines for a Thanksgiving dinner which was worth the wait.

On Monday Ursula and I drove back to Cowley to do an inventory of the shack and to bring the Grob back to Claresholm (we weren't sure if Kerry Stevenson had got the message that he didn't have to take it back to Black Diamond). It turned out that he did drive down, and he decided to take the back road to Head-Smashed-In Buffalo Jump because he had never gone that way before and wanted to see the scenery. As we were driving south towards Fort Macleod we decided to drive westbound on the buffalo jump road because we hadn't been on it in that direction before and wanted to see the scenery, and we met Kerry half way along.

The back roads through the south end of the Porkies were pure rustic wild west, and the weather was gorgeous and warm of course, with the valley full of cu with waves on top. See you up there next year. ❖

BAILED OUT BY THE BAILOUT BOTTLE



"Hypoxia, like low level spin, is best recognized in its incipient stages."

Jay Poscente

Cu Nim Gliding Club

THE FAMOUS COWLEY WAVE was not particularly strong this day, nor was it marked by the beautiful lenticular clouds that often help form a visual picture of the smooth bands of lift. High altitude winds were forecast at over 100 mph and a 40 to 50 degree wind shift at 20,000 feet further complicated the climb. The challenging but erratic two hour ascent in rotor and broken wave generated a barogram that looked more like a thermal flight than that of a wave climb.

The lift topped out at about 25,000 feet ruling out any record attempts, so I decided a bit of wave cross-country might be fun. I had neglected monitoring my oxygen pressure during the difficult last half of the climb as my gauge is mounted inconveniently on the regulator behind my head. I looked back to check the pressure and my heart stopped. "ZERO! ... DOES THAT GAUGE SAY ZERO?!" Three panicky breaths later, the bottle was completely empty, the blinker stopped blinking, and my mask was suffocating me. Anxious to breathe, I pulled the mask from my face. The next nine minutes seemed more like an hour.

In a hurry to descend, I initiated a quick 180 degree turn towards the sinking side of the wave but found the controls frozen nearly solid by the -35C temperature. The resulting high speed uncoordinated turn was quite unnerving. "Don't panic. Breathe deeply and slowly," I told myself. "Dive in the lee of the wave, get the oxygen mask back on your face, then activate your bailout bottle." (a tiny emergency oxygen bottle designed for military pilots so they can bailout at high altitudes).

Unfortunately, maneuvering into the descending side of an invisible wave with stiff controls while trying to maintain constant speed in the steepest dive I had ever experienced proved challenging. Add the complication of trying to free and lower a frozen landing gear (to increase drag) while holding open powerful dive brakes that want to close at high speed, and I found myself postponing the task of replacing my oxygen mask. I was already down to 22,000 feet and thought, "perhaps diving at this rate I will have enough time to make it down without emergency oxygen." Then, hypoxia set in.

It did not creep up on me with the "subtle feeling of wellbeing" I had read about. It hit me like a bag of hammers and it was frightening. Heart pounding, ears ringing, tunnel vision, head spinning and tingling all hit at once and hit hard. I was flying at the edge of my frozen bird's performance envelope and felt I could pass out at any moment.

I fumbled with my oxygen mask and banged my knuckles as I reached to activate the bailout bottle strapped to my thigh. "Wonderful," I thought. "There go my motor skills!" Craving a rush of oxygen to clear my head, I yanked repeatedly on the little bottle's activation cable, but nothing happened. My mask was suffocating me again. It was like trying to draw a breath from an empty pop bottle. I moved my mask off to the side of my face and gasped at the rarefied air. A sickening feeling of helplessness welled over me. I was losing consciousness and there were no more options. All I could do was dive at the Livingstone Range and wait. Time stood still.

I vaguely remember noticing the airspeed approach 100 knots (somewhere near red line for this altitude) and thought, "Slow it down or you'll break the glider." I must have flown

through a band of moist air because a layer of frost formed on the canopy and wings. I remember peering through the ice-streaked canopy to see how close to the ground I was getting. I also remember the deep feeling of disappointment at seeing the mountain peaks still two miles below.

Now resigned to my predicament, a sense of calm settled in. I felt numb, like I was dreaming, and watched curiously as the tunnel vision tightened and as colours faded to greys. For lack of any other options, I gave the bailout bottle another try. Expecting my oxygen mask to suffocate me again, I took a deep breath and held it before fumbling with my mask and bailout bottle. As I was holding my breath, mask in place, I noticed pressure building in the mask. Fear turned to elation!

I tried desperately to get a deep breath, but it was like trying to breathe through a tiny straw. Again, I yanked at the activation cable thinking it was only partially open, but there was still no rush of oxygen, just enough to get a mouthful every few seconds. Enough, I suppose, to stay conscious for the seven to ten minutes that these 22 cubic inch bottles are designed to deliver.

With my heart pounding, trying to match my breathing to the torturously slow rate of oxygen flow was nearly impossible. But the pure oxygen quickly cleared the harshest symptoms of the hypoxia. Thoughts began racing through my mind. I remember suddenly realizing just how very dizzy and cold I was. I got angry with myself for having neglected my oxygen pressure gauge on the way up, but was relieved to realize that at this point, I was probably going to make it back down, in one piece.

Again, I caught the airspeed approaching red line, only this time I was approaching a nasty looking rotor cloud! Sobered by images of my frozen fibreglass sailplane breaking to pieces in violent rotor at 100+ knots, I pulled out of the dive as gently as I could. "I've made it," I thought! "I can wait at this altitude for my ship and brains to thaw out."

It took me a couple of minutes to realize, however, that I was still at thirteen thousand feet, bailout bottle now empty, and still starving for oxygen. It was a quick dive to ten thousand feet. Mercifully, I was spared any dealings with rotor and was able to establish a holding pattern in light wave lift for about twenty minutes while my glider and I thawed slowly at +2°C. The phrase, "You can breathe easier now", took on a whole new meaning!

Everything seemed to be going fine until I found myself snapping out of a daydream in strong sink. I wasn't sure if I had recuperated enough to attempt a high wind landing yet but I was sure that I was in heavy sink and would definitely be on the ground somewhere soon, ready or not.

I headed for the Cowley airstrip, reviewing my circuit procedures and landing checks over and over, concentrating heavily all the way in. Despite the high winds, it may have been one of my best circuits ever and I was so happy to touch down safely that I forgot who was driving and promptly botched the roll out! I sat motionless in the glider for awhile savouring the profound feeling of relief and contemplating how fortunate I was to be there with no damage to plane or pilot.

I am not proud of this avoidable adventure. It was the result of my neglecting an instrument important to the safety of the flight. However, research and the luxury of hindsight have allowed me to make a few safety related observations that should be shared with other high fliers.

Observations:

- Scuba training taught me that the deeper you go underwater (increasing pressure), the more air you use with each breath. I had assumed that the higher you fly (decreasing pressure), the less bottled oxygen you would use with each breath. Wrong! In fact, the higher you fly with a diluter demand regulator, the more oxygen you draw from your tank with each breath. Breathing through an oxygen mask at 10,000 feet, your regulator mixes mostly outside air with a small amount of bottled oxygen. By 32,000 feet, most regulators are automatically supplying 100% bottled oxygen to your mask.

I had been monitoring the oxygen pressure during the early stages of this climb and based on the slow rate of oxygen depletion at moderate altitudes, I had assumed there was at least an hour more capacity than turned out to be the case at higher altitudes.

- There are those who would say I was not extremely high at 25,000 feet. The chart says you should have up to five minutes of "Time of Useful Consciousness" (TUC) without supplemental oxygen at this altitude. But what if you don't realize that your oxygen supply has been deteriorating for awhile? I believe this is what happened on my flight. I had less than one minute from the time I discovered the trouble until I developed substantial physiological difficulties.

"Blinkers" (oxygen flow indicators) blink shut while oxygen is flowing through the regulator. My blinker was trying to tell me that something was wrong for about 15 minutes before I ran completely out of oxygen. When the pressure got low, my blinker only closed briefly at the beginning of each breath rather than its usual practise of staying closed throughout each inhalation. I probably was not getting enough oxygen this whole time and was becoming increasingly hypoxic without realizing it.

I failed to notice three signs of deteriorating judgement during the last 15 minutes of my oxygen supply. I saw the

blinker's subtle change in behaviour but for some reason I shrugged it off without further investigation. Then, I decided to fly cross-country despite ridiculously high winds, no flight plan and no retrieve crew. Finally, I have no idea why I took off my mask when my oxygen ran out. It would have made more sense to immediately activate the bailout bottle. These events all occurred prior to my having noticed any sign of hypoxia.

- Descending is a rather poor emergency procedure for high altitude oxygen system failures. During an emergency descent, you are not recovering during the dive, your condition continues to deteriorate, albeit at a decreasing rate until you are below 10,000 feet. Above 20,000 the problem compounds rapidly. The higher you are when the problem occurs, the less time of useful consciousness you have and the farther you have to dive, your hypoxic condition worsening the whole time you are above 10,000 feet.

Furthermore, your rate of descent is a big unknown. Will you be able to locate and stay in the lee of an invisible wave once hypoxic and diving? You could be diving in lift. I was flying a Mini-Nimbus which has extremely effective dive brakes. My barograph recorded this very steep descent at a fairly steady 2000 feet per minute. I thought I was in the lee of the wave but will never know. The 50 degree windshear somewhere around 20,000 feet confused the shape of the wave and the vario is useless diving at high rates.

After I discovered the problem and after the dive was established, it took an additional six minutes to descend to 13,000 feet. What if I did not have a bailout bottle? What if I had been at 28,000 feet where a healthy military pilot has about 90 seconds before passing out without supplemental oxygen? A lot of pilots at this year's wave camp achieved 28,000 feet and higher.

MY FIRST SEASON OF GLIDING

from page 4

instructional flights are either early in the morning or in the afternoon. At the summer camp, though, there are flights at all times of the day. I was able to round up an instructor around two o'clock on Wednesday, and was hoping to catch some thermals and fly for a full hour (always wishful thinking).

After a bumpy tow (partly the thermals, mostly me) we released and proceeded to find a weak thermal. After centering in it and making a few turns, other pilots started noticing that we had found the only thermal in the area. Before long, I was in a thermal with four other airplanes. By no means was this a crowded thermal, but for a student who had virtually no experience flying with other airplanes, it was an eye opener.

How fast can your glider descend? What is its red line at various high altitudes with dive brakes fully open? From what maximum altitude can you survive an emergency descent without oxygen assuming what vertical speed? At what altitude will one bailout bottle not have enough capacity for you to survive the descent? At what altitude should you abandon ship and free fall to a safe altitude and will your face and eyes be protected against terminal velocity at -40C?

- Prior to this episode, I had encountered a rather widespread cavalier attitude towards bailout bottles. The day after my misadventure, I was happy to see considerably more attention being given to these convenient little life savers on the Cowley flightline. I hope this article will inspire a few more pilots to carry bailout bottles on all wave flights and to thoroughly understand how they work.

- When you use an instrument only a few flights a year, as is often the case with oxygen instruments, you have to make a conscious effort to alter your normal instrument scanning habits.

- There is no rush of oxygen when a bailout bottle is activated. About a 20 pound tug on the green ball activates a low volume free flow of oxygen that decreases in both volume and pressure over the seven to ten minutes it takes to deplete the bottle. Try breathing through a one-eighth inch drinking straw or one of those coffee stir sticks that look like a squished straw for a few minutes to get the idea.

- My experience with hypoxia was not what I expected. Since everyone reacts differently, anyone intending to fly wave should seriously consider taking an altitude chamber ride. Your local department of aviation medicine can steer you in the right direction. Hypoxia, like a low level spin, is best recognized in its incipient stages. ❖

Lookout now became a serious business. I saw parts of airplanes I had never seen before and was closer than half a mile to another object in the sky. Every minute or so, as a 1-26 would slip by silently above us, I remember asking the instructor sitting in the back if I was flying too close to the other airplane. I'm sure the instructor thought I was paranoid, but all I could think of was how all of these gliders got here. My nerves were soon settled as I looked down and saw my dad (in his HP-11) below me. At this point I realized I must have been doing something right as I was outclimbing my father. From then on I enjoyed the flight, but my dad was rather sullen that evening!

The year has been a lot of fun even though I've spent a number of Sundays at the field waiting for a flight. Next year should just be a blast! ❖

official notice to all ASC members

Awards Luncheon & Annual General Meeting

6 February 1993

at the



(east off Edmonton Intern'l airport exit)

*Everyone welcome – come and spend
the day with friends from other clubs*

Accommodation

room rate (double or single) \$55.00
phone 1-800-661-6966
fax (403) 955-7743

please make your own reservations

ASC is offering

- financial travel assistance for drivers carrying a carload of ASC members to the meetings
- a small subsidy on the luncheon cost

Agenda

Planning meeting 1000
tying up the loose ends for '93 activities

Awards luncheon 1200
Luncheon ticket \$10
salad • ginger beef stir fry • fresh fruit cup

Presentation of provincial honours

Special Meeting 1330
• ratification of bylaws (see motions)
[copy of the bylaws is available on request,
but call at least three days prior to the AGM]

Annual
General Meeting 1400

- approval of Minutes of '92 AGM (printed in the '92 ASCent spring issue)
- '92 executive & committee reports
- '92 financial report
- '93 budget presentation
- old & new business
- election of officers

The two-year terms for President and Secretary, and the one-year term for Treasurer will expire. Nominations prior to the AGM and from the floor are invited.

- Nominees to date •

President Marty Slater
Treasurer Denis Bergeron & Julie Lauzier
Secretary Ursula Wiese

Call Ursula at 625-4563 for questions, info, etc.

CLUB NEWS & GOSSIP

Cu Nim Gliding Club

The final pieces of Cu Nim's land purchase have fallen into place. Money from the sale of the L-19 Birddog is finally in the bank, and the membership has approved a financial plan to retire the bank debt by January 1993.

Although the Cu Nim had been pursuing a sale of the L-19 to the Montreal Air Cadets since early summer, it was finally sold to Ray Bowerman, an enthusiastic gentleman from Port Alberni. Enthusiastic hardly describes Ray. He spent a small fortune in long distance phone calls tracking down the airplane. When he was told that a deal was pending with the Montreal Air Cadets, but that their cheque was perpetually "in the mail", he asked if we would sell it to him if he was the first to actually deliver a cheque. He then agreed to pay us a better price than was offered by the Cadets. He immediately jumped into his car and drove 14 hours through the Rockies in a snow storm to deliver a \$5000 certified cheque. That done, he turned around and drove back to refinance his house so he could pay the balance within two weeks! Now THAT is a war-bird enthusiast!

The proceeds from the sale of the L-19 have reduced the bank loan on this summer's airfield purchase to a comfortable level. In fact, our current debt servicing is now about equal to the payments we were going to be making this year had we continued leasing the airfield.

We have enjoyed being our own landlord so much that we have decided to become our own banker too; "Cu Nim Capital Bonds" are being floated to our club members this month. The proceeds will be used to retire our bank loan by January 1993. This financing will be good for both the club and the member/investor. The club will be paying less interest than it would have at the bank, and the member/investor will be receiving a higher return than is offered by Canada Savings Bonds. The bonds are being allocated in such a way as to allow, and encourage, everyone in the club to participate. Early indications are that the issue will be over-subscribed.

Jay Poscente

Central Alberta Gliding Club

This past fall we made about 100 training flights and six of our members soloed. We also made our first attempts at autotow launches and managed to attain a 250 feet on one launch. Modifications to the launch trailer are currently underway in preparation for the spring gliding season.

We held an organizational and planning meeting on 14 November in Red Deer to discuss changes to the club and its membership. With 15 active members we have decided that it is time to introduce new members to the club. Anyone interested in joining should have a private pilot licence or glider pilot licence as a minimum, since the club's primary objective is still conversion training of our members.

One long term goal set during the meeting was that the club investigate the purchase of an additional glider in the next five years. A popular option is a 1-26 to allow licensed pilots to begin flying a higher performance ship.

I hope this information will let the rest of the province know what we are doing in Innisfail.

John Mulder

Cold Lake Soaring Club

This coming year will have a lot of activities. We will hopefully complete the development of two new means of launching. We will rebuild a winch and also try to implement a car-towing system. After all, Cold Lake has one of the longest runways in the country (12,000 feet) so we should make good use of it. Also the executive is working hard on plans to build a new hangar. Presently, the club does not have a permanent shelter.

On the flying side, we want to improve our cross-country skills by holding lectures on the subject with the most experienced pilots. In the spring, we will set up mini cross-countries to Bonnyville as a first step to increase confidence. Of course, we will have ground school for the new members and our annual landing competition in August. It promises to be a challenging year for our members. We welcome any other club member to come soar with us in Cold Lake at any time.

Marc Brassard

Edmonton Soaring Club

The club had a good year with the largest membership, 85, in recent recorded history.

Our student training week was an outstanding success, handled by Garnet Thomas with seven students doing very well. A number of new members were air cadets and it was wonderful to see young people out at the field.

No major flights were made from the field this year but rather a large number of flights were made per day.

With a number of our members retired or independently unemployed there was never a shortage of flying.

The big event of the year was the arrival of the Puchacz from Poland. It was very well received and is an absolute joy to fly. Comfortable and well coordinated with huge dive brakes make it in demand at all times. With a number of our members having their aerobatic endorsement, it has seen a few unusual attitudes. If any member of other clubs are interested in aerobatics we may be able to provide training in the future if there is enough interest.

The new executive is almost the old executive. Dave Puckrin and Andrew Jackson switched positions and Dave is president again. Monika Setter and Jack Despres split the treasurer's position, Harold Porter is field manager, and Al Sunley looks after equipment. The CFI is Bruno Schrein, special events coordinator is Elaine Friesen, and Rick Dawe is the training coordinator.

We will have all our 1993 club events ready for the next *ASCent* magazine, and remember, any member of the gliding fraternity is invited to join us.

This year we should have the runway extension finished and the winch should be up and running.

Anyone in Edmonton on New Year's day is invited to come out to the field to fly, eat, and We always start the year off this way and have had rides for the last three years — last year was a sleigh ride. We're looking forward to an active winter (we do fly all year) and a great soaring season in 1993.

Dave Puckrin

1993 EVENT CALENDAR

The dates of the major ASC events and camps for the next year and significant external events are listed below. Some changes may still occur or additions made as they arise from the final planning meeting on 6 February.

ASC final planning meeting	Nisku	6 Feb
Awards luncheon & AGM	Nisku	6 Feb
SAC AGM	London	5-7 Mar
Provincial Soaring Contest	Innisfail	22-24 May
ASC Cross-country clinic	Chipman	tba
ASC Cross-country clinic	Cu Nim	tba
Mountain soaring camp	Invermere	tba
National Soaring Contest	Swift Current	6-15 Jul
US Region 8 contest	Bozeman, MT	tba
Cowley Summer Camp	Cowley	24 Jul-2 Aug
SAC Instructors course	Hope, BC	tba
Cowley Wave Camp	Cowley	7- 11 Oct

OXYGEN ANALYSIS REPORT

CANOX, which supplies our breathing oxygen, sent us a copy of the results of a gas analysis they had done on the oxygen they give us. The impurity gases look pretty awful — I'm sure glad the quantities are measured in parts per million! (The analysis method is gas chromatography.)

<i>Component</i>	<i>Cylinder</i>	<i>Allowed</i>
oxygen (% nominal)	99.9	>99.5
water vapour (dew point, °C)	-73	-63
carbon dioxide (ppm)	2.0	10.0
methane (ppm)	24.2	50.0
nitrous oxide (ppm)	0.2	4.0
halogenated hydrocarbons (ppm)	nd	2.0
ethylene (ppm)	0.2	0.4
acetylene (ppm)	nd	0.1
ethane and higher aliphatic hydrocarbons (ppm, ethane equiv.)	trace	6.0
odour	nd	none

nd = not detected

PLANNING MEETING

The first of the two annual planning meetings for 1993 was held in Calgary on 31 October. Twenty pilots representing ASC and three clubs were present. The following major items were discussed:

- **Event overload** There was a general feeling that we had too much organized for 1992 which made it difficult to find organizers, towpilots, etc. and also spread the available holiday time too thin. It was felt that more participation would occur by incorporating some events into club functions and by shortening some week-long events.

So for 1993, the ASC cross-country clinic will be split and incorporated into the Cu Nim and ESC flying weeks if there is enough interest (dates to be announced), the Fall Cowley Camp will be shortened to five days beginning on Thursday and ending on Thanksgiving. To keep options open, PCK will be stationed in the area so an earlier start is possible on short notice if the weather is favourable (this also applies to the Invermere Camp, date tba).

- **Towpilot availability** Some events suffered from too few towpilots. The event director is to look after towpilot availability or be sure the job is designated. It was also suggested that event organizers be appointed and advertised at the beginning of the year.

- **Cowley Development** The airstrip will be fertilized again in the spring. The visibility of the windsock will be improved and a second may be erected near the kitchen.

Summary of 31 October ASC exec meeting

ASC Towplane Up until now there has been no emergency spending allowance for the towplane manager. To bring this oversight into line with Grob expenditure control, the executive approved spending to \$1000 under the following conditions:

"The Manager shall be responsible for the general condition of the towplane, and has the authority to pledge the credit of the ASC to the extent of \$1000 for required maintenance. Executive authorization required for greater expenditures."

A statement will be placed in the towplane manual that the member clubs allow free of charge "flying" storage of the towplane in the winter months. If no club can store it, the executive then has to find rental space.

John Broomhall will finalize the towplane operations manual this winter.

ASC Sailplane Tony has received a few inquiries since the Grob was advertised in SOARING magazine. Asking price is US\$31,000, trailer negotiable (\$2000 - \$1500).

Following Cowley fall camp, the Grob is now in Claresholm, awaiting clean-up and to be readied for sale. It is re-emphasized that the aircraft managers are also responsible for ensuring the aircraft remain legal. Jerry Vesely receives the DoT reporting forms (for C-GPCK and C-FAML) to keep the CofA current. The annual inspection can be delayed, but the aircraft cannot be flown after the expiry date of the last annual inspection.

By law 3-14 Expenditure limits

Julie Lauzier had worked on an expenditure approval level for ASC. However, to keep the process simple, it was decided to change the amount in the present by-law from \$500 to \$1000. A notice of motion to be published for ratification in a special meeting prior to the ASC AGM on 6 Feb 1993. (*See notice of motion on opposite page.*)

Phone bill for Cowley summer camp

Despite notes displayed near the phone that personal calls to be charged to credit card, ASC continues to receive bills from personal calls. Ursula attempts to bill the party involved, but the task is large and often im-possible if numbers other than home or business numbers are dialled. Dave Puckrin suggested that ASC bill the respective clubs who would then do their best to locate the culprits. Also, Marty will look into possibility of AGT installing an inhibitor which prevents direct dialling long distance calls.

ASC Annual General Meeting 1993

The 1992 format at Nisku Inn was liked and a similar format is again suggested for 6 February 1993. Immediately prior to the AGM proper a special meeting will be held to ratify a new by-law (10-0 on Dissolution), and change 3-14 on Expenditure limits. (*See notice of motions on opposite page*)

Safety – "dot" system at Cowley The dot system on the ASC tow ticket in Cowley was implemented for towpilot safety. The job had become administratively very onerous and it was time to have another look at this system. With registrations and pilot's statement of flying experience in place, we may be able to single out inexperienced people. ASC will waive the dot system for the time being. However, prudence on part of the registrars is still emphasized and if in doubt, refer a pilot to the event CFI, as has been done in the past.

Sounding equipment Denis reported on the use and success of the atmospheric sounding recording equipment and data reduction software from Steve Foster of the Toronto Soaring Club. Denis recommended that ASC purchase this package for our use; prices to follow. The executive support this idea in principle for use at contests and Cowley.

Financial matters Denis urged that all expense claims be mailed to him asap, certainly prior to year end. Claims received after 31 Dec may not be honoured.

ASC allows only one signature (treasurer or secretary) on ASC cheques. Although there have been no problems reported it was felt prudent for the purpose of financial control that the president be mailed a second bank statement directly from the bank.

Trophy – missing engravings When collecting the flight data from pilots for the ASC book *Winners*, Ursula found that the winners for the years 1973-1979 were missing on the trophies. In an effort to rectify this oversight, the addition of missing engraved plates (where data becomes known) was approved.

Youth group flight support After discussion on the level of ASC funding to support youth group flights (clubs were claiming different amounts or were unsure what could be claimed), it was decided that a flat rate of \$15 a flight per AP-6.06 will apply. For accredited media flights, AP-7.02 applies. ❖

Notice of Motions for '93 AGM

Motion by Al Sunley, seconded by Marek Wakulczyk that the ASC bylaws be amended by addition of bylaw 10.0 *Dissolution* to read:

"If, upon the winding up or dissolution of the Council, there remains after the satisfaction of its debts and liabilities, any property whatever, the same shall not be paid to or distributed among the members of the Council, but shall be distributed to one or more recognized charitable and/or non-profit organizations in Alberta having objects similar to the objects of this Council and which prohibits the distribution of its or their income and property among its or their members."

The Alberta Soaring Council now enjoys capital equipment namely a towplane and a sailplane, an oxygen cart and various other valuable items for use at ASC events.

The present by-laws do not allow for safe distribution of ASC assets in the unlikely case of dissolution of the Alberta

Soaring Council. Therefore the new motion for "Dissolution" was put forward at the '92 AGM for presentation and approval at the upcoming special meeting which deals exclusively with by-law changes.

Motion by Al Sunley, seconded by Ursula Wiese that the ASC bylaw, 3-14 *Expenditure limits*, be changed to read:

"Expenditure of funds of the society for an amount not exceeding \$1000 may be authorized by the president and the secretary, for any purpose which they consider to be necessary to carry out the objects of the society. Expenditures of amounts greater than \$1000 shall be authorized by a vote of a majority of the directors present at a meeting of the board."

The present amount is \$500, as approved in 1979. The executive feels that the new amount of \$1000 reflects more today's costs.

'93 NATIONALS SLATED FOR SWIFT CURRENT

Early discussions with the Regina and Winnipeg clubs have established the basics for the '93 Nationals, which is that it will be held in Swift Current, Saskatchewan on 6-15 July. The "Speedy Creek Nats" began when some pilots wondered if the nominal location of Claresholm could be shifted. Alberta competitors at a Cu Nim club meeting three months ago expressed interest in trying a new prairie location, and Hal Werneburg as chairman of the SAC World Contest Committee stated that the eastern pilots would appreciate consideration given to a shorter drive westwards.

The date was chosen to avoid conflict with school which would have prevented some pilots from attending. Furthermore, since the July 1 holiday is on a Thursday there is the opportunity for an extended practise period for pilots who can also scrounge the Friday off work.

The location has some plusses over Claresholm: less chance of high winds, less chance of thermal suppression due to subsidence in the lee of the Porkies, a 360° choice of turnpoint locations, sandy soil and a rolling topography to aid in thermal generation, and a Flight Service Station on site for weather information. The major negative was that it is remote from large clubs. However, from the experience of the success of an inter-club organizational effort in Hawkesbury this year, and very good Nationals in the past at Brandon and Virden, I thought the remote nature of Swift Current was by no means fatal as a choice

providing the large clubs in Saskatchewan and Manitoba would support the contest.

Regina and Winnipeg have agreed in principle, so all that's left is to look after the details. Early work involves getting the city of Swift Current excited, getting possible grant assistance from the Saskatchewan government, gathering the major contest officials, ensuring there are no major airport/airspace problems, etc. So far, Jim Oke of Winnipeg has taken on the job of preparing the turnpoint data and liaising with DND on the use of the Moose Jaw jet training airspace, George Szukala is providing sectionals, and Gary Bozek in Regina is going after the grant money.

I would ask that anyone who can help put together the contest to give me a call and I will immediately send you a checklist of duties related to the area in which you are willing to help. We are looking for a Chief Towpilot (and any other club towpilot), a Flightline Boss, an Office Boss and anyone who is willing to assist in any capacity. It will be an easy contest to run if everyone does a little bit. Competitors and crew will be expected to actively support the competition staff as much as possible. It would also help me if you let me know if you are planning to be driving through Swift Current this winter or spring as you may be able to drop in on the site to solve some small organizational matter at the time.

Tony Burton, contest manager

return address
Box 1916, Claresholm, AB TOL 070