## **Accident Write-up from ACC Edmonton Website**

http://alpineclub-edm.org/accidents/index.asp

**CAC Accident Information** 

Date: 01/02/2003 Activity: Backcountry Skiing Mtn Range: Selkirk Mtn Range

Location: Mount Cheops Province: BC

Loc. Descr.: Glacier National Park

## **ACC** Accident Write-up

Seven teens on a high-school ski excursion in the treacherous back country of east-central B.C. died Saturday when a half-kilometre-wide avalanche roared down from a mountainside and engulfed their group. It was the second deadly slide to hit the region in as many weeks. Seven adults perished in a slide in January. The dead were six boys and one girl, all in Grade 10 at Strathcona-Tweedsmuir School, a private day school on an expansive rural campus in the foothills southwest of Calgary. The surviving students, the two teachers and parent chaperone were expected back in Calgary late Sunday night. Six of the students have some scrapes and bruises, and one male suffered a broken ankle. "We are absolutely stricken with grief. Our hearts go out to all those who are impacted," Tony Macoun, head of the school, said in a written statement. Frantic parents gathered at the school Saturday night, arriving separately and in groups, embracing each other. No students were visible. "Our school is a small family and loss this extreme is impacting us tremendously," said Macoun. There were 17 people in the school group, three adults and 14 Grade 10 students in an outdoor education class, on their annual cross-country ski trip. The avalanche occurred on Mount Cheops in Glacier National Park just before noon, said Pam Doyle, superintendent for Parks Canada in Revelstoke. It happened on the north face of the mountain in Connaught Creek Valley section of Balu Valley, about five kilometres west of the Rogers Pass summit. The group was led by two male teachers and a male volunteer. All had certification and back-country experience, Macoun said. The group had been skiing about 15 metres apart, with one supervisor in front and the other two bringing up the rear. The skiers were halfway up the valley when the avalanche roared down the north slope, burying nearly the entire group. Another group of young skiers witnessed the avalanche and were among the first to help. A supervisor whose hand was just visible above the snow was the first to be dug out. Once freed, he called park wardens on a satellite phone to raise the alarm. "Of the remaining students, six of the students are safe and one has a broken ankle," Macoun said in his statement. The three leaders were uninjured and are attending to the survivors, who were in Revelstoke on Saturday night after being airlifted first to Glacier Park Lodge by helicopter. Two people from the group were treated for minor injuries, said RCMP Sgt. Randy Brown. The avalanche was "very powerful," with a rating from 3 to 3.5, compared with a top rating of 4, said Pat Dunn, a Parks Canada spokeswoman. "The size 3 to 3.5 avalanche could destroy a building . . . or 10 acres of forest," she said. The slide was 500 to 800 metres wide and travelled a kilometre down the slope. Some of the skiers were buried as deep as three metres, said Dunn. She said the group was carrying the proper avalancherescue equipment, including personal locator beacons and digging tools. A park conditions bulletin said there was a considerable avalanche hazard in the area Saturday. That rating is about the middle of the hazard scale but includes the high probability that a person could trigger a slide, said Dunn. "The risk always varies . . . when the risk is posted as considerable it's a note to skiers to be cautious," she said. "There are a couple of instabilities in our snow pack this winter . . . that may have contributed and further investigation will determine (that)." Saturday's slide was unusually deadly, said Eric Dafoe, public safety officer with Parks Canada in Revelstoke. "We've never had an avalanche like this where we had a multiple number of people buried," said Dafoe, who worked on the rescue effort and flew over the slide as part the initial investigation. "It was a huge slide," he said. "It covered the valley floor from side to side." Dafoe said the slide began at a point between 2,200 to 2,300

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vertical metres up Mount Cheops. It travelled for a kilometre and spread out half a kilometre at the sides. The toe of the slide ended at about the 1,500-metre elevation mark with parts of it more than five metres deep. Dafoe said the investigation will continue but was almost certain it was a natural slide. "It (the slide trigger site) is so far from the bottom it seems unlikely it was human-triggered," he said. Dafoe speculated a small slide may have occurred high up the mountain and as it came down, it dragged out snow from surrounding gullies. Park wardens, RCMP officers and local ski tour operators and guides, backed up by four or five helicopters and search dogs, joined in the rescue effort. Members of a Canadian Horse Artillery unit stationed in the park for avalanchecontrol work were also on hand to assist. It was the second major slide in the area in a month. Seven people in a party of 21 back-country skiers died in a much smaller avalanche Jan. 20 on Durrand Glacier, located about 30 kilometres east of Saturday's slide. A memorial service for the victims was held just Friday in a Revelstoke church. Ruedi Beglinger, owner of Selkirk Mountain Experience and organizer of the fatal expedition last month, was with his clients when it struck. Contacted Saturday night, Beglinger did not want to comment on the level of experience necessary to ski the area where the students were caught. "There is an inherent risk (in back-country skiing) which is very important to talk about, an inherent risk people have to be willing to share amongst themselves (whether) they have a guide or not," he said. The area of Saturday's slide is not particularly remote, but Dunn said there were no groomed trails, "except people who have been there before you." But no guides are needed to ski in the area and skiers do not have to register before setting off. "It's a very, very popular ski destination site," said Dunn, media liaison officer at the national park. Brown said the skiers were not part of a commercial tour group. Doyle said that at this time there are no plans yet to close back-country areas of the park. UPDATE REVELSTOKE, B.C. (CP) - Authorities said Sunday it was time to take another look at the safety of back-country skiing in an area where a day earlier seven Calgary-area teens were swept to their deaths in a massive avalanche. Six boys and one girl were killed Saturday while skiing with a high-school group on Mount Cheops in Glacier National Park, about five kilometres west of the Rogers Pass summit in east-central British Columbia. B.C. Premier Gordon Campbell said Sunday he wanted his government to work with federal officials and professional associations on a "comprehensive review" of safety in such wilderness expanses. "Obviously, all of us have to work together on this," said Campbell, who did not specify the scope he thought a review should take, or what role he thought the provincial government should assume. "None of us want this to happen to anyone who is enjoying our parks and our wilderness." Campbell offered few details on what changes might be proposed, saying it was important to "wait and get all the information that we ... need, to make sure the steps we take are steps that will move us down the right road." Meanwhile, a Parks Canada official with the federal department's local avalanche control section said the current system for providing risk bulletins to back-country skiers in the park would be re-evaluated. David Skjonsberg said the area where the teens died is under Parks Canada jurisdiction but the department doesn't "carry out any avalanche control for back-country areas of the park." His office provides daily avalanche risk bulletins but "there is an expectation that the user make their own decision in terms of destinations, trip procedures and the type of equipment." Skjonsberg said the avalanche warning system would be re-evaluated but thought it was "unlikely we're going to see any major changes in our approach. "We believe we're providing a good quality product for back-country users," he said. "But perhaps there's something we're missing in how we convey the information to users so they really fully understand our definition of the danger ratings, for instance, and what the potential consequences of that danger rating might be." He was hesitant to say whether the group composed of 14 students and three adult supervisors should have been skiing in the area at the time they were hit. "At any time if you travel in mountains, there is always a risk," he said. "The probability of an avalanche is never zero." Clair Israelson, director of the Canadian Avalanche Association in Revelstoke, said Sunday it was time "that B.C. and Alberta and Canada seriously address the avalanche safety issue in Western Canada." He recommended that a coalition of industry, government and private sector workers work together to promote better warning systems. Skjonsberg said he didn't foresee the long-term closure of the area where the avalanche occurred. The area was reopened by Sunday night after being temporarily closed for investigators. "If I was to close that area, I'm afraid I'd have to be looking at virtually closing off the back-country of the park and I really don't feel that's warranted," he said. "I think people can

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travel safely in the mountains." The high-school group was hit just before noon by a massive slide that swept through the Connaught Creek Valley on Mount Cheops. The group included 14 students and three adult supervisors. The tragedy was only about 30 kilometres away from the site of a smaller slide two weeks earlier that killed seven adult back-country skiers. That avalanche was termed a fluke of nature by one survivor and authorities said there was no evidence it was caused by the skiers themselves. Saturday's slide travelled through the valley and into the shoulder where the party was climbing the valley, said Eric Dafoe, a public safety officer with Parks Canada in Revelstoke. It was about 500 metres wide and officials said it was capable of destroying a building. Two nearby mountain guides witnessed the slide and had just managed to shout a warning when the slide hit. Dafoe said the skiers had "somewhere between four and five seconds" before being swept away. The two guides rushed over and managed to dig out a supervisor whose hand was just visible through the snow. That supervisor immediately called park wardens on a satellite phone to raise the alarm. A rescue party was on scene within 40 minutes, but Dafoe said the students and supervisors initially rescued by the guides had already begun work on digging out their fellow skiers. "People were searching the snow, digging," he said. As many as 35 people managed to get to the site to help with the rescue, said Dafoe. All but three people had been pulled out within 40 minutes. "It was a huge co-operative effort," he said. "It occurred very rapidly." The group's three adult supervisors and remaining seven students escaped with minor injuries. Those who died were asphyxiated, coroner Chuck Purse said Sunday. Red-eyed teenagers and their parents began arriving early Sunday at Strathcona-Tweedsmuir School, a private school on an expansive campus in the foothills southwest of Calgary. A team of grief counsellors began working with about 300 members of the shell-shocked school community. Principal Glenn Odland said Sunday a third-party investigation would conduct an inquiry into the preparation that went into the trip, but said the three adult supervisors were well-prepared and had extensive training. The avalanche risk for the alpine area above the students was classified as considerable by Skjonsberg's office that day, but the risk was only moderate in the treeline area where the students were skiing. But the avalanche travelled a kilometre, engulfing the teenagers and their supervisors. UPDATE: David Heyman Calgary Herald Monday, February 03, 2003 Skiers from Strathcona-Tweedsmuir High School had four or five seconds to react to a massive slide of snow powerful enough to take out buildings. The slide was so large it contained at least 1,000 tonnes of snow, according to information provided by the Canadian Avalanche Association. "It was huge," said Eric Dafoe, public safety co-ordinator for Glacier National Park, who was on the scene shortly after the avalanche occurred. He rated the slide as a three or 3.5 on a scale of five. At that level, an avalanche can bury and destroy a car or small building and snap trees. An avalanche rated as one is relatively harmless to people, whereas an avalanche rated as five could destroy a village or a forest. Dafoe added the skiers would have had no time to get out of the avalanche's path. He said the slide fractured the snowpack at a depth of between 80 and 150 centimetres. It swept about a kilometre downhill and was about 500 to 800 metres wide, barrelling down the hill towards the 17 skiers. Seven of the skiers died and all were Grade 10 students at the Okotoks-area school. The survivors included seven students, one parent chaperone and two teachers. The seeds of Saturday's avalanche were sown last November when a particularly unstable layer of snow was created at the beginning of a very unusual season. This layer has created problems throughout the season, but on Saturday, the instability turned into a massive avalanche. Last month, another avalanche swept down nearby Durrand Glacier, burying a group of backcountry skiers. Of the 13 people buried in that avalanche, seven people died. Dave Skjonsberg, manager of the avalanche control section of Parks Canada, said Saturday's slide started well above the treeline where the avalanche risk was rated "considerable" but swept into the areas below where the risk was rated "moderate." "Although technically you could say they were at treeline, the avalanche did not start at treeline," he said. "The avalanche initiated in the alpine. It progressed below the treeline, and the results were tragic." He said the area around Revelstoke has had one of the most unusual snow seasons in the past 30 years and that's created very unstable sections in the snowpack, especially areas laid down in November, upon which newer snow has rested. An investigation has been launched into the cause of this avalanche. It started small at around 11:40 a.m. Saturday, high above the treeline on the west shoulder of the north face of Mount Cheops, about three kilometres from the Trans-Canada Highway. It was first spotted by two backcountry skiers from Golden, who

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were relaxing on the opposite side of the Connaught Valley. They had just passed the group of 14 students and three guides from Strathcona-Tweedsmuir School and knew, to their horror, they were in immediate peril. RCMP say one man shouted "Avalanche, avalanche, avalanche," but it was already too late. The small slide quickly dug into much deeper snow further down, pulling with it hundreds of tonnes of snow. The entire mass quickly accelerated down the mountain in a plume of mist and debris. Such was its speed and force that it swept around a corner, part way up another mountain before flushing down the Balu Pass Trail where the students were, burying all 17 skiers. Clair Israelson, managing director of the Canadian Avalanche Association in Revelstoke, said the avalanche "moved extremely quickly. The