CANADA

FALL ON SNOW AND ICE AND NO BELAY—Alberta, Moraine Lake, 3-4 Couloir. Alison Clough and Dave Charlebois were descending the couloir from the Graham Cooper Hut on a rope at 8 a.m. on July 3, 1977 as part of a larger party. The first rope, which was below them, called for more speed, and Clough responded. She was front-pointing down toward Charlebois, who was not belayed, when she stepped off a small drop and tumbled backwards down the slope. Charlebois managed to stop her, but was pulled from his stance and lost his axe. His pack frame hit Clough very painfully in the back (it was discovered later that she had broken three ribs) and they both fell down the couloir. Clough also lost her hold on her ice axe, but was able to recover it, as it was tied to her harness. They were stopped after falling about 1200 feet by both the ice axe and an avalanche that was falling with them. Clough had much pain in her back and suspected she had a compression fracture of the spine, and spat some blood. She was helped down the couloir by Chris Hamilton, the leader of the party, and Rob MacDonald. She had lost her gloves in the fall, but remained warm and dry afterwards because she was wearing good woolen clothing and an over-outfit of Goretex.

The fall had been noticed from Moraine Lake Lodge, and a helicopter arrived as the party reached the edge of Moraine Lake. Clough refused it and was supported by the leader. They crossed the lake by rowboat, and refused an ambulance that was waiting for them on the other side. She was finally driven to Banff Hospital, lying down in the rear of a four-wheel-drive vehicle. She was not seriously injured, but her ribs were very painful for about three weeks. (Source: Alison Clough, C. Hamilton, R. MacDonald, C. Baumgartner, and M. Kohlman.)

Analysis: The general conditions were reasonably safe for the descent, but a number of mistakes contributed to the accident, and some could have made it much worse. Clough and Charlebois should not have climbed down without belay, should have had less rope between them and should not have responded to the call for more speed. The helicopter should not have been refused, in spite of her insistence, because Clough's injuries might have been severe. They should not have crossed the lake in a jerky rowboat, and should not have refused the ambulance.

Clough was using a Chouinard "Zero Piolet" which was 42 cm long, and had practiced arrests with it and found it satisfactory; it did not seem to have contributed to the accident. She was wearing an M.S.R. helmet, which was thoroughly scraped and banged, and probably prevented more serious injury. (Source: Alison Clough.)

FALLING ROCK—Alberta, Lake Louise. Stephen Pope was hiking in the Beehive area behind Lake Louise on July 31 and sat to eat lunch below

a rock face. A large boulder fell and crushed his femur. (Source: *Banff Crag and Canyon,* early August, 1977.)

Analysis: People often sit under rock faces in the mountains; but rocks often fall, and, therefore, one should avoid being in their path if possible. (Source: E. Whalley.)

FALLING ROCK—Alberta, Banff, Mt. Rundle. Geoffrey Taylor (16) and Steve Ord (16) were climbing Mt. Rundle on August 4 by the usual easy route. They became separated, Ord being in front, and maintained contact by voice. Taylor stopped calling about noon, and Ord returned to find him. Rocks had fallen from the cliff above the trail and seriously injured him. He was not wearing a helmet, but fortunately had no head injuries. He was not bleeding, so Ord gave him spare clothing, draped him with bright orange ponchos, and went down for help. Taylor was evacuated by helicopter. He had broken both arms and several vertebrae. (Source: S. Ord.)

Analysis: Rocks fall from cliffs and we should avoid being under them as much as possible. Helmets should be worn at these times. It is better not to separate, although had the two been very close, both might have been injured. (Source: S. Ord.)

FALL ON SNOW—Alberta, Mt. Lefroy. Michael and Valerie Laub were descending Mt. Lefroy to Abbot's Pass on August 10. They were cramponing down a steep slope of 3 inches of snow on a firm ice and snow base, with about 20 feet of rope between them. A short distance below the summit ridge they stopped belaying each other and Michael went down first. Valerie slipped and fell onto her back and was not able to turn over. She slid past Michael, who immediately jammed his ice axe into the snow, but it only went in half way before the rope came taut. It was immediately pulled out and Michael fell. He tried to stop himself, but the wooden shaft of the ice axe broke. They slid about 1300 vertical feet before stopping just short of the cliffs into Abbot's Pass, and were badly shaken with numerous sprains, cuts, and abrasions. The accident was seen from the Abbot Hut and one occupant went to Lake O'Hara Lodge to summon help, while the others went to help the fallen climbers. The Laubs were evacuated by helicopter. (Source: M. Laub and *Banff Crag and Canyon.)*

Analysis: The accident was caused by a combination of three mistakes. First, they had stopped belaying each other just before the accident; considering the fresh snow and firm base, this should not have been done. Second, Valerie was the less experienced of the two, and in particular had little experience on crampons, and she should have been first on the rope. Third, Valerie had had too little practice in self-arrest. (Source: M. Laub.)