the return they decided to descend a snow and ice gully. Without ice axes, crampons, or rope, they stepped onto the slope and fell about 50 meters before stopping. The younger climber suffered a deep laceration in his left knee. The other one bandaged the wound to prevent blood loss, and they struggled back to camp with frequent short rests, arriving about an hour after sundown.

The following day, the uninjured climber walked out and reported the accident to the Warden Service at Jasper. A helicopter picked up the injured climber at 1630. (Source: Jasper Park Warden Service)

#### Analysis

The climbers' objective was beyond their skill and experience level. They did not register or attempt to get route information from Park Offices. (Source: Jasper Park Warden Service)

### FALL ON ROCK, DESCENDING UNROPED, OFF ROUTE British Columbia, Selkirk Mountains, Mount Sir Donald

At 0500 on August 24, 1985, a party of two (31 and 27) set out from the Illecillewaet Campground (1220 meters) to attempt a light, rapid ascent of Mt. Sir Donald. They short-cut to the northwest arete via a prominent corner south of the Uto Col. They then climbed the arete unroped to the summit, reaching it around 1420. The descent was begun at 1500, with a solo climber who had joined the party on the ascent.

At a prominent band at 2900 meters, the party left the normal Northeast Arete route and followed a ledge system across the West Face. The reason for this was that they were catching up to another descending party, and did not want to be held up. After some discussion of the appropriateness of the improvised route, the third member left the group and went back to the arete.

The ledge system ran out at the south end of the West Face, offering no reasonable line to the South Face descent route. The party continued down-climbing unroped through a series of short rock bands above an area of smooth and downsloping slabs. Near the top of the slabs, one of the climbers (27) appeared to be losing his footing, and froze in a "spidered-out" position (arms and legs extended, facing out). His partner offered his leg as a hold. The lower climber was unable to reach up, and most likely lost friction as he leaned back into the wall. The result was a rapid fall over a series of slightly stepping slabs sloping about 60 degrees into a gully of about 25 degrees, and a final vertical plunge into the moat between the wall and the Vaux Glacier. The total vertical distance was about 3000 meters.

The remaining climber rappelled off the face onto the Vaux Glacier. Unable to locate his friend, he completed the descent and reported the accident to the Warden Service in Rogers Pass at 2100. The next morning, the body was raised with a Z-pulley and flown out. (Source: E. Dafoe, Mount Revelstoke/Glacier National Park)

#### Analysis

These men had climbed together regularly for four years, and had climbed numerous routes more difficult than this one. However, on this occasion they were attempting a descent route without knowing where it would lead, and though the climber who fell was wearing a harness, he was not using the proper rope or wearing a hard hat. (Source: E. Dafoe, Mount Ravelstoke/Glacier National Park)

# HYPOTHERMIA, HEART FAILURE Baffin Island, Auyuittuq National Park

On August 25, 1985, a man (42) was hiking alone. What transpired during the day is not known, but when he arrived at Overlord Campground in the evening, he was wet, shivering, and had difficulty walking. A group of hikers who was also camped there took him to an emergency shelter, had him remove his wet clothing, and provided him with a sleeping bag. They took his temperature, finding it to be 35.5°C (37°C is normal). They provided him with soup and heated the cabin. His temperature rose to 38°C, and he complained of pain in his right leg which was cut and bruised. The next morning at 0900, it was reported to park staff that the hiker was sleeping comfortably. At 1000, he was reported dead. (Source: R. Breneman, Auyuittuq National Park Reserve)

### Analysis

The post mortem examination attributed the hiker's death to systemic hypothermia with the mechanism of death being heart failure. General circulatory failure is not usually encountered until body temperature is much lower than 35.5°C. Had the hiker not been alone, a companion might have been able to provide assistance. (Source: R. Breneman, Auyuittuq National Park Reserve)

(Editor's note: Although the person was hiking rather than climbing, this account is published to document a possible outcome of traveling alone in a remote mountainous area.)

### **FALLING ROCK**

## Alberta, Rocky Mountains, Mount Redoubt

On August 25, 1985, three highly experienced climbers were ascending a chimney on the west face of Mt. Redoubt. About 12 meters above a belay station, the leader dislodged a large boulder, raining rocks and debris on the two below. The leader fell about three meters onto his protection and was held by the belayer. Both persons at the belay were hit by falling rock and sustained injuries. (Source: Warden Service, Banff National Park))

### Analysis

This accident demonstrates the susceptibility of even highly experienced climbers to the dangerous effects of the instability of rock found throughout the Canadian Rockies. Experience, judgment, and the use of safe climbing techniques do not always guarantee protection from objective hazards. (Source: Warden Service, Banff National Park)

## FAILURE TO FOLLOW ROUTE, FALL ON ROCK, CLIMBING ALONE British Columbia, Coast Mountains, Garibaldi Provincial Park

On September 1, 1985, two hikers left Black Tusk Meadows to scramble up Black Tusk (2200 meters). The night before, they had seen a Parks Branch film about the summit, which stressed that the only safe way was up a chimney at the west end of the main face. When they reached it, one of them decided it was too steep, and the other (40) went up alone. Descending, he took a wrong turn from the summit, and wound up on the steep, dangerously loose South Face. He fell 12 meters into a narrow gully, fracturing his skull, an arm, and a leg, and suffering other injuries.