

**Analysis**

In this incident, as well as in the July 16 case of cerebral and pulmonary edema on Mt. Logan's east ridge, early identification and correct treatment of altitude related problems no doubt insured the patients' survival. As climbing activity increases in the St. Elias Range, so does the incidence of altitude sickness. Party leaders should be aware that party size plus the isolation and poor weather are major planning considerations when organizing expeditions into the area. (Source: R. Frey)

**FALL ON SNOW, AVALANCHE****Yukon Territory, Mt. Logan, East Ridge**

The fall occurred shortly after noon on June 14, 1980, as an eight-man party left camp one (10,500 feet) on descent. A snow step underlaid by ice failed under T. Auger causing him to fall into a small icy chute at the upper end of a larger gully. Auger's ropemate attempted to arrest the fall, but was also pulled into the chute. Both climbers went into the gully, started a small, wet snow avalanche and fell with it some 600 meters to the bottom of the ridge. Miraculously neither climber was critically injured. The remaining party members assisted by Kluane Park Warden Service located the victims and evacuated them to Whitehorse General Hospital by 6:30 p.m. (Source: R. Frey, Kluane National Park)

**Analysis**

Both men were experienced climbers. The group was working terrain over which they had traveled four or five times previously. Auger was the sixth person to use the step when it failed.

The party was traveling in 6-10 cm of new snow which was balling up in crampons. Crampons had been removed after almost continuous earlier use because of the snow conditions. This condition was a contributory cause, possibly a primary cause, yet the same snow condition certainly helped protect them from more serious injuries as they fell down the slope. One could say that they should have waited for more suitable conditions, yet in the St. Elias Range, conditions just don't get much better. (Source: R. Frey)

**FROSTBITE, INEXPERIENCE****Yukon Territory, Mt. Logan, King Trench Route**

During an ascent of the King Trench route on Mt. Logan in June 1980, Gideon Frydman, a member of a four-man party from the Royal Military College Club of Canada, noticed that his feet had become "numb" and remained so even in his sleeping bag at night. He continued with the climb (a period of several days), but ended up with frostbite in both feet and the eventual loss of parts of three toes on one foot. Another member of the party also suffered frostbitten feet, but not so severely. (Source: Toronto Globe and Mail, July 4, 1980, G. Frydman)

**Analysis**

Frydman was using double boots which were not large enough to accommodate the two pairs of socks which he wore without a tight fit inside the boots. A fall into a crevasse, during which he got very chilled before being extricated, also contributed to the problem. (Source: G. Frydman)

Natural thickening of the blood due to adaptation to high altitude and additional possible thickening due to dehydration caused by insufficient fluid intake can increase the tendency to frostbite in climbs of this type. (Source: R. Reader)

### **CEREBRAL AND PULMONARY EDEMA**

#### **Yukon Territory, Mt. Logan, East Ridge**

On July 16, 1980, Kluane Park Headquarters received word that one member of a four-man party required evacuation from the 12,500-foot level on the east ridge. Michael Kowalski had developed symptoms of cerebral and pulmonary edema and had been brought down to this level by his party. Further descent was impossible because of terrain, party size and patient condition. Kowalski was winched off the ridge by helicopter by Kluane National Park Warden Service on July 19 and taken to Whitehorse General Hospital. (Source: R. Frey, Kluane National Park)