

A section of the overhanging ice cap, as large as several houses, released above them, carrying them down 600 meters to their deaths. The climbers were reported overdue on the evening of August 5 by a Parks Canada rescue team. (Source: Clair Israelson, Banff National Park Warden Service)

### **Analysis**

About 30 meters above the traverse ledge, a seven millimeter rope sling with a carabiner on it was found jammed around a rock. Because of the steepness of the rock face and the speed of the falling ice, neither this site nor the traverse ledge was scoured by the icefall. In the ice deposit on the foot of the face, there was a sling with two carabiners on it, with a wired #4 hex on one of the carabiners. The rope between the climbers was fully out, and one of the climbers had a Figure-8 in the belay mode on his harness.

From the evidence, it appears that the belay had been established on the rock face above the traverse ledge. One of the climbers (27) had led the pitch to easier ground above, and the other (36) was dismantling the belay station when the ice fell. The lead climber was hit with the full force of the ice, and as he was carried away, he pulled his belayer with him.

The major factor contributing to the accident was the decision to climb across the bowl under the icefall rather than to climb the technically harder but less exposed north ridge. Icefalls are extremely difficult to forecast, and overhanging serac fields should always be regarded as suspect, regardless of recent weather influences.

When exposed to icefall, the hazard can be reduced by using the protection of steep terrain where falling material will be deflected overhead. Had both climbers been on the traverse ledge or at the belay site, they would likely have escaped unharmed. (Source: Clair Israelson, Banff National Park Warden Service)

## **FALL INTO CREVASSE, INEXPERIENCE**

### **Alberta, Rocky Mountains, Bow Glacier**

On the afternoon of August 8, 1986, two climbers were descending the Bow Glacier above the Bow Hut. They were roped 15 meters apart, traveling in a well-beaten track within sight of the hut. R.P. (30s), the less experienced climber, was ahead. He jumped over an obvious weak snow bridge. When R.L. (38) attempted to jump, the bridge collapsed beneath him, and he fell approximately ten meters into the crevasse before R.P. stopped his fall.

Lacking the knowledge and experience necessary to extricate him from the crevasse, R.P. used a water bottle to pound a warthog into the ice and anchored the rope to it. R.L. then attempted to prusik out, but his wet prusiks jammed repeatedly and progress was slow. He was able to raise himself about five meters, but could not get through the snow lip where the rope had cut in. With water pouring onto him from the melting snow above, he stood in his prusiks, put on his poncho, tied himself to an ice screw in the wall of the crevasse, and waited for help. R.P. ran down to Num-Ti-Jah lodge to report the accident.

R.L. was extricated by a Parks Canada rescue team just before nightfall, after spending over four hours in the crevasse. He was wet and mildly hypothermic, but otherwise uninjured. (Source: Clair Israelson, Banff National Park Warden Service)

## Analysis

The accident location was the site of a fatal crevasse fall several years ago. R.L. was aware of this fact, and insisted on traveling roped even while walking in a well-beaten track. This action probably saved his life.

Glacial travel with a party of two leaves little margin for error. Both persons should be capable of setting up crevasse rescue systems, as the person falling into a crevasse may be injured and unable to survive until outside help arrives. A party of three or four is inherently safer.

Even though the weather was sunny and mild, R.L. carried emergency clothing and a poncho on his back. He ended up needing it. (Source: Clair Israelson, Banff National Park Warden Service)

## **FAILURE OF RAPPEL, PITON PULLED OUT, FAILURE TO FOLLOW ROUTE Alberta, Rocky Mountains, Rundle Ridge**

On August 16, 1986, around 0800, David Doucette (38) and Bruce Magee (35) set out to climb the Guides' Route (5.7), a 17-pitch climb on the east end of Rundle Ridge, near Canmore. After a half-hour hike to the starting point, they were on the climb, taking alternate leads. Since the climb was new to them, they took their time, using a guide book to keep them on track.

Around 1800, after climbing all day, they reached a broad, grassy, treed ledge. David led the pitch and found it to be much harder than stated in the guide book. He ran a full rope length, about 50 meters, then drove a piton and secured himself. He belayed Bruce up 25 meters to a ledge where Bruce secured himself to a small shrub and to a piece of protection placed in a crack. David rappelled down to Bruce.

The time was 1930, and they had done 13 pitches. They decided to rappel back to the large grassy ledge. David drove another piton, and secured a sling to it, which was also secured to a nearby shrub. They both rappelled. However, when they tried to pull the ropes down, they found that the ropes were stuck. David prusiked ten meters up the rope, freed them, and reported this to Bruce.

Then Bruce heard the sound of ropes moving at high speed. He turned to see David fall from above, hit the grassy ledge, and then continue down the mountain. In an attempt to stop David, Bruce grabbed the ropes, receiving a rope burn on his hand. David fell about 200 meters and was killed.

Bruce attracted attention by yelling to passing cars, and motorists in turn alerted the RCMP. Park Rangers and RCMP rescued Bruce by helicopter the following morning. (Source: Bruce Magee and Patricia Doucette, Banff, Alberta)

## Analysis

The climbers were conscientious and cautious, and had a full rack of climbing equipment. Their equipment was all new and consisted of helmets, sit harnesses, one 11 millimeter 40 meter rope, one 9 millimeter 50 meter rope, stoppers, slings, climbing boots, pitons, and carabiners.

Unfortunately they got off route on pitch 13 onto tricky terrain, as do many climbing the route for the first time. In the guide book, the dots indicating the route span a 25-meter area, leaving the exact path to take up to the climber.

David Doucette fell because the piton pulled from the rock. The evidence for this is