

to only a small fraction of the current delivered by the strike. This incident is a strong reminder to back up a rappel with a self-arresting device. (Source: Bugaboo Glacier Provincial Park Ranger)

FALL ON ROCK, ROPE PARTED—FRICTION DEVICE

Northwest Territories, Baffin Island, Mount Thor

In mid-July A.G. (30) began a solo attempt on a new route on the 3800-foot granite west face. The lower two thirds of the face are vertical and the upper third is overhanging with an average angle of 105 degrees. Another party of two climbers was also climbing a new route on the face which they completed in late August. When they returned to the valley on August 23, they called in to Auyittuk Park headquarters on a radio in an emergency shelter to report that they had not seen or heard from the solo climber since early August. A Canadian Armed Forces Labrador rescue helicopter was in the area and was dispatched to do a reconnaissance of the face. Remnants of a camp were spotted on the end of the prominent ledge dividing the vertical and overhanging sections of the face. There was no sign of the missing climber. It was decided that the face could not be accessed by helicopter due to its steepness.

Since there is no local technical mountain rescue capability, the Parks Canada Warden Service Mountain Rescue Unit in the Canadian Rocky Mountain National Parks was contacted for assistance. A rescue team along with a certified rescue pilot was dispatched and flew by commercial air from Calgary, Alberta to Pangnirtung, Northwest Territories. Arrangements were made to have a locally chartered Bell Long Ranger 3 available for the crew.

After an initial reconnaissance of the face and the remnants of the camp were spotted, it was decided that inserting two rescuers onto the ledge on the face was possible. The ledge was wide enough at one point that, using a 50-foot line, there would be enough clearance for the helicopter. Once on the ledge the two rescuers scrambled over to the old bivouac site where the missing climber was found lying dead in a pile of boulders. He had fallen about 50 feet. His rope was broken above the self-belay device he had been using (a Rock Exotica Solo-Aid).

It was not possible to sling into the victim's location due to the overhanging wall. For this reason, a rope was tied to the body and laid out along the ledge to the point where it could be picked up safely by the 50-foot sling rope underneath the helicopter. The body was evacuated to the staging area, and the two rescuers were then slung off the face.

Analysis

After completing the investigation and after talking to a number of people about solo aid climbing, the rescue team speculated that the following is what likely occurred.

The accident happened on August 3. The fatal fall was a result of the victim's rope parting. The break in the rope near the self-belay device clearly showed this. The other end of the rope could be seen fifty feet higher, with about two feet dangling from the last aid piece. Due to the overhanging nature of the wall and the logistics of solo aid leading, the rope was being clove-hitched to the gear placements as the climber moved up. Because of these direct tie-offs, the fatal fall created a Factor Two force on a short section of rope.

It is unlikely, however, that the rope was broken by the self-belay device. We conclude this because the broken segment of rope above the self-belay device was bunched

up and rigid and the broken end was about 12 inches away from the jaws of the belay device. If the self-belay device had broken the rope, the rigid rope should have been behind the device.

It is therefore speculated that the climber was also using an ascender above his belay device. The broken end near the self-belay device showed signs of heat damage consistent with cutting by an ascender. Unlike a self-belay device, an ascender is not designed or intended to absorb a fall—particularly a Factor Two fall. The propensity for ascenders to cut ropes combined with the rope damage which his ropes would have sustained from the first 2000 feet of difficult aid climbing are likely the reasons why the rope broke. The wear to the ropes is substantiated by a diary entry. (Source: Parks Canada Warden Service)

FALL INTO MOAT, CLIMBING UNROPED, POOR POSITION, INEXPERIENCE

Québec, Saint Raymond de Portneuf, Delaney Falls

On January 13, E.F. and E.L. had just finished climbing La Transparente, a 150m waterfall climb on Delaney Falls near St. Raymond de Portneuf. They had both reached the top of the falls by about 1210, and where an easy slope continued upward for another few meters, E.F. unroped and began to walk toward the top.

E.L. collected their equipment before continuing up to meet his partner for lunch. He suddenly noticed he could no longer see or hear his partner and began searching for him. He eventually found a hole in the ice of the slope that he suspected his partner may have fallen into. He could see nothing, but calling into the water rushing into the hole, realized he could communicate with E.F.

E.L. dropped a rope into the hole, and E.F. confirmed he was able to tie into the rope. E.L. was unable, however, to rig an extraction system, and so had to find another way to get to his partner. He descended about five meters and made a hole through the ice, but was still unable to see E.F.

E.L. returned to the top of the climb to attempt to pull the rope from a different direction, again without luck. He returned to the hole he had previously made in the ice, and could now see the rope in it, indicating that E.F. had slipped farther down behind the ice. E.L. realized that some time had passed, that he was unlikely to be able to extricate his partner himself, and that he still had a long snowshoe and drive to get to rescue authorities. He tied his partner off and went off to call the police.

The Québec Police Intervention Group was called to initiate a rescue. At the scene of the accident, the rescuers attempted to raise the victim with the help of a winch connected to the rope which he had previously tied to his seat harness. The technique worked until E.F.'s body apparently jammed.

The police then set up a rope some 15 meters below, where there was a natural hole through the ice. They hoped to try again from there with the help of a sledge hammer and an ax, but as it was late in the day by then and darkness would increase the hazard to rescuers, they postponed further efforts until morning.

It took two days before the police located and recovered the body. At Portneuf Central Hospital, Dr. Céline Cantin could do no more than pronounce E.F. dead at 1400. (Source: Jacques Kirouac (FQME); Marc Bedard, Québec Coroner)