

snow patch. Within a few steps onto the snow, J.C. slipped and started sliding down the snow which had a pitch of 45 to 50 degrees. J.C. had no ice ax, was unable to self-arrest, and slid 300 meters on the snow—and then tumbled 20 meters onto the rock at the bottom.

Several members of the group went to the accident site. It was apparent that J.C.'s chances for survival were slim. On August 19, J.C.'s body was recovered by Alpine Helicopters.

Analysis

It is unclear why the climbers would choose to cross glaciated terrain unroped and why they carried neither crampons nor ice axes whilst choosing to be on snow slopes with an angle of 45 to 50 degrees as described. J.C. was found to have died from severe head injuries. It is unclear whether a helmet would have made a difference in the outcome in this case. It is also unclear whether the ability to evacuate the victim immediately by helicopter would have made any difference to the outcome given the injuries described. (Source: Greg Hill)

SLIP ON SNOW—UNABLE TO SELF-ARREST

British Columbia, Selkirk Mountains, Palisade Mountain

On August 19, two members of a week-long climbing camp based at the Great Cairn Hut were descending the north side of Palisade Mountain on intermittent snow slopes. Around 4:30 p.m., and approximately 200 meters above the glacial valley floor, D.M. was walking sideways across a 35-degree, 20-meter-long snow slope when his foot slipped. D.M. tried to self-arrest with his ax but failed. He accelerated down the snow slope, hit a medium sized boulder at the end of it and continued to tumble over rock talus for a further five meters. M.E., who had been descending through the adjacent scree and boulders, reached him quickly and immediately carried out a thorough primary assessment, administered required first aid, and spent time ensuring that D.M. was comfortable while discussing the options of what to do next. It was clear that D.M. had a serious hip injury and that a helicopter evacuation would be required. D.M. was also experiencing some problems with breathing on his left side, and minor internal injuries were suspected even though his ribs appeared to be unbroken. M.E. hurried on to the Great Cairn Hut to summon help, arriving around 5:30 p.m. A satellite phone rented for the camp was used to call Alpine Helicopters in Golden.

The rescue team and their equipment had to be slung in on a long-line from a staging area at the bottom of the slope. D.M. was stabilized with a body air splint and prepared for helicopter evacuation. The crew and patient were in flight for the Golden hospital by approximately 8:00 p.m.

After full x-rays of his neck, spine, ribs, and hip, and failure to relocate his left hip into its socket, D.M. was transferred to the trauma center at Foothills hospital in Calgary. The dislocation movement had broken the hip joint and there were also a number of bone chips. D.M. now has a

permanent plate to hold everything together. He also had some slight cracks in his lower back vertebrae and required some fluid drainage from the left lung area.

Analysis

D.M. subsequently noted that he had moved down steeper snow slopes further up the mountain and had negotiated lots of similar slopes in the past. He remarked that he tried to self-arrest with his ax but that it was pulled from his hand in the first moments and he was trying to grab it again. He felt that he was not complacent about the slope but he didn't anticipate losing hold on his ax or the speed of his slide. This illustrates the need for climbers to consider various factors in moving in the mountains: potential hazards, the ability to react and respond in the event of an incident, the potential consequences of an accident, and accident prevention through route selection and adapting technique. In this case, D.M.'s inability to self-arrest quickly along with the snow slope's short length and lack of run-out resulted in a serious crash into the rocks below. While he might have gone down through the rocks instead, this has its own hazard and moving down snow slopes is often a tempting faster alternative. However, had D.M. traversed the slope by facing more into it and holding his ax in more of a self-arrest position, he may have been in a better position to self-arrest more successfully.

This accident happened on the second day of a week-long fly-in camp and so the satellite phone was invaluable in evacuating D.M. in a timely manner. D.M. was wearing a helmet and thus did not suffer more extensive injuries. (Sources: D.M. and Marcus Eyre)

FALL ON ROCK, CLIMBING ALONE AND UNROPED

British Columbia, Dowler Range, Mount Dougie Dowler

N.S. (25) departed around noon on November 26, from Quadra Island by boat and landed at the most easterly of three creeks on the south side of Bute Inlet to attempt a solo climb of Mount Dougie Dowler (6,363 feet) in the Dowler Range on Bute Inlet, about 40 miles north of Powell River. The trek into the base of the mountain follows the creek and some fairly steep terrain likely requiring some bushwhacking. N.S. had left instructions with a friend on Quadra Island to get in touch with his family if he was not back within several days. He did not, however, leave details of the route he intended to take—only his destination.

On November 28, the friend contacted family as instructed. The first search was initiated by the auxiliary Coast Guard out of Campbell River, who quickly located the boat N.S. had left at the creek mouth. With no indication he had returned to the boat, it was decided to launch a search. Campbell River Search and Rescue became involved, and a helicopter was requested from a nearby logging company. On Nov. 29, the body of N.S. was located from the air in a snowfield. The site was about 1,000 feet below the summit and a fairly exposed and long climbing route. It was apparent on