down. The guide candidate descended to Moraine Lake and the pilot and two rescuers spent the night with the helicopter. By mid-morning the next day, the weather improved enough to allow the helicopter to complete the evacuation of the rescuers and the body.

Analysis

All of the climbers were wearing helmets. This is a heavily traveled route, possibly the most popular in the Ten Peaks area. This section of the climb was not known for rockfall. There were no smaller rocks or debris which accompanied the large block and which may have provided some warning. This incident is a reminder that there are inherent risks in mountaineering that cannot be completely eliminated. (Source: Parks Canada Warden Service, Helen Sovdat)

FALL ON ICE/SNOW, UNROPED, POOR ROUTE CHOICE, HASTE Alberta, Columbia Icefield, Mount Athabasca

On August 29 at 0500, F.W. (43), S.C. (34), and U.T. (37) set out to climb the North Face of Mount Athabasca. They reached the summit at 1730 and started to descend by the normal route. The group found that their crampons were balling up with the wet snow, but a hard layer ten centimeters down made them decide to keep their crampons on. At the top of a snow-and-ice feature known as the Silverhorn, F.W. began to descend the steep snow slope instead of taking the easier shale trail to the left. S.C. suggested they follow the shale trail down, but F.W. felt that it would be quicker to go down the snow slope. F.W. started down the slope and then turned to face in, saying that it was getting icy. S.C. was about ten meters above F.W. and heard him shout and watched him fall down the steep slope and out of sight. F.W. did not respond when S.C. and U.T. called him. They descended the shale trail and short-roped down the standard route. Near the base of the Silverhorn, they saw F.W.'s ice ax above the bergschrund, 400 meters below where he had slipped.

At 1900, S.C. climbed to the bergschrund edge and found F.W. one meter down and lying on secure snow. He responded to his name but had obviously sustained multiple injuries. S.C. left F.W. lying on his side and put extra clothing around him to keep him warm and stabilize his neck. U.T. was a less experienced mountaineer, and S.C. did not want to leave U.T. with the victim in the worsening weather, nor allow U.T. to go down the crevassed glacier by

herself. So S.C. descended with U.T. to get help.

At the toe of the glacier, they met two other climbers. D.R. went back up to the bergschrund and reached F.W. at 2030, while S.C. descended to get help from the Warden Service. F.W. was unresponsive and his airway was blocked with blood. D.R. did CPR for an hour with no response or signs of life and so left F.W. to hike down. D.R. met up with responding Park Wardens and a Medic on the moraine near the base of the mountain. With D.R.'s news, it was decided to wait until morning to recover F.W.'s body.

Heavy snowfall that night prevented the Park Wardens from flying to the site until 1100 the following day, at which time they did avalanche control with explosives to make the site safe for rescuers. Two size 1.5-2.0 slab avalanches

released and buried F.W. with two meters of snow. At 1325, his body was helislung off Mount Athabasca.

Analysis

F.W. was an experienced mountaineer and a member of a search and rescue team in New Zealand. The group was in a hurry to descend after spending longer on the ascent than they had expected. It is likely that F.W.'s slip was caused by his crampons balling up with wet snow on the initial, lower angled part of his chosen descent route. The hard snow and ice surface on the steep face that followed prevented him from self-arresting his fall. After recognizing the poor snow conditions on the summit ridge, F.W. could have opted for the safer route down the shale trail, or could have asked for a roped belay to check out the snow descent. (Source: Lisa Paulson, Jasper National Park Warden Service, S.C., member of climbing party)

HANDHOLD CAME OFF—FAILURE TO TEST HOLD, FALL ON ROCK, CLIMBING UNROPED

Alberta, Jasper National Park, Mount Colin

On September 7, S.A. (35) and L.B. (26) set out to climb Mount Colin by the Southwest Face Direct route (III 5.7). The pair decided to solo the first few 5.5 pitches to save time. At 0900, one hour into the climb, S.A. was thrown out of balance when he grabbed a loose handhold. He fell 60 to 80 meters. L.B. saw him unsuccessfully try to stand up.

Park Wardens heli-slung into the area and climbed to the victim. S.A. had come to rest on a ledge in a steep rock gully to the left of the buttress he was climbing. S.A. had died from extensive trauma. His body was lowered off the mountain and heli-slung down to the awaiting ambulance.

Analysis

Climbers are sometimes lured into solo climbing easier pitches. However, Canadian Rockies limestone is often loose, particularly on lower-angled terrain, which is why it is a good idea to rope up. (Source: Lisa Paulson, Jasper National Park Warden Service)

AVALANCHE, FALL ON SNOW, INADEQUATE PROTECTION Alberta, Jasper National Park, Mount Woolley

On November 13 at 1000, a party of three (ages: 25, 26, 26) set out to climb the Japanese Couloir of Mount Woolley on a clear morning with light winds. They were climbing together, equally spaced along a 50 meter by nine millimeter rope with one ice screw in between each climber. The climb was mostly hard snow and ice on a slope angle ranging between 40 and 50 degrees. Around 1215, the lead climber was near the top of the couloir when the snow became boot-top deep and he triggered a slab avalanche up to 50 centimeters deep by about 50 meters wide. The lead climber was knocked off his feet and was swept down with the avalanche. One of the group members believes the rope broke when all three climbers momentarily hung from the highest screw. It is likely that the second screw pulled out when it was shock loaded. All three climbers fell approximately 500 meters over hard snow, ice, and rock outcrops.