slope and over the edge. He passed close enough to the British team to reach toward them, but he was out of reach.

Schryer fell past Nowak, who was able to hold the fall. Nowak was pulled into the ice by the force of the fall. The ice screws placed by Schryer all held. Nowak shouted to Schryer but got no response. He could, however, hear what sounded like snoring, which confirmed that Schryer was breathing. No one on the route could see Schryer at this time. However, all knew what happened and began communicating about how to respond.

Nowak lowered Schryer somewhat in an attempt to position him in the initial gully. A Brit rappelled down two 60-meter ropes and assessed Schryer's condition. He was initially unconscious, then regained consciousness. The Brit and Nowak coordinated lowering Schryer, with the Brit rappelling along side him for support.

Schryer was semi-conscious with bleeding cuts evident. He had vomited blood. Schryer reported pain in his right knee and shoulders when touched. The other Montana climber arrived. Nowak had him collect warm clothing from the packs just below and bring them up to help keep Schryer warm. They positioned an empty pack and coiled ropes under him to insulate him from the snow. Despite this effort Schryer shivered and complained of the cold. The other Mountaineer rope team arrived during this time. They had to complete the final pitch in order to descend safely. They cleaned Schryer's pitch upon descent and found that all three ice screws were secure.

Schryer was helicoptered to the lodge and taken by ambulance to Calgary where he was treated for a basal skull fracture and other injuries and released several days later.

Analysis

The immediate cause of the accident was a fall on ice, with inadequate protection as a contributing cause. Schryer himself remembers almost nothing of the accident, and can offer no explanation for either declining to clip the Brit's protection or not placing other protection on the last 30 feet. While Schryer had five years of experience in rock and alpine climbing, this was only his second season on water ice. Banff Warden Percy Woods commented that placing an ice screw before the transition from steep ice to less-steep ice at the top of a waterfall is important because climbers are more likely to fall as they change over from front-pointing technique to flat-footing. This transition can be awkward. He said that falls at the transition are the second most common cause of waterfall ice climbing injuries in the park—after getting hit by snow and ice falling from above. (Source: Steve Firebaugh, The Mountaineers)

FALLING ICICLE, FALL ON ICE, INADEQUATE PROTECTION

Alberta, Waterton Lakes National Park, Cameron Lake Road, Pearl Necklace

On March 2, a climber was five to seven meters into a lead on Pearl Necklace (50 m. WI 5+), without placing any protection. He had placed a tool

and kicked one foot into a free-hanging icicle when it broke. The climber barn-doored backward, then fell, hitting the ground shortly after the large icicle. He landed feet first then rolled a short distance downslope. He suffered a broken tibia and fibula in his left leg.

Analysis

The climber gambled on an unprotected move onto a risky icicle, with the potential of groundfall as a consequence. (Source: Parks Canada Warden Service, Brent Kozachenko)

FALLING ICE

Alberta, Banff National Park, Louise Falls II WI4+

On March 7, three climbers were climbing the left line of Louise Falls. The temperature in the Lake Louise area had been at around zero degrees C, then dropped to -26 degrees C in the couple of days before March 7. The lead climber had lead the left edge of the crux pillar and up to a tree belay. He led the route using two 60-meter 8.5mm ropes. His two partners were anchored to two ice screws below the left edge of the pillar. The lead climber brought up most of the slack in both ropes up to the top belay. He clipped the one rope into the end of his daisy chain and put the other line on belay. Climber #2 was belayed up to the anchor. J.D. (37) was waiting in the belay cave to begin his ascent of the final pitch. The rope to J.D. suddenly became taut with sufficient force to blow out all but the last bartacks in the lead climber's daisy chain. J.D. had been standing in a cave under a large veil of hanging ice. This veil of ice cracked off, fell and crushed him when the ropes dragged him into the path of the ice. He fell 10 to 15 meters down the face of the ice climb and came to rest hanging from his harness on the rope.

Two other climbers were just approaching the base of the pillar on the climber's right hand side when the accident occurred. They rappelled at an angle over to the fallen climber and reported that the victim had no vital signs—no pulse, pupils fixed and dilated. The two other climbers lowered the victim to the bottom of the climb. The accident was reported to Warden Service Dispatch and the deceased victim was later evacuated by helisling by Warden Service rescue crews.

Analysis

Free hanging icicles and veils of ice pose a hazard to climbers at any time. Hazards are increased whenever there is rapid and significant change in temperatures, as ice responds by contracting or expanding. This can cause the ice to crack and to become more susceptible to breaking. An earlier climbing party had noticed the ice near the pillar had made loud cracking noises twice during their ascent. They were unconcerned because the crux pillar was supported from below and their route was not underneath any free hanging curtains. It is unclear whether the victim's party was present when these cracking noises occurred. (Source: Parks Canada Warden Service, Marc Ledwidge, Edwina Podemski)