and 1100, the NPS started hailing him and he considered taking the offer of having warm, dry clothing lowered to him. However, he then realized that he was becoming hypothermic, and in the face of the oncoming storm should leave the mountain. He left all his equipment on the face and was evacuated around 1700 on Wednesday. (Source: John Dill, SAR Ranger, Yosemite National Park)

EXPOSURE, FATIGUE, INADEQUATE CLOTHING AND EQUIPMENT California, Yosemite Valley

On October 28, 1984, at 1025, David D. Dryden (19) reported that he and Thomas Apel (19) had been climbing Lost Arrow Spire, and due to unexpected fatigue, they had to spend the night on top. Sometime in the night Dryden noticed his friend quit shivering, become disoriented, give inappropriate responses and comments in conversation, become weaker as time went on, and finally become unconscious. Dryden said he then returned to Yosemite Valley to alert NPS Rangers and to arrange a rescue of Apel.

Dryden said that after he left Apel and completed the Tyrolean to the edge of the Valley, he ran to Yosemite Valley, and before he got very far he ran into Robin L. Madgwick who was headed to the Spire for a climb. Madgwick told Dryden that he and his climbing buddy would take a sleeping bag to Apel on top and help Apel out as much as possible while Dryden went to the Valley to alert NPS Rangers.

Ranger John Dill was flown to the top by 1200, and found the victim to be unconscious and appeared to be dead. He was flown to Yosemite Medical Clinic and pronounced dead at 1310.

An interview with David Dryden revealed that both of them were tired due to their "inefficient" climbing, not because they were out of shape. It was Apel who suggested that they bivy. They had jackets and sweaters, and at the time, 1900, there wasn't much wind. By 2000, the winds picked up. Dryden remembers it being 2100, then midnight, and that they talked during that time, though the wind made it difficult to hear. Dryden said they were shivering the whole time. By 0400, Dryden noticed Apel's deterioration, which continued to the point where, by 0600, Apel was leaving his hands out of his pockets and giving totally inappropriate responses. Finally, Dryden lay on top of Apel and rubbed him in an attempt to warm him up. He began mouth to mouth respiration sometime after that, but he noticed Apel's eyes had become foggy and he was totally unresponsive. By 0800, Apel was "completely out of it." By 0900, Dryden felt there was nothing he could do for Apel. The sun wasn't out yet and it was still windy, so Dryden decided to jumar across the Tyrolean and to get the Rangers. (Source: Carol Moses, Ranger, Yosemite National Park)

Analysis

Dryden said they were both leading 5.10 and had done 5.10 routes in the Valley before. He felt they were both good, capable climbers, but that they "just weren't experienced." He felt they were prepared for their climb, but that they "just didn't think they would spend the night on top of the Spire." (Source: Carol Moses, Ranger, Yosemite National Park)

(Editor's Note: One can't help but continue to wonder how two individuals in the same predicament

come to such different ends. In any case, John Dill's comments about Yosemite weather clearly indicate the desirability of being prepared to spend a cold, wet night or two-even if the plan is to do only a day climb.)

FALLING ICE, POOR POSITION Colorado, Rocky Mountain National Park

On January 15, 1984, around 1345, Elizabeth Wheeler (24) was standing at the base of an ice fall watching two friends climb when a piece of ice weighing about 12 kilograms and falling about 20 meters struck Wheeler on the head. The ice had broken away when one of the climbers above was placing a tool. Wheeler was knocked unconscious for several minutes and experienced disorientation, spinal discomfort, and a severe headache after regaining consciousness. Park rangers responded, immobilized the spine and evacuated Wheeler to an ambulance by about 1900. (Source: Charlie Logan, Ranger, Rocky Mountain National Park)

Analysis

Wheeler was wearing a climbing helmet at the time which, no doubt, prevented a considerably more serious injury. Observers should stand clear of potential falling debris or equipment. The usual forewarnings from above are not always possible. (Source: Charlie Logan, Ranger, Rocky Mountain National Park)

FALL ON SNOW, SKIING, INADEQUATE EQUIPMENT Colorado, Rocky Mountain National Park

On February 5, 1984, Robert Kelman (53), Pat Lang (30), and Robert McDonald (25) started at 0130 from Bear Lake (2842 meters) in Rocky Mountain National Park to ski the popular summer walking trail to Hallet's Peak (3814 meters) via Flattop Mountain. Temperature was about -7° C, winds moderate with clear sky, and trail hard packed and icy. At 3350 meters Lang led a traverse of a 60 meter long, hard packed, 30 degree snow field which had a 20 meter run out ending in trees. Kelman mentioned the traverse seemed unsafe, especially since his skis did not have metal edges, and said he would walk across the bottom of it on the way down. A hundred meters further timberline was reached, skis were cached, and easy hiking led to Hallet's Summit by 1130. On descent the group reached the cached skis at 1300. Lang skied on ahead. McDonald decided the snow was too hard packed to ski and proceeded to walk. Kelman skied to the snow field and observed Lang's track, taking it high. He decided to ski it lower and started traversing about ten meters from the bottom. He slipped and rapidly accelerated, striking his lower left leg against a tree. McDonald assisted Kelman into a bivouac sack. Lang skied for help, getting to the ranger station in about an hour. A rescue helicopter was dispatched and reached the party at 1630. Kelman was evacuated to St. Joseph's Hospital in Denver arriving at 1730. He was diagnosed as having a fractured left tibia and a flesh wound in the left leg unrelated to the fracture. (Source: Robert Kelman)

Analysis

I have made this climb in winter three times and its easiness led to carelessness in an easily prevented accident whose consequences could have been more serious except