

Rangers arrived on scene by 5:00 p.m. Park medics stabilized Holenberg and the rescue team conducted a semi-technical rescue operation to remove him from the boulder field and get him down to the trail surface. He was then evacuated by wheeled litter to an ambulance at the trailhead, transferred to a medical helicopter, and flown to the UT Medical Center in Knoxville. Holenberg suffered a fractured femur, fractured vertebra in the lower back, and a fractured wrist.

Analysis

The investigation revealed that the rope was military surplus Kevlar material and that there was a melted/frayed cut where it crossed over a sharp rock edge during Holenberg's rappel.

There is no indication that the victim was an experienced or even a novice climber. Each year we report on rappelling incidents such as this in hopes that the word will get out regarding proper technique for rappelling—even for those who only want to engage in this aspect of the sport of climbing. (Sources: Rick Brown, District Ranger, and Jed Williamson)

AVALANCHE—DID NOT READ PUBLISHED AVALANCHE WARNING, WEATHER, POOR POSITION, FAILURE TO FOLLOW INSTINCTS (ONE CLIMBER), CARRIED BEACONS—BUT NOT TURNED ON

Oregon, North Sister

We departed the Pole Creek Trailhead, 5,200 feet, at 1:00 a.m. on May 22 with the intent to climb North Sister via the Early Morning Couloir in a day. We arrived at 8,500 feet below the Northeast Face in four hours, five miles from the trailhead. We took a long 1½ hour break to evaluate the atmospheric conditions as we had experienced intermittent precipitation and variable cloud cover on the approach. The clouds showed no signs of building.

At 6:45 a.m. we departed and climbed the Northeast Ridge separating the Early Morning Couloir and the Villard Glacier routes gaining the North Ridge by 9:00 a.m. Of particular interest was the change in snow conditions; a good bucket step was typical on the east side. However, we found a solid but breakable crust on the west-facing slopes. We summited at 10:15 a.m. Conditions were still variable with the cloud cover decreasing and the ambient air temperature increasing.

The three viable descent options included the standard route on the southwest side of the mountain, our ascent route, or the Thayer Glacier Headwall route on the East Face of the mountain. Due to the time of day, the warming temperatures, and unfamiliarity with the snow conditions on the Southwest side of the mountain, we elected to descend the Thayer Glacier Headwall route. James Brewer and David Byrne had attempted the route the previous year and were familiar with the lower sections. Ad-

ditionally, we observed that another team had just ascended and descended the route.

The ropes came out and we set up a rappel from Prouty Pinnacle. We had completed our rappel by noon and descended unroped. The snow conditions had become soft as we plunge-stepped our way down, sometimes up to our mid shins. The temperature was continuing to rise, especially on our descent route, which doglegs to skiers left around 9,400 feet. From there it is roughly 700 feet to the top of the steepest part of the route around 8,800 feet. David Byrne had arrived at 8,800 feet with James Ellers approximately 150 feet above, Nancy Miller approximately 150 feet above James Ellers, and James Brewer approximately 150 feet above Nancy Miller, all on skier's right of the main gully. David Byrne had just placed a rappel anchor when James Brewer yelled, "Slough!" then, "Avalanche!" in the same breath. A point release slide started above James Brewer, above the dogleg, and instantly grew in volume in both width and depth as it entrained the loose snow in its path. It missed James Brewer but swept James Ellers and Nancy Miller from their stances, despite their attempts at self-arrest once the slide overcame their positions.

David Byrne, who was toed in and looking up slope, was able to move up and out of the gully. James Brewer and David Byrne watched the deposition zone fan out 700 feet below for clues. Both James Ellers and Nancy Miller were observed in the debris fan. James Brewer and David Byrne connected at 8,800 feet and contacted 911 using a cell phone at 1:10 p.m. to request SAR mobilization. James Brewer and David Byrne called out to their partners and then began rappelling and down-climbing via slopes to skier's left of the main gully. Nancy Miller, who had the highest position in the debris fan, was reached in approximately 30 minutes. Nancy Miller provided a detailed assessment of her condition and information was relayed to authorities: critical conditions, including broken vertebrae, a compound fracture of the left wrist, several pelvic bone breaks, a dislocated right shoulder, and a broken left clavicle. James Brewer moved down to James Ellers, who had fractures to both lower legs, plus soft tissue damage. (It is important to note that both climbers continued to swim out of the debris once the debris fan reached less steep terrain.)

Efforts were made to provide first aid and comfort to James Ellers and Nancy Miller until the Camp Sherman Hasty Team arrived at 3:30 p.m. Shortly thereafter, additional Deschutes SAR members arrived on the scene with the assistance of the Oregon National Guard. James Ellers and Nancy Miller were packaged and air lifted to Sisters, where they were then transferred to the hospital in Bend. Thanks to the efficiencies of the SAR groups, all team members and rescue personnel were off the mountain by 6:30 p.m.

Analysis

James Brewer (51), David Byrne (38), James Ellers (36), and Nancy Miller (40) have been climbing together for over seven years, primarily in the Cascades and on trips to Canada, Alaska, Colorado, and Nepal. Each has at a minimum Level 1 Avalanche training and mountaineering first aid; James Brewer has WFR training.

Our experience humbled us all. Descending the Thayer Glacier Headwall route appeared to be the best decision based on what we knew at the time. In this case, it was elected as the quickest way down the mountain. It also avoided the longer and circuitous south- and west-facing slopes on the standard routes, which traverse several steep sections and under significant rime coated gendarmes and were receiving full sun. As is typical on the Cascade headwall routes, the angle varies between 40 to 50 degrees with some steeper sections. We assumed that the snow conditions on the headwall would be similar in character to the ascent route.

As we descended, we were alarmed by the speed at which the conditions were deteriorating. We knew we were out much later in the day than we had hoped. Our long early morning break certainly set us back, although we felt it was worth the wait to verify that the weather conditions were not worsening. As we worked our way down the headwall, we attempted to stay out of the gully and be aware of our surroundings. Fortunately James Brewer spotted the beginnings of the slide. His warning shout gave everyone a chance.

Out of common practice the avalanche forecast was checked on Thursday morning. No warnings posted at that time. We should have checked the avalanche forecast again on Friday but did not. We observed old slide debris on the mountain but saw no signs of recent slide activity. One team member later expressed that he had a strange feeling about the snow conditions on the ascent and, in hindsight, wished he had voiced this concern.

The slide that caught us had been triggered by a natural event. We carried our beacons on the climb but were not wearing them. Additionally, we were surprised by the amount of trauma that the slide caused to James Ellers and Nancy Miller. Providing the level of care necessary to treat the extensive injuries and subsequent evacuation would have required resources that are not carried into the mountains. Ingenuity would have been necessary were we in a remote location.

If we had not had the benefit of the SAR groups, the outcome most certainly would have been different. Many thanks to the Deschutes County Sheriff, Camp Sherman Hasty Team, the Oregon National Guard, and Deschutes Search and Rescue. (Source: David Byrne, with some additional information from Robert Speik)