

INADEQUATE BELAY ANCHOR, POOR POSITION, EXCEEDING ABILITIES

Washington, Seattle

On a field trip to Camp Long in Seattle, a Seattle Mountaineers climbing class was using the belay towers when the following occurred on February 22, 1985.

It was the end of the day and the other stations on the belay tower were being dismantled. The instructor was giving a few students the opportunity to use a mechanical belay device. The first student, a female, successfully caught the weight with the Figure 8. Shari Hogshead (40) was next. The instructor set up the system for her. The Figure 8 was being set up as one would set up a rappel using the device, with the Figure 8 clipped to the front of the harness and the rope wrapped around it. She was also clipped into the belay anchor through the back of her harness.

The belay anchor was below and about one meter behind the belay stance. The rope ran just above the level to the ground to a pulley attached to one of the tower poles about 30 centimeters above ground level and 12 meters from the belayer. For a sitting belay, the rope would form a triangle, with the belayer's system at the apex.

Hogshead was standing on a little mound of dirt that made up one bank of a small drainage ditch between the belay anchor post and the runway. She was instructed to step forward to remove the slack, though the presence of the mound may have made this difficult. The weight was raised and then dropped. She clamped down tight and the belay was apparently quite static.

When the force of the weight reached the belayer, she was violently knocked to the ground at the same time as she felt tremendous pressure about her waist. She ended up partially in the drainage ditch, supported partially by the rope under tension.

She immediately complained of severe pain above her pelvis. She was supported while the tension in the rope was released and her harness removed. Then she was carried to the runway and placed on ensolite pads. Traction was applied, and she was placed on a piece of plywood and carried to the parking lot and an ambulance. X-rays revealed a compression fracture at T-12 (Source: Seattle Mountaineers report, February 1985)

Analysis

From the trip leader, instructor, and victim, the following points were made:

(1) Protecting standing belays at this particular training is probably inappropriate. The anchor and the first point of protection (the lower pulley) are lower than the belayer.

(2) The belayer should not have been attached to the anchor at the back, but rather, at the same point on the harness that the locking carabiner was attached. This caused tremendous forces, squeezing the belayer from the sides by her seat harness. This is only true if the topmost strand of the harness rides higher than the belayer's hip. If the seat harness rides entirely on the hip, these forces are well within the body's ability to withstand them.

(3) The slack between the belayer and the anchor should have been taken up.

(4) Demonstration of the mechanical belay followed by practice without the full force of the weight should precede the simulated leader fall.

(5) Communication between instructor and students needs to be clear.

(Source: Seattle Mountaineers, via George Sainsbury)

(Editor's Note: Thanks to the Seattle Mountaineers for sharing this report, which has application for all climbing instructors.)

AVALANCHE WEATHER, POOR POSITION

Washington, Whitehorse Mountain

On May 12, 1985, Denae Rideout (28), her cousin Jeff Tucker (27) and another cousin, Jeff Kollgaard set out to climb Whitehorse at 0800 as part of an annual Mother's Day family gathering. Rideout is reported to have climbed the mountain many times, and Tucker is said to have climbed throughout the world, including the Himalaya Range. They climbed the direct glacier route. About 1600, they were caught in an avalanche about 225 meters below the summit and two of them were partially buried but were able to extricate themselves. The party continued to climb in spite of the obvious avalanche hazard. Nearing the summit they were joined by two Seattle climbers, Edward Whalen and Brian Griffin. When the second avalanche occurred at 1630, one of the Seattle climbers was off the snow putting on his crampons. Kollgaard was covered to his neck, Tucker had only a hand sticking out, and the other two were completely buried. The climber not caught rushed to Kollgaard and freed him, the two then dug out Tucker. These three could hear the buried Seattle climber yelling, and quickly extricated him. A 45-minute to one hour search failed to locate Denae Rideout. The party marked the point where Denae had last been seen with a blue foam pad secured in the snow and started the descent for help.

The victim's body was located the next day at 1030, following over 200 hours of search time by the 18 rescue personnel from Seattle Mountain Rescue. (Source: *Bergtrage*, Seattle Mountain Rescue Council, 85-09, October 1985)

Analysis

This is a popular climbing place, with three primary routes to the 2100 meter summit. The 500 people who make the climb each year usually do so during the summer months, according to U.S. Forest Service employee Howard Barstow, who further stated that this is one of the worst times of the year to climb the peak. A fresh snow had hit the day before, exacerbating the conditions.

Another factor here seems to have been that the desire to make the climb as part of an annual event perhaps clouded the otherwise good judgment these climbers would normally have followed. (Source: J. Williamson and *The Everett Herald*, May 13, 1985)

FALLING ROCK, RAPPEL ANCHOR FAILURE

Washington, Mount Rainier

Michael Maude (22) and Russell Ward (28) left Camp Muir for the Gibraltar ledge route in the early hours of May 26, 1985. They arrived at the Bee Hive around 0300 and began to cross the Cowlitz Cleaver. They came to a location where they could have either backed off or rappelled down. They decided to rappel. Maude lowered Ward down the edge. Part way down Ward was hit by a sliding rock, but was not injured. Maude then pulled the rope back up and set a webbing line around a rock to anchor a rappel. Maude was half way down when the rock gave way. Maude fell four to six meters and was also hit by the falling rock. Maude's climbing helmet had four large dents in it and his lower left leg was broken.

Ward then regained the ridge and headed for Camp Muir. The first person he met went to Maude's aid. Ward continued to Camp Muir where he contacted Ranger Henkle at 0500. Maude was rescued with the help of ten people. (Source: Mount Rainier National Park)

FALL ON SNOW, EXCEEDING ABILITIES, INEXPERIENCE

Washington, Mount Washington

On May 18, 1985, a group of 20 Boy Scouts, including six or seven leaders, were returning