

the three people rappelling together with packs was likely between 500–600 lbs. While it is impossible for any climbers to know definitively the exact force any selected anchor can hold, the tragic end to this event shows this weight was too much for this anchor. Statements and evidence indicate the anchor failure happened when the three were about ten feet into the rappel. The accident was compounded by the fourth member (meant to rappel last separately) being clipped to the anchor. Later observations of the area immediately around the anchor site showed few backup options, at least of the type and proximity that with the standard climbing gear available in the party's gear could have held the primary anchor in place. (Source: Kelly Bush, SAR Coordinator, North Cascades National Park)

### **FALL ON HARD SNOW—SLACK IN THE ROPE**

#### **Washington, Mount Rainier, Emmons Glacier**

On July 12 at 1545, four members of a seven-person Mountaineers group, Chris Clapton, Rebekah Koch, Theresa Fielding, and Tom Labrie, were descending the Emmons on one rope when Koch caught a crampon on some rope slack and tripped at 13,500 feet. Her fall pulled Fielding and LaBrie off their feet, and the three began to tumble down the 40 degree icy slope. Clapton went into self arrest and caught the fall, preventing a much more significant accident from occurring.

Labrie broke his nose and injured his leg during the fall. Fielding severely sprained her ankle. Clapton and Koch secured the team with an anchor. The party's second rope team, which included party leader Doug Smart, descended to the accident site. They were joined by an unassociated climbing team of three who offered to help. After the injured were stabilized, the assisting party descended to seek more assistance for the injured.

Meanwhile, climbing rangers at Camp Schurman, using a spotting scope, had already observed the climbers gathering near 13,500 feet shortly after the accident. This gathering, considering the location and time of day, seemed to indicate trouble, so rangers continued to observe. At 1654, the rangers saw the group of three climbers leave the scene and descend the Emmons Glacier route. Now, convinced there was something amiss, Climbing Ranger Jeremy Shank and volunteer Mimi Allin quickly geared up and began to ascend the route. At 1732, Shank and Allin met a single member of the three-person team who had unroped and run down the Emmons to report the accident. That climber informed the rangers of the nature of the accident and the victims' injuries. Realizing that this situation would require more equipment than they had, Shank and Allin descended to Camp Schurman and prepared for a longer evacuation and possible overnight on the mountain.

At 1812, Rangers Shank and David Gottlieb left Camp Schurman accompanied by Mount Rainier Alpine Guides Eric Stevenson and Dorja Sherpa. The four rescuers carried extensive overnight gear and medical equipment.

Around the same time, at the accident site, Smart chose to stay with LaBrie and Fielding. The three had a stove, shovel, parka and two sleeping bags (donated by the assisting party). Clapton then led the remainder of the group down the glacier back to their camp. Smart was unable to excavate a snowcave in the firm snow and use the stove, so the injured used the sleeping bags, while Smart wore the parka. The winds blew steady at 15-20 mph with higher gusts and below freezing temperatures. All three became hypothermic by the time the rescue party arrived at 2159.

The rescue team began clearing a site for tents and by 0015, the tents were erected and the guides departed back to Camp Schurman. The three hypothermic climbers were placed in a tent and rangers began administering hot water and food. It was a rough night. One of the tents partially collapsed under the wind and blowing snow as the temperatures dropped. At dawn, Gottlieb and Shank prepared the site and the patients for the helicopter extraction. The Oregon Army National Guard launched a Blackhawk helicopter from Salem, Oregon, at 0635 and was able to insert a medic on scene at 0757. By 0820, both patients had been hoisted aboard the ship, which then transported them directly to Memorial Hospital in Yakima.

The rangers descended the Emmons Glacier to Camp Schurman with Smart. Smart and the remaining members of his team then packed up their equipment and departed for White River.

### **Analysis**

Several things could have turned from bad to worse on this incident. The original fall caused by slack in the rope generated enough force to knock two of the remaining team members off their feet. Thankfully, the rope leader was able to arrest the fall. Slack in the rope during glacier travel is not only dangerous because of the tripping potential, but also it allows the faller time to accelerate, thereby generating greater forces (shock load) on successive team members. Glacier travel, with its potential for crevasse falls, requires a snug rope between team members. Paying attention and communicating with your partners along with adjusting pace to keep the rope snug is critical.

The initial accident blossomed into other potentially dangerous incidents. Unroping and running solo down the Emmons Glacier late in the day to report the accident could have added yet another victim should that climber have ended up in a crevasse due to weakening snow bridges. It's important to resist the temptation to let urgency overpower good judgment.

By choosing to stay with Labrie and Fielding, Smart also became hypothermic. While one's intentions may be good, critically evaluating one's own ability to assist versus the possibility of becoming a liability must be considered carefully. Like the other climbers, Smart was tired after a long summit climb. In the end, he did not have the energy to erect a wind-break or fire up the stove and became a third victim in need of assistance.

Consideration was given to trying to hoist the patients off that evening, but given the technical nature of the terrain and the lack of experience of most paramedics in a technical alpine environment, it was determined that inserting a medic without mountaineering experience on the upper mountain would have set the scene for creating a fourth victim. The decision was made to wait until climbing rangers could secure the site and prepare for the hoist operation. (Source: Mike Gauthier, Climbing Ranger)

## **LOSS OF CONTROL—VOLUNTARY GLISSADE, IMPROPER USE OF CRAMPONS**

### **Washington, Mount Rainier, Inter Glacier**

On July 15 at 1348, the communication center notified Camp Schurman that a climber had broken his leg near the bottom of the Inter Glacier. Climbing rangers Chris Olson and Stoney Richards left Camp Schurman at 1415 arriving on scene at approximately 7,400 feet on the Inter Glacier 30 minutes later with a Cascade Litter.

Randy Kruschke (age unknown) had been glissading when his crampon caught an edge causing him to tumble and break his right tibia and fibula. Kruschke's teammates had already splinted his leg with a foam pad and ski pole and after quick evaluation of the injury, Olson elected not to re-splint the fracture to prevent further injury or delay. Olson and Richards packaged Kruschke into the litter and with the assistance of Kruschke's teammates lowered him to the base of the Inter Glacier where he was wheeled down to Glacier Basin. Kruschke was airlifted to the hospital from Glacier Basin

### **Analysis**

Crampons are a great tool when on firm snow and ice but quickly become a hazard as the snow warms. Knowing when to use them and when to remove them—and then stopping at the appropriate time to make the change can lead to preventing this kind of accident. Novice climbers often mistakenly assume that they must wear crampons whenever on snow. It is hard to imagine a time when glissading with crampons would ever be considered a good idea.

Kruschke chose to leave his crampons on even though it was late in the day, the snow was soft, and he was glissading. In the classic fashion, when Kruschke picked up speed during his glissade, the rear tines of his right