

Dr. Shively was reportedly an experienced climber, having summited Mount Hood, Mount Adams, and Mount St. Helens. However, climbing these moderate snow clad peaks is not adequate preparation for the steep friable volcanic slopes guarding the gendarmes and summit blocks of North Sister. (Source: Robert Speik)

## **FALL ON ROCK, PARTY SEPARATED**

### **Oregon, Middle Sister**

On August 15, Trent Gabel (16) fell to his death, most likely from dislodging rocks, while attempting to climb a route on Middle Sister. He was with Pathfinders Youth Group from Tillamook, and at the time of his fall was accompanied by an adult. But they became separated when Gabel moved out of sight to check out the route ahead while his partner was taking photographs. (Source: Jeff Scheetz, John Miller, and two articles from *The Oregonian*.)

## **FALLING ROCKS**

### **Utah, Big Cottonwood Canyon, Storm Mountain**

On February 17th, Kris (27) was hit by spontaneous rockfall while practicing solo aid-climbing on Six-appeal, a 5.6 bolted route at the Storm Mountain picnic area in Big Cottonwood Canyon. The bolts are spaced widely on this route, and he was placing small nuts between them. The rope was anchored at the bottom end, and he was using a clove-hitch as his solo-device, backed up by a figure-eight knot further along the rope.

He was also moving a fixed line up the route as he climbed, fixing it to the top bolt each time he passed one. Temperatures were warm for February and snowmelt was running down the route and down a chimney left of the route. Kris had moved up and down parts of the route several times when a rock slab released spontaneously from the chimney. He estimated the size of the rock to be ten feet by three feet by one foot thick. He jumped away from the rock and managed to avoid most of the contact. The slab hit his foot on the way by, breaking his ankle, tibia, and fibula in five places. Smaller rocks also hit his face and helmet. He took about an eight-foot fall, ending up hanging from a bolt secured by the clove-hitch. He was able to switch to his fixed line and rappel to the bottom of the route. Climbers from the nearby Bumblebee Wall had heard the rockfall and knowing that Kris was on the route, they came by to check on him and called for help. SAR members met them at the base of the crag and carried Kris to the road where he was transported by ground ambulance. He spent three months in bed or on crutches and has now recovered and plans to climb again this summer.

### **Analysis**

Kris was an experienced climber, wearing a helmet, and practicing good techniques on an easy route. Solo aid climbing can sometimes produce huge fall-forces compared to normal lead falls, but all of his gear held. Spontaneous rockfall can happen at any time, but it is by far the most likely

in Spring freeze-thaw cycles, when cracks are forced wider by snow and ice, and then the ice melts, taking out the “glue” holding the rocks together. This is a spot that gets climbed thousands of times a year, and appears solid. It’s not known for rockfall, though perhaps it should be. I’ve personally had my closest call from rockfall about ten feet away from this, just on the other side of the chimney. (Source: Tom Moyer—Salt Lake County Sheriff’s Search and Rescue)

## **FALL ON SNOW—UNABLE TO SELF-ARREST DURING VOLUNTARY GLISSADE, POOR POSITION, WEATHER**

### **Washington, Mount Rainier National Park, Mount Ruth**

On June 22, a group of nine Mountaineers and I set off to attempt Mount Ruth, a spur-peak on the north-east flank of Mount Rainier. As we encountered snow several hundred feet below Glacier Basin, the starting point of our ascent, Mount Ruth would be classified as a “snow scramble.”

Around 1:00 p.m., we achieved the summit without incident. After soaking up the sun rays filtering through the rapidly moving clouds, we began our descent. After descending less than 1000 feet, the clouds thickened and engulfed us. An occasional fleeting sunny break allowed us to find our route. Leadership with respect to route finding on the descent was rather informal and the group diverged as we descended. As realized only later, several of us ended up considerably to the left of the relatively slope we had ascended. Our descent trajectory placed us directly above the rock cliff bands purposely avoided during our ascent.

The urge to glissade in the mushy summer snow was irresistible to many of us, although a few individuals refrained, perhaps more cautious as a result of greater experience with the conditions confronting us that day. Although I had never been an overly enthusiastic “glissader,” I became caught up in the excitement of the moment and followed several others. In proper glissade position (as taught by the Seattle Mountaineers), I found myself “racing” a fellow Mountaineer when the clouds once again descended upon us. Immediately, I forced my ice ax into the snow to act as a brake. With no immediate reduction in velocity and continued acceleration, I instinctively rolled over into a perfect textbook self-arrest position. To my shock and disbelief, my acceleration continued.

Earliest memories of the initiation of my fall are of sheer terror. I vaguely recalled the series of rock bands, and that they protruded perhaps 20 feet above the height of the snow. Realizing I was well above them, logic continued in my thoughts, and as seconds passed, I speculated that if I hit the rock band, my fall would terminate.

I was not stopped by the rock band. It acted more as a springboard, deflecting my fall over its rocky edge. I was then thrown through a long narrow rock chute approximately 300 feet in height, extending from the top of the cliff band to an open snow field littered with various sized rock debris from the cliffs above. I was ejected onto a snowfield of lesser slope scattered