Though the cliff stood only a half mile from Route 73, rugged terrain made the evacuation difficult and nearly five hours passed before he reached the Keene Valley Hospital. He was pronounced dead at 10:25 p.m. by Dr. Tilman Kluwe of Keene.

Richard Parker (20) and his brother, both students at Middlebury College, had climbed a difficult and unfamiliar route on the cliff. It had taken them three hours to reach the top of the 300 foot climb. Richard said they were at the summit at 5 p.m.

The accident occurred as they were descending at 5:30 p.m. They used two 150 foot ropes for the rappel and both finished the first half of the descent safely.

They passed the rope around a tree, 150 feet from the ground, and Richard rappelled to the base of the cliff. He had just unclipped from the rope when his brother fell. (Source: *The Lake Placid News*, November 4, 1976)

Analysis: Rescuers are certain that the accident was not due to faculty equipment. Douglas was using a seat harness and a figure-of-eight rappelling device for frictional braking of the descent. Both men were experienced climbers, but Richard thought his brother might have been improperly set up for the rappel.

In any rappel both strands of the doubled line must pass through the climber's braking system. When Douglas fell he was apparently holding on to only one of the strands, because one end of the rope was nearly pulled back around the tree. (Source: *The Lake Placid News*, November 4, 1976)

FALL/SLIP ON SNOW AND LOSS OF CONTROL IN A VOLUNTARY GLISSADE—Washington, Mt. Baker. I am putting these words on paper the day after a more than 1,000 foot plunge down the northwest face of North Twin Sister, between Welcome and Acme, near Mt. Baker, Washington. If you want to know what it feels like to go over the Victoria Falls or some such, welcome to this story. If you think the modern ice-axe is the zenith of snow safety, then I urge you to read on. And if you are one of the hundreds who carelessly trudge up Mt. Baker—a companion to the Twins—each spring, then let me warn that one of these days we are going to open our papers and read about a comparable plunge off the novice route up "Big Steep White," as the Indians called it. The difference will be that the Baker plunge ends in a crevasse, and the story will be written by observers rather than participants.

In the early summer, when the avalanches are over, the northwest face of North Twin Sister is about 1500 vertical feet of packed snow. It starts with a gentle bowl at 5000 feet, and then slopes upward through 100% grade to a short, steeper section about 100 feet from the 5570 foot top. It is observable throughout its length from logging operations at 3500 feet, where I asked temporary residents Bob and Robin Howell to keep an eye on my ascent. Furthermore, the snowfield is gently curved across the face, so that in July firm conditions any plunge will tend to the centerline and away from rock

ridges framing the snowfield. There were, in July, no floating rocks on the surface. The overall grade is no steeper than the final 1000 feet of Baker.

I was carrying a pack with emergency overnight essentials. I removed the pack at what my altimeter told me was about 6000 feet to lighten the load for the last few hundred feet. On the final lip of the snowfield, my footing gave way; my ice-axe could not hold me, and in what seemed less than a second was flying backwards and then felt my body sliding over the snow. (The Howells later said that one moment they saw me at the top and the next glance I was down at the bottom.)

Blinded by snow as I descended, I could not see whether my body was drifting off center toward the rocks. I was concerned that too much flailing around might have such an effect. At the same time, I was trying to get my ice-axe into the orthodox braking position. I did not see "life flash before me," but I did decide to "let go," and spent a few hundred feet mentally "floating," and wondering with some detachment as to whether I would shoot right over the bowl at the bottom (impossible) and land in Acme!

Then, near the bottom, I felt myself slowing down and managed to accomplish an ice-axe arrest by turning the adze into the snow. It was a wasted effort, as I would have come to a stop in another fifty feet anyway.

Apart from an incipient headache, torn trousers, some minor scratches, and lost sunglasses, everything seemed properly together. I decided I should immediately reascend for the pack, some 800 feet above. I didn't want any more unexpected descents, so the trip back to 6000 feet was accomplished in possibly exaggerated technical style; that axe went into the snow to its neck at each step.

I reached the frame pack and sent it down slope. It kept to center-line and made its descent without tumbling. I decided to follow it—but this time with a deliberate start in the arrest position, which I estimated should permit control, on a slope of that grade and condition. I estimated wrongly. Although I did manage to keep my axe in position for much of this second and shorter trip, there was no way I could have brought myself to a halt. In fact, I found myself being swung around the point like a clockhand. Even though the axe was not catching at handle tip, when I reached five to twelve, everything collapsed and I wasn't quite sure whether I was going headfirst or feetfirst until I neared the bottom again.

I rather groggily regained my pack. What had started out as a cloudless day was now turning to drizzle. As I left the scene, I mulled over the exact nature of the surface condition and I realized the snow had melted sufficiently at surface, that neither point nor blade of the ice-axe could get a grip on anything. On the other hand, the sub-surface was hard and icy and carried the body weight like a child whizzing down a playground slide. By the time I got to the logging area, my wrist was painful and I greatly appreciated the ministering and hospitality of the Howells. (Source: Raymond S. Rodgers)

Analysis: Outdoorsmen may object that people should not go upcountry alone. Everything is relative. I feel more secure, physically and philosophically,

where I go carefully into the hills, than I would feel in certain urban places. The more interesting question, for a climber, is whether being on ropes with others would have made any difference. I think not. Certainly not if the party were moving in unison, as is usually the fashion on Baker's novice route, and comparable climbs. Unless at least half the party were dug in static positions, the tumble of one would have pulled the rest down as well.

On North Twin it would not have mattered, except for the possibility of somebody strangling in a tangled rope, or meeting up with an ice-axe. But on the Baker route, where every May and June we see rapidly moving parties using their axes as walking sticks, or even without axes and other emergency equipment, the slide ends in a long crevasse north of Sherman Crater. (Source: Raymond S. Rodgers)

CLIMBING UNROPED—Washington, Copper Mountain. Harry Christiansen (24) and David Wells and Rick Ohlund were free climbing on the northwest side of Copper Mountain within Mt. Rainier National Park. Christiansen was standing on a rock ledge while his companion, Rick Ohlund was down climbing back to Christiansen's position. All of a sudden the rock ledge gave way and Christiansen free fell about 15 feet then continued rolling down a steep talus slope for an additional 85 feet. (Source: Elmer Schick)

Analysis: Reviewing the accident led to at least two possible ways to avoid another such circumstance: (1) because of the steepness involved not only on the rock pitch but also with the talus slope below, a belay of some type should have been used; (2) more thorough examination of the stability of the rock ledge also should have been done. (Source: Elmer Schick)

FALL/SLIP ON SNOW, UNROPED, INEXPERIENCE—Washington, Mt. Olympus. On March 21, 1976, Kris Robertson, Mike Kalvelage, Bill Hansen and I left the Hoh River road on a scheduled six day attempt on Mt. Olympus. We camped the first night just below the Hoh River bridge 12 miles from the road. Conditions required snowshoes for most of that distance, although the trail had been broken by a group ahead of us. The following day we pushed on to Elk Lake, arriving at 4:00 p.m. We could see a fresh trail going up the ridge toward Glacier Meadows and assumed the group ahead had left that morning.

At 6:00 p.m. we noted two figures descending the trail. It was snowing lightly, with temperatures at 38° F. When they arrived the two individuals reported that there had been an accident in their Wilderness West party, which consisted of eight young adults, 16 to 18 years of age, and their leader, Steve Stocksteder. The remainder of the party arrived in half an hour. They reported that the victim, Mark Landerville, had fallen down a steep avalanche gully about 1-1/2 miles from Elk Lake. He was crossing on a fixed line, not clipped in, when he slipped, lost hold of the rope, slid over a small cliff, and disappeared