packed by one man. The victim's skis and poles can be lashed to it to serve as forward handles and a rope to a following skier gives excellent control.

Utah—Pete's Rock, Salt Lake County: In the early part of September, 1953, John R. Bendall (25) was rappelling 90 feet on the Wasatch Mountain Club practice rock. The rope used was a half-inch army nylon (not war surplus) 5 to 6 years old which seemed to be in good condition. The rope was passed unpadded around a quartzite rock. Bendall, using a figure 8 sling with Karabiner made a long jump of about 20 feet at the start of his rappel as was his custom; the rope broke at the rappel point and he fell 70 feet, struck two protuberances of the cliff, and landed on a steeply sloping dirt slope. He suffered numerous abrasions and lacerations, a dislocated elbow and a fracture of a bone in his hand.

Source: Harold Goodeo, Director, Mountain Climbing Wasatch Mountaineering Club, and Dr. W. R. Halliday.

Analysis: The site of the rappel was examined and no sharp rock was noted that could have cut the rope. It, therefore, seems likely that there was an intrinsic point of weakness in the rope which could not withstand the sudden strain of Bendall's initial long jump out to clear the rock.

New Mexico—Devil's Thumb, West Face of Sandia Mountains: On 8 August 1953, Hugh DeWitt (23) and three companions were climbing on the Devil's Thumb the last 1000 ft. of which required the use of ropes. At about 300 ft. from the summit they decided to work in two ropes of two. DeWitt was leading the first rope and had left his belayer in a secure position. Because of inadequate belaying points 35 ft. above the belayer, DeWitt felt he had to go on. The cause of his fall was not clear since it happened so suddenly. DeWitt states that the rock here was sound although most of the rock in the Sandia Mountain is rotting and that the climbing was easy. He fell a full 70 ft. to a shelf 35 ft. below his belayer striking the cliff once. He hit the shelf just as his nylon rope tightened which presumably cushioned his fall. He suffered two broken bones in his left foot, a sprained right foot, and a compound dislocation of his right arm. Evacuation was accomplished the next day.

Source: Report of Hugh DeWitt.

Analysis: DeWitt feels that he should have protected himself with a piton and states that in the future under similar circumstances he would.

California—Mt. Shasta: On 28th November 1953 a party which included Edgar Werner Hopf (30) and eight companions left Horse Camp intending to climb Mt. Shasta. They left the cabin at about 4:20 a.m. in 10-minute intervals and agreed to meet at Lake St. Helens. At Lake St. Helens two persons carrying skis decided it was too icy so left theirs while Hopf, the only other skier, kept his, since he was an experienced and competent skier. Hopf put on his skis and went on ahead alone and the others roped up about 1000 ft. from the lake. The snow was crusted and hard. Hopf was using ski crampons and skins and was 300-400 ft. ahead.

One member of the party using crampons came up to Hopf who then went on another 100 ft. while this person rested. At this point Hopf fell in a prone position spinning and falling with his skis on. The slope was 35-30° and there was one small rock outcrop in the entire slope which he struck head first. Two members of the party tried to arrest the fall but were unsuccessful. Hopf ceased falling about 800 ft. from his starting point. When the party reached him his pack was over his head, his face was badly cut (there was blood in the snow from the projecting rock to the body), and he was gasping for air. Emergency first aid was administered and an emergency toboggan was constructed. A rescue party was alerted for evacuation but Hopf died before their arrival.

Source: Copy of coroners report of Siskiyon County, California, and members of the party.

Analysis: The outcome of this accident is truly accidental since there was but one rock outcrop in the entire slope and Hopf had the misfortune to strike this head first and receive a fatal injury. The exact cause of the slip is not known. Since Hopf was the most experienced member of the group the others did not feel in a position to question his action nor to request that he remain with them, which would have been the proper procedure rather than splitting up.

Oregon—Eagle Cap, Wallowa Mountains: On August 22, 1953, Sylvia L. Carlson (28), a new member of the Inter-Mountain Alpine Club of Richland, Washington, slipped coming down a small snowfield on Eagle Cap, Wallowa Mountain, Oregon. She broke an ankle and had to be evacuated eight miles. It was an easy climb and the weather was good. No ice axes, or crampons were in use.

Source: Miss Sylvia L. Carlson.

Analysis: As stated in her own account this was a case of an inexperienced new member who was not able to remain standing while descending a small snowfield. This emphasizes the need for snowfield experience and for each climber to have his own ice axe with him and to be familiar with its proper use.

Washington—Cascades, Snoqualmie Pass: Keith Jacobson (17), Larry Schinke (17), and Eddie Olmquist (17) without registering or checking on weather conditions started on an overnight ski-mountaineering trip from Snoqualmie Pass Summit to Snow Lake on 7 February. They had just passed Source Lake, and at about 1 p.m. Jacobson and Schinke were switching back up a steep hill and were about 100-150 ft. away from Olmquist. Olmquist heard a low rumble and saw an avalanche starting. All three tried to ski out of the path of the avalanche. Olmquist was successful but the other two were buried. Olmquist made a brief attempt to locate his companions but realized he needed help. He marked the spot with his pack and then started back with one broken ski. He contacted the Washington Alpine Club at Snoqualmie Pass summit. A rescue party was organized and Olmquist led them to the site of the accident. Schinke was found after being covered by snow for 9 hours. Jacobsen had been suffocated and was dead when uncovered.