Fortunately there was another small party close by which saw the fall. They started giving aid and alerting a rescue team. The first of the rescuers reached the scene at 6:00 p.m. The party was cut apart and moved out of the moat, wrapped in blankets. By 8:00 p.m. more rescuers arrived including two doctors. By 9:00 p.m. the more seriously injured victims began the trip down the mountainside. The last of the victims left the Crater at 11:50 p.m. and was in medical hands by 3:10 a.m. after a two-mile evacuation. One of the climbers was killed and all of the others received varying amounts of injury; there were 13 litter cases. The Mountain Rescue & Safety Council of Oregon, Clackamas County Civil Defense Truck, Red Cross, Air Force, Air Guard, U. S. Forest Service and others were active in the rescue and deserve mention for their fine handling of the problem.

Source: Newspaper accounts; John Biewener, Sec'y MoReSCO.

California, San Francisco Bay Area—On February 18, 1956 Keith Anderson (25), accompanied by two other climbers, attempted to climb one of the outcrops near the summit of Mt. Tamalpais. With a lower belay he led up a wide chimney to an overhang. At the underside of the overhang he placed an angle piton for protection and proceeded to climb the overhanging rock with the aid of a large handhold. The handhold pulled out under his full weight and in falling the piton was also pulled out. Although the piton probably absorbed some of the energy, it did not arrest the fall and Anderson landed at the base of the climb, having fallen a total distance of about 25 feet. He suffered a broken ankle for which he was given immediate first aid at a nearby military installation.

Source: William Siri and Harvey Voge.

Analysis: (W. Siri). The piton had been placed in unsound rock. If the piton had held it very likely would have prevented injury to Anderson. He also failed to test carefully the handhold on which he relied for sole support.

California, Berkeley—On March 11, 1956 a group of about 15 climbers that included experienced men as well as novices was practicing lower belaying at Indian Rock under the direction of the outing leader. The belayer was at ground level using a standing seat belay to arrest falls (free jumps from above). The rope passed through a carabiner about 25 feet above the belayer and then down a few feet to a climber on a ledge. On signal the climber would leap off to be arrested by the belayer. For safety a second, upper belay was also used but the belayer was off at an angle of about 30 degrees and hence not too effective. Although several jumps had been made and successfully arrested, on this occasion the rope broke after absorbing most of the energy of the fall but dropped the climber possibly the last five feet. Fred Schaub (20) landed on his back, apparently without serious injury, at least none that could be diagnosed.

Source: William Siri.

Analysis: (W. Siri). The rope used in these practice falls and belays was \( \frac{7}{16} \) inch diameter nylon. The rope, however, was five years old and had been badly worn in use on local practice climbing and belaying. A study of the rope revealed that about 50 percent of the fibers were only \( \frac{1}{2} \) inch long and only 10 per cent of the fibers in the rope had not been affected by abrasion. Ninety per cent of the fibers were less than 4 inches long. Further tests are being made of its ultimate strength.

Action is being taken for better inspection of ropes, and to substitute

weights for the practice of lower belays.

California, San Francisco—On March 25, 1956 Bruce Frederick (16), with two companions, attempted an ascent of Lands End cliff. After his companions turned back, Frederick continued alone, reaching a point about 25 feet from the top before falling some 275 feet back to the base of the cliff. Rescue operations by firemen, police, and Coast Guard took three hours since the victim had to be raised to the road at the top of the cliff.

The boy's injuries were diagnosed as fractured skull, broken neck, fractured ribs and legs, punctured lungs, and internal injuries. He died the

next day.

Source: William Siri.

Analysis: (W. Siri). No climbing experience, no training, and no equipment, and site not used for practice climbing because of extreme hazards and rotten rock.

California, Sierra Nevada-On June 28, 1956 John Brinkmann (15) was injured while climbing the NE ridge of University Peak. The party was led by Scoutmaster Jim Fairchild, who had had mountain experience with the Sierra Club; the climbing party consisted of six. In addition, there was a doctor in camp. The party was on the mountain in good weather, following the easiest route up the NE ridge. The leader had a rope and various emergency equipment; the rope was not being used at the time of the accident, because the terrain did not seem to justify it. Brinkman was following behind several others. At one point the climber in front of him, who was slightly heavier than Brinkmann, pulled himself up onto a ledge by grasping a 70-pound boulder. Brinkmann grasped the boulder, which felt solid, and started to pull himself up; he does not remember exactly how he pulled on the rock, but the only alternative route at that point was to one side, on steep snow. Brinkmann's father, who was with the group and examined the place, concurs that there was no alternative. The boulder suddenly came loose and fell on top of Brinkmann, injuring him chiefly in the chest. Evacuation was performed by the party and packers operating in the area. Brinkmann's father praised Fairchild's experience, judgment, and performance throughout.

Source: Interview of John Brinkmann and Mr. G. H. Brinkmann by D.

Harrah. Newspaper account.

Analysis: (D. Harrah). One could argue that the party should have been roped, but on the other hand this sort of mishap occurs to climbers in terrain where no rope would be used; it looks like "just one of those things." The party was in a strong position as far as rescue necessities go, with plenty of manpower near at hand, a doctor in camp, and a rope for

lowering the injured man.

California, Yosemite (1)—On May 27, 1956 Dr. Robert Franklin Johnson (28) was killed instantly in a sheer fall from Castle Cliff east of the Lost Arrow. He had climbed up Indian Canyon where there is no trail to the rim of the canyon. He was alone and had not registered for the climb nor had he left word with anyone specifically of his plans. He apparently attempted to make a short-cut back to the Valley down a crevasse in the cliff and slipped or lost his footing and fell about 80 feet to a ledge. An extensive search was made for him from May 28 to June 2 by rangers and members