Levitt (also on the same rope but higher up) to begin spinning around. To stop himself, and also to get a little further away from the rock wall, Stan pushed off against what appeared to be a solid rock flake. The flake immediately broke free and fell. Stan yelled, "Rock," as the football size projectile dropped toward persons below. The rock struck Pat Teague on the left front side of his helmet and then smashed into his left hand, causing a narrow but deep cut. From there the rock, which had partly fragmented, struck Pam Viviano in the upper chest area.

Immediately after this happened, other instructors and students rushed to assist the two injured people. Both Pat and Pam were stabilized, moved to a safe area, and had their injuries treated as well as possible before being transported by ambulance to the Hi-Desert Medical Center. Both Pat and Pam were released from the hospital

later that afternoon after being checked and treated.

After the accident occurred, two instructors (Jim Monroe and Steve Winslow) went up to the area from which the rock had broken. The site was checked out and the whole route was tested by pulling, pushing, kicking and hammering of the rock surface. Several loose and/or questionable rock formations were removed and allowed to fall to the ground. (Source: Mike Brinkmeyer, Joshua Tree National Monument)

Analysis

The route had been ascended about 20 times by students and at least three times by instructors prior to the accident without any mishap. Future sites utilized for rock rescue training should be more thoroughly checked over. This would include the whole length of the intended route. (Source: Mike Brinkmeyer, Joshua Tree National Monument)

FALL ON ROCK, INADEQUATE BELAY/PROTECTION

California, Joshua Tree National Monument

On October 23, 1988, Mike Hollins (34) was climbing with Mark Myers (28) across from the entrance to Jumbo Rocks Campground south of the Nuclear Reactor Rock on an unnamed route. Myers was leading the climb and was being belayed by Hollins. He had clipped into a bolt about three meters off the ground. He followed the climb to the left of the bolt along a thin crack. Myers was about two and a half meters left of the bolt when he fell off. Hollins was unable to catch him before he hit the ground.

Myers sustained a compound fracture of his left leg near the ankle from the fall. (Source: Kip Knapp, Ranger, Joshua Tree National Monument)

FALL ON ROCK, INADEQUATE PROTECTION, NO HARD HAT

California, Joshua Tree National Monument

On October 27, 1988, Francis Walters (age unknown) fell six meters to the ground while leading Orfan (5.9). He was three meters above his protection when he fell, sustaining major head injuries.

As of October 31, Walters was still in critical condition at the Desert Hospital in Palm Springs. (Source: Karl Pearson, Ranger, Joshua Tree National Monument)