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)

(Editor's Note: Of the 12 actual climbing accidents reported from Joshua Tree, a third involved head injury and inadequate protection. There were three injuries received as a result of falls while bouldering alone. As in gymnastics, "spotting" is recommended for boulderers.)

#### FALL ON ROCK, INADEQUATE PROTECTION

California, Somewhere in San Diego County

On November 27, 1988, Mike and I went back to one of our obscure, local and nonzooed out climbing areas that we've put in a trail to and have been systematically ticking off the first ascents. (Trails are necessary in these areas due to rattlesnakes that are a threat to us and our kids.) We began putting up "Masterpeice" (5.12) six months before the accident. I got two bolts in on the first day when we reached the crux, three meters past the second bolt, with a very marginal small RP one meter below my feet, which pulled out as I went about a meter higher. That prompted some scary 5.10+ downclimbing. We came back a month later and put in the third bolt 16 meters up, took a short fall and still couldn't unlock the secret. Mike began losing interest in being a "belay slave"— I've been down that road before—so I returned a month later alone when I knew I could make those moves that I revisualized daily and dreampt of almost every night. I set up a bomb-proof belay and rope soloed with a 85 jumar and prussik via the "Barnett system." I looked the moves over again from the last bolt's free stance and carefully and precisely made the two meter crux to the thin rest ledge about five meters from the bolt. The rest was easy 5.5 and 5.6, and is up a crack system—no more bolts required. This resurged Mike's interest and he returned on November 27 to repeat it. But I hadn't been climbing at my maximum for the last three months due to work problems, among other things. As a result, I took an eight meter fall in the crux and hit a flake at the end of the fall with my left foot, which caused a stabbing pain when in certain positions. After a short rest, I went back up and again "mentaled out" the crux, repeated the fall, broke off the flake and further injured the same ankle. Mike kept suggesting we go back down, but I wanted to climb badly. So I led a couple more and couldn't do a third—all the climbs were 40 meters long-and I had a long limp out on a sprained ankle.

A week and a half off work on crutches gave me plenty of time to think. I won't lead when I'm not totally one with myself and the mountain. We went back on December 29 and I put in one last bolt 1.5 meters above the third bolt from the last, and hardest, free stance available (we only climb in "classic" style) to further protect the 5.12 crux for myself and future ascents. Then I committed myself to the crux and was up it in seconds—it's good to be back. (Source: Martin Veillon—33)

#### Analysis

Avoid long and/or risky runout when the moves are at my limits. (Source: Martin Veillon)

# FALL ON ROCK, RAPPEL ANCHOR AND BELAY INADEQUATE

California, Joshua Tree National Monument

On December 3, 1988, Boy Scout Troop #156 was conducting rappel training/practice on the north side wall of the Indian Cove Campground Amphitheater. One