right tibula and fibula.

The complicated rescue was not completed until the next morning. (Source: From a report by Scott Emmerich, Ranger, Yosemite National Park)

#### **Analysis**

Probably the most common cause of injury on descents is letting one's vigilance lapse in what seems to be a "safe zone" after long hours on more technical terrain. This, combined with post-climb elation and fatigue, have long been recognized as hazards by climbers. (Source: Jed Williamson)

### FALLING ROCK, SEVERED ROPE, STRANDED

### California, Yosemite Valley

On October 13, 1988, about 1100, Kail Giger (44) and Alex Clapasson were on the sixth or seventh pitch (below Dolt Hole) on The Nose route of El Capitan when a rock fall occurred. Clapasson was the lead climber and Giger was belaying. Clapasson was about one rope length above Giger when he put in a Friend for protection. After putting in the protection, he climbed up about two meters. When he looked down and saw that the block where he put the protection was falling out, he yelled below to Giger to watch out for the falling rock. Giger was struck on the right arm and shoulder and left side of the head by the falling rock. Giger received a broken right humerus and a cut on the left side of the head. The falling rocks broke both of their climbing ropes in several places. They collected the pieces which were about three meters in length and tied them together. They then began to rappel down with Clapasson assisting Giger, whose right arm was useless. They were assisted by another climbing group, and rappelled and were lowered off the route. (Source: Grady Bryant, Ranger, Yosemite National Park)

(Editor's Note: This was the second major rockfall incident on El Cap this year.)

## FALLING ROCK, INADEQUATE AREA SECURITY

### California, Joshua Tree National Monument

On October 16, 1988, at 1415, a rock was dislodged and fell about 15 meters, striking two individuals—Pat Teague (40) and Pam Viviano (19). This accident occurred in Group Site #8 of the Indian Cove Campground during a Technical Resuce Training Seminar hosted by Joshua Tree National Monument.

The lesson plan for the afternoon was to practice ascending a rope using technical equipment. Augusto Conde (student) was about two meters off the ground on rope #1 and seemed to be having some problems. Pat Teague (instructor) had ascended rope #2 and was attempting to assist Augusto. (Pat was facing east with Augusto in front but slightly below him, and the rock wall that was being ascended was to the south.) Pam Viviano (instructor) was sitting in a rock depression on the ground below Pat and slightly to the west. Pam was holding on to rope #3 while another student was ascending above her. Stan Levitt (instructor) was also on rope #2, but about 12 meters above the ground. Stan's job was to assist any student having trouble once that student neared the top of the ascent.

As Pat Teague began to move about on rope #2 to assist Augusto, this caused Stan

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)