the crack. After that, he said, the climbing would have become very easy. He said he was about four feet above, and ten to 12 feet to the right of his last piece of protection. He stated he could have easily climbed a little higher and placed another piece to protect the traverse. However, the climbing was easy, Kopacz was anxious to get off the climb, and he stated that, "I wanted to be in the Valley drinking beer." Due to these reasons, he said, "I did not have much concentration." Kopacz further told me that he was very tired, and that he was not wearing his "good" climbing shoes because they were being resoled. He felt these factors also contributed to the fall. However, he added that there was no excuse, the cause of the accident was mental mistakes. (Source: Daniel Horner, Ranger, Yosemite National Park)

FALL ON ROCK—ROCK FOOTHOLD BROKE OFF, PROTECTION PULLED OUT, NO HARD HAT
California, Joshua Tree National Monument
On June 7, 1992, William Oliver (30) was leading Beck's Bet (5.5). He was about 25 feet up the route, just past his second piece of protection, when the rock knob he had stepped onto broke off. He fell, his protection pulled out, and he landed on his belayer. Oliver went unconscious briefly. His partner sustained a bruised thigh and lacerated ankle. They were both evacuated to medical facilities, examined, treated and released that evening. (Source: Kip Knapp, Ranger, Joshua Tree National Monument)

Analysis
Bill Oliver wrote an article about his accident for the Southern California Mountaineering Association newsletter, and sent it along to ANAM. In his own words:

> I always, always wear (my hard hat) when climbing—even though virtually no one else does and it looks totally uncool. Today, needless to say, I had inadvertently left it in the car and I didn't bother to go back and get it once we got to the wall... Since there's no guarantee against an unexpected fall, it behooves climbers to carry adequate medical insurance—and the use of a hard hat might not be totally uncool.

The total charge for his ambulance ride and hospital—including the CAT scan—came to $6,251!

STRANDED, INADEQUATE EQUIPMENT AND CLOTHING, WEATHER
California, Yosemite National Park, Stately Pleasure Dome
On June 24, 1992, Anne Tuite (21) and Sean Costello (29) became stranded on Stately Pleasure Dome due to a rain and hail storm.

After a difficult rescue in the storm, Tuite was flown off the dome at 2040 and transported to medical facilities where she was treated for mild to moderate hypothermia. Costello and the rescue rangers rappelled off. (Source: Dave Page, Ranger, Yosemite National Park)

Analysis
Costello and Tuite became stranded because of the weather. They chose to continue climbing as they only had one rope and could not rappel. A contributing factor was their lack of warm clothing and rain gear. Both climbers were from Ireland. Costello was apparently fairly experienced; Tuite was a novice. They took only one rope, no headlamps or

storm clothes because they thought they'd get off in time. They realized they'd made a potentially serious mistake. They were not cited for negligence, but, in the future, climbers in similar situations may be. (Source: John Dill, SAR Ranger, Yosemite National Park)

FALL ON ROCK, PROTECTION PULLED OUT
California, Tahquitz Rock, Consolation

On July 4, 1992, I was about 25 feet into the third pitch of our climb when I came off. Two pieces that I had placed failed. One was a small Metolius tri-cam unit a few feet below the spot from which I fell. The cams tipped out and reversed. A foot or two below that piece I had a wired, curved stopper or rock. It didn't wind up in front of my harness afterward. One is left to guess what happened to it. Perhaps the carabiner failed or the swage on the piece failed. Mike Jaffe remembers hearing two distinct sounds just before I flew past. He describes it as, "Bam! Bam!" The first sound was likely the TCU blowing out, the second the other piece. In any case, I went on a longer ride than expected. I think it was good fortune that I had just cleared an overhang, so I took to the air and didn't go tumbling down. I have a vague recollection of wondering what had happened with my pieces and when I was going to stop falling. I had no sense that I was going to die, no life flashing before my eyes, just gray and blue and then some green. When I finally stopped falling and got some friction underfoot, on a small face and held by the rope, I was fairly calm. I talked with Mike, letting him know I was OK but for some pain in my right knee. Very little in the way of abrasions and blood. He let me know that he had hurt his hands, one badly. I asked him to let me down a bit so I could move over into a crack. I clipped into a fixed piece there so that we could be somewhat more free to get our bearings on the situation. I considered climbing up to him and going up and off by a different route. On testing my right knee it became apparent that I wouldn't be doing any more climbing that day. Mike said he didn't think he would be able to climb either, given the injuries to his hands. We went about rappelling down the roughly 350 feet to the base. This took an hour because of our various infirmities, the perceived need to deal with the damage to the rope (discovered only after I almost rappelled past the worst of the damaged spots), and our somewhat unsettled, not totally clear state of mind.

The piece that finally held my fall was a small, solid hex slung on perlon, a good placement just right and above the place where Mike sat on belay. When he caught me he was pulled over into the piece. Some rope ran through his hands and the belay device (a new Black Diamond figure eight with red anodizing), burned his hands in the process. As a medical student, Mike was impressed with the fact that, although the burn when through the dermis and some blood vessels, there was little bleeding because the wounds were instantaneously cauterized. (Source: From a letter sent to New England Ropes and ANAM by Terry Hartig)

(Editor's Note: Hartig was impressed by the fact that his 60 foot leader fall did not result in the rope parting. We were impressed by the lack of more serious injuries.)

FALLING ROCK
California, Yosemite Valley, Leaning Tower

On July 5, 1992, I spoke with Brad Young (32) at the Yosemite Medical Clinic about a climbing accident that he and his climbing partner Doug Burton (age not noted) were involved in on the Leaning Tower.