

FALL ON ROCK, INADEQUATE PROTECTION**California, Yosemite Valley**

On September 3, 1983, Peter Kohl (20) and climbing partner Robert Fostner were starting the first pitch of the South Face of Washington Column. Kohl, who was leading, had progressed past the lieback section and had moved on to some low-angle slab just below Dinner Ledge. Kohl fell far above his last protection on the lieback area and grounded out before protection could help. The total fall was 30–35 meters. (Source: Mike Mayer, Ranger, Yosemite National Park)

FALLING ROCK**California, Yosemite Valley**

On September 18, 1983, Robert Muhnicky (28) was leading the tenth pitch on the Northwest Face of Half Dome when a large rock flake he was on broke away. He fell onto his climbing partner, Toivo Kodas. The rock fell onto Muhnicky's foot, breaking some small bones.

The climbers descended on their own, and the victim was flown by helicopter to Yosemite Medical Clinic. (Source: Dan Dellinger, Ranger, Yosemite National Park)

Editor's Note: According to Ranger Gary Colliver, with this ledge now gone, the bolt ladder cannot be reached until several new bolts are placed.

FALL ON ROCK, UNROPED**California, Yosemite Valley**

On September 11, 1983, Carol Moyer (28) fell about 100 meters to her death from the fourth pitch of Tangerine Trip on El Capitan.

According to her climbing partner, Raymond Kovac, she was cleaning the aid pitch under the roof and untied from the belay rope, relying on her jumars, which slipped off the rope. (Source: Jim Reilly, Ranger, Yosemite National Park)

Analysis

This is a summary of the summary report prepared by John Dill, SAR Ranger:

I interviewed Moyer's climbing partner, Raymond Kovac, and other climbers concerning Moyer's actions, statements, moods, and climbing experience prior to her death. I climbed to the scene of the accident (fourth pitch) and examined Moyer's rope and all other equipment left in place (and undisturbed) since her fall. Using her equipment, I reenacted what I knew of her movements, evaluated various procedures for cleaning the pitch, and looked for possible causes of the fall. I discussed the accident with several experienced climbers. We examined Moyer's equipment in detail, discussed appropriate techniques for cleaning the pitch and possible causes of her fall, and tested some of these hypotheses against the evidence at hand.

Moyer was described by acquaintances, in essence, as having climbed two long and strenuous routes within a few days before the Tangerine Trip. She was considered experienced, but not extensively. She was well liked and was in a good mood on the Tangerine Trip.

At the time of the accident, Moyer's jumars were rigged adequately for cleaning the pitch and for her personal safety.

Kovac was watching while Moyer worked on the previous piton and also on the one from which she fell. The method she used was workable but inefficient and less safe than the alternatives, in my opinion. It required more strength, had a slimmer margin of control, and a high potential for shock loading the system.

Based on Kovac's testimony and the arrangement of equipment on the cliff, it would seem that Moyer had probably removed Kovac's carabiner from the piton and was preparing to, or in the process of, lowering herself to the next one.

Structural failure or malfunction of her equipment is not likely; even after falling 90 meters, both jumars were intact and working properly. The rope was intact and the piton still in place. The only damage noted was probably caused by the fall, not vice versa.

Because many unpredictable mishaps can occur while jumaring (as in any other part of climbing), most climbers remain tied to their safety rope. If tied to its end, a 45-meter fall is still possible, so it is common practice to tie in "short;" that is, to tie in several times farther up the rope as one ascends. Only about a meter of slack exists at any time, and the end is free for other uses. Several deaths in Yosemite could have been prevented this way.

Moyer could have cleaned the pitch in the same manner she did while still tied to the end of her rope. She would have survived her fall, and, if tied in "short," she would have fallen only about a meter. (Source: John Dill, SAR Ranger, Yosemite National Park)

INADEQUATE EQUIPMENT, EXPOSURE, WET WEATHER California, Yosemite Valley

On September 30, 1983, Charles Turner (28) and Alan Jolley (26) began calling for help from "The Block" on the Salathé Wall of El Capitan. A rescue team was flown up to the rim and began setting anchors directly above The Block with the aid of a spotter located on Bridalveil straightaway. A rescuer was lowered to The Block and both victims and the rescuer were able to jumar to the rim by 2130.

The rescue party and the victims spent the night on El Capitan and were flown off via contract helicopter on the morning of October 1. (Source: John Daley and John Dill, SAR Rangers, Yosemite National Park)

Analysis

The climbers stated that they began climbing on September 25, and, on that day, had fixed ten pitches. On Monday they hauled to Heart Ledge and spent the night there, where they got wet in a storm. On Tuesday they fixed to above Hollow Flake and spent the night there. On Wednesday they got to the Alcove and again got wet. On Thursday they got to The Block and sat in the rain and rim runoff from about 1500 Thursday until their rescue Saturday night. Most of their time on The Block was spent together in a bivy bag in an attempt to stay warm. They began yelling for help on Friday morning at 0715 and, at first, assumed that the rangers who were communicating with a German party on The Shield were aware of them also. Sometime around noon on Friday, the victims realized that a rescue was not