

litter, by rope, under the helicopter), Lemoore was enroute, and a Medi-Flight helicopter had been requested.

At 1242, as the Park's helicopter was hovering in preparation of attaching to the litter, Goukas stopped breathing. CPR was initiated, sodium bicarbonate and epinephrine were administered. Because it was not possible to continue effective CPR during the short haul, the Park's helicopter was cancelled. Lemoore lowered a crewman to Goukas' location, and with the assistance of this person, CPR was performed during the winch and transport.

About 1330, Lemoore landed with Goukas. Goukas was pronounced dead by Yosemite Medical Clinic staff at 1350. (Source: Hugh Dougher, Ranger, Yosemite National Park)

Analysis

McDonald stated that he had known Goukas for about one year. They had climbed together three times previously.

Goukas placed perhaps four pieces of protection on the pitch. The uppermost piece, a moderate sized Friend, held the fall. Several lower pieces "popped out" during the fall.

The pitch followed a shallow right facing corner with a vertical crack that allowed for good placement of protection. The face was near vertical. The difficulty is estimated to be 5.10, well within Goukas' abilities. Goukas may have been doing a lay-back and his foot could have slipped due to the large amount of lichen on the wall. He was climbing steadily at the time of the fall and had given McDonald no indication that he was having a difficult time.

Goukas had a tendency to climb with long distances between protection. McDonald estimated the length of the fall to be 12 meters. Subsequent investigation indicated the fall to be closer to 22 meters. Goukas came to a stop about ten meters above McDonald at an area where the cliff was less steep. The cliff was shallow enough to support Goukas' weight. In order to lower Goukas, McDonald had to haul him with a rope.

He was not wearing a helmet. His harness consisted of a three meter swami belt of 7.5 centimeter tubular webbing. (Source: Hugh Dougher, Ranger, Yosemite National Park)

FALLING ROCK, NO HARD HAT

California, Yosemite Valley

About 0810 on July 2, 1986, Steve Snyder, a climber near the scene of the injury, contacted Ranger Sherwood at the Little Yosemite Valley Ranger Station with a report of an injured climber at the base of Half Dome. He reported that a rock had struck Jonathan McKinney (29) while he and his brother were preparing to ascend the northwest section. Ranger Sherwood responded with the assistance of Snyder, Ranger Jones, and Scott Jackson as backup. At 0815, Ranger Sherwood notified Dispatch of the situation and requested helicopter assistance. At 0930 Ranger Chris Jackson and Ranger Maxwell landed at Half Dome and assumed control of the medical situation. The victim's head was bandaged, he was placed in a stokes litter and transported to the Valley medical facility. (Source: Kathy Sherwood, Ranger, Yosemite National Park)

Analysis

McKinney stated he was not wearing a helmet and was aware of the climbers above him. Both he and his brother admitted hearing that helmets were not needed in Yosemite since the rock was "very clean."

Ranger Sherwood interviewed one of the two groups climbing the face of Half Dome at the time of the incident. Group #1 had started climbing early that morning (about 0600) and had passed Group #2, who were on their third day. Neither had noticed the group below or admitted knowing of a rock falling at the time of the incident. (Source: Kathy Sherwood, Ranger, Yosemite National Park)

FALLING ROCK, FAILURE TO TEST HOLDS

California, Mount Whitney

On July 3, 1986, Mike Meteyer (27) and Jim Raymond (28) were climbing the Classic East Face route on Mount Whitney. In the early afternoon they were at the lower portion of the Grand Staircase when a basketball size block that Mike had moved up on broke away. Jim was hit a grazing blow by this falling block but not seriously injured. Mike fell about three meters and sustained what turned out to be three broken ribs. They continued to climb to the top of the Grand Staircase where the difficulty again increases. Unable to continue, they called for help and were able to attract the attention of two climbers just finishing the Keeler Needle. These two climbers came to their assistance with extra clothing for Mike and then one of them hiked out with Jim to call for a rescue. Arriving in Lone Pine in the middle of the night, they waited at the U.S. Forest Service office until it opened to ask for help. They should have called the Inyo County Sheriff. The China Lake Mountain Rescue Group was called at 0700. With Forest Service contract helicopter support, we were landed on the summit and got to Mike by late morning. After applying first aid and providing food and water, we were able to climb with Mike to the summit where he was flown to the hospital. (Source: Al Green, China Lake Mountain Rescue Group)

Analysis

Mount Whitney East Face climbers should be aware that there is considerable loose rock on this route and great care must be exercised for their own safety and for those below them. This particular route is becoming increasingly popular and the China Lake Mountain Rescue Group has several operations there each year. (Source: Al Green, China Lake Mountain Rescue Group)

FALL ON ROCK, CLIMBING ALONE AND UNROPE

California, Joshua Tree National Monument

On July 16, 1986, at 0946, I contacted D. Michalakakis (23) in campsite #9 of the Hidden Valley Campground concerning his extended stay in the park. I confronted Michalakakis about several violations that I had observed. After a citation was issued, Michalakakis advised me that he had fallen 20 meters while solo rock climbing on July 4. Michalakakis received injuries to his right ankle, head, chest area and both arms. Most injuries consisted of lacerations and contusions. Michalakakis stated that he did not know that he was required to report injury accidents to Park Rangers. Therefore, Michalakakis reported the incident to no one and sought his own medical attention.

Michalakakis was advised that he would have to leave the park no later than July 23. Failure to comply with request would result in his arrest. It was also learned during the interview that Michalakakis was involved in a traffic accident on June 14 that he also failed