

Another theory is that we may not have been looking for “solutions.” As climbers we have a fairly high capacity for pain and a tendency to put up with whatever is thrown at us. At one point during the night Dave asked Sean what time it was. We didn’t know if we had been laying there for two hours or twelve. When Sean answered that it was two in the morning, we were all relieved. We had already made it through eight hours. Just four more and this would all be over. I think that same mentality—“let’s just tough this out”—may have taken over hours before; perhaps even while we were still climbing up toward the peak.

We were fortunate. If the temperature had been ten degrees colder the outcome would have been much more serious. Not all our decisions were poor. The arrangement with the three of us laying on our sides and pressed together worked well for all of us and provided some protection for Dave, who without a bivy bag was at least in the middle. However, he is considerably taller than either Sean or me. This left his feet out in the cold.

It was also good that we did not attempt to climb down the chute after dark. There was no discussion or argument on this point, we just turned away. That’s encouraging. On this matter there would have been little room for misjudgment. (Source: Mike Koerner)

*(Editor’s Note: Another lengthy narrative, but filled with illustrative lessons from the best source: the individual involved.)*

## **EXPOSURE—WEATHER, INADEQUATE CLOTHING AND EQUIPMENT, HYPOTHERMIA, FALL ON ROCK—UNABLE TO COMPLETE DESCENT**

### **California, Yosemite Valley, El Capitan**

In late December, Joseph Crowe (25) began fixing pitches on the Zodiac (VI 5.7, A) on El Capitan, intending to solo the route. By mid-afternoon on the 5th, he was just finishing pitch-3 with plans to fix pitch-4 and to return to the ground that evening.

Two other climbers, Pat Warren and Matt Robertson, had camped at the base of the route near Crowe the previous night. When they started hiking down to the road in late afternoon on the 5th, Crowe appeared to be leading pitch-4. Although the weather that morning had been mostly cloudy and windy, with scattered light rain and a temperature of about 40 degrees F, they noticed that Crowe had dressed in fairly light clothing and did not appear to have taken any extra storm clothing up the wall with him. The first few pitches of the route were known to be particularly exposed and they had previously seen Crowe return from fixing pitches, thoroughly soaked by water coming off the summit and blown in by the wind.

A short time later a storm moved in, with high wind, heavy rain and snow. Visibility quickly deteriorated to 20-30 feet. Warren and Robertson were not too concerned about Crowe since he had the skills and enough rope to get down, and the three climbers had talked together in camp about rapping off a route if severe weather struck. But as they were hiking past the Nose about 6:30 p.m., after dark, they heard cries for help coming from

the vicinity of the Zodiac and they were sure it was Crowe. They themselves had become soaked by the storm during the hike, despite good foul weather gear and they were now very concerned for Crowe.

At 7:30 p.m. they reported the situation to the NPS. Using a loudspeaker from the road, the rangers got answering cries, but the storm made communications extremely difficult. They did manage to determine that he was still on the wall, had no light, and was unable to get down. SAR team members hiked to the base of the route (which took almost two hours because of the conditions). When they arrived, they found Crowe hanging from etriers attached to the end of a rope, 25-30 feet off the ground and 15 feet out from the wall. He was not moving and did not answer their calls. After more gear was brought to the scene, they were able to fix a line to him by means of a carabiner attached to a long pole. A ranger ascended a fixed line (left earlier by other climbers) on Shortest Straw (an adjacent route), carrying the line that was fixed to Crowe. He pulled the two of them together and lowered Crowe to the ground. Despite attempts to revive Crowe, he was pronounced dead from hypothermia by a physician at the Yosemite clinic.

### **Analysis**

A few days after the accident, NPS team members climbed the first four pitches of the Zodiac and analyzed Crowe's rigging. Based on that evidence, here is the most likely series of events:

Crowe was climbing with two dynamic ropes, one 70 meters (230 feet) long and the other 55 meters (180 feet). He had previously fixed them from the ground to pitch-3, and on this day he pulled them up to climb pitch-4. When he finished the pitch, or if he needed to descend earlier, he would rely on those ropes to return to the base of the wall, as their combined lengths were more than adequate to do so from the top of pitch-4.

The 70 meter rope was his lead rope. It was tied to the anchor at the top of pitch-3 (the "pitch-3 anchor"), but instead of the end of the rope being tied there, the knot was about 15 feet from the end, leaving a tail of that length hanging down pitch-3. His belay device was probably his Grigri.

For some reason, possibly the storm, darkness, or a technical problem, Crowe stopped climbing about 20 feet short of the regular pitch-4 anchor and built his own anchor out of protection he placed in the crack. Then, using his Grigri, he rappelled on the free part of the 70 meter rope, leaving the part on which he had led still clipped through the protection and anchored at pitch-3. He did not clean the pitch as he descended, possibly because he was in a hurry and also because he wanted to eventually return and complete the pitch. By leaving a significant amount of the 70 meter rope tied up in the pitch, he was relying on the remaining free part plus the 55 meter rope to reach the ground.

Crowe rappelled to the pitch-3 anchor. At this point he was still rappelling on the free part of the 70 meter rope. About 40 feet below him, a knot joined the end of this rope to one end of the 55 meter rope. The other end

of the 55 meter rope was tied to the 15-foot tail of the 70 meter rope that hung from the pitch-3 anchor. As a result, the 55 meter rope hung from both the free side (on which he was rappelling) and the anchor side of the 70 meter rope, forming a continuous loop. This was apparently a solo aid technique he was trying.

The bottom of the loop was about 100 feet below him, well above the ground. To gain the full length of the 55 meter rope, he would have to descend about 15 feet past the level of the pitch-3 anchor, reach over and untie the joining knot in the anchor side of the loop, and drop that end of the 55 meter rope. Then he would rappel another 25 feet, pass the remaining joining knot, and continue descending on the 55 meter rope, hopefully to the base of the wall.

It may have been dark by now, certainly windy and cold, with almost no visibility, and he may have been in the waterfall that targets pitch-3. With his minimal clothing he was probably hypothermic, in a hurry, and possibly panicked. His light, a very small LED model (found later in his pocket), would have been useless, and he may have had to determine the dimensions of his system and the location of the critical anchor-side knot by memory and feel, with numb fingers.

Either he had forgotten that both ends of the 55 meter rope were tied into the system, or he misjudged the distance to the anchor-side knot, for he descended past the level of the knot. In fact he continued at least another 25 feet until he had passed the knot on his side of the loop and was now on the 55 meter rope. At some point he realized that he had gone too far and would have to ascend to reach the anchor-side knot.

As he climbed back up the 55 meter rope, he accidentally jammed his upper ascender tightly up against the knot he had just passed. He was unable to free the ascender, and since it was tied with cord, rather than clipped, to his harness, he cut it loose. (After the accident the ascender was found jammed against the free-side knot.)

With only one ascender, Crowe was unable or unwilling to continue up the rope (although it was feasible with the remaining ascender and a prusik). He apparently decided to go with what rope he could get at that point. He reached over to the anchor side of the loop and cut the 55 meter rope, opening the loop. (We found the 55 meter rope on the anchor side of the loop cut at the level of the jammed ascender.) This left 25 feet of the 55 meter rope hanging uselessly below the anchor-side knot, shortening the rope available to reach the ground by that amount.

Then he tied a safety knot in the end he had cut, dropped that end, and—leaving two etriers behind with the abandoned ascender—rappelled about 150 feet until he reached the end of the rope. He was now 30 feet above the ground and 15 feet away from the wall. With his tiny light, in a whiteout, we wonder if he knew how close he was.

His subsequent actions may have been accomplished in a different order, but here's one reasonable sequence: Hanging just above the end of the

55-meter rope, he attached his remaining ascender to the rope just above his Grigri. He clipped his two remaining etriers in series to the ascender, making a long ladder. He stepped onto the ladder and cut the 55-meter rope between the ascender and the Grigri. (We found a two-foot piece of the 55-meter rope, cut at both ends, with the Grigri attached and what was probably the safety knot still tied. We don't know why he didn't just unclip the Grigri, but we suspect his fingers were too cold by then.)

He then cut the cord connecting his harness to his ascender and began to climb down the ladder, unbelayed. If he had reached the bottom step and hung from his hands he would have faced a drop of only 15 feet. If he had not abandoned the other two etriers, he could have almost stepped onto the ground. But he probably collapsed from hypothermia and fell, and his hammer became entangled in the etriers. He was found suspended by the shoulder sling of the hammer, with no evidence that he had tried to cut himself free.

The lack of adequate storm clothing and a headlamp with useful range were his most serious problems. With that gear he probably could have stayed on the wall through the storm or descended with more control. As it was, if he had searched carefully for the anchor-side knot, if he had not jammed his ascender, if he had been able to fashion a prusik, and if he had found and untied the knot, he would have gained 25 feet more of the 55 meter rope, enough to reach his goal. (Sources: Jack Hoeflich and John Dill—Park Rangers, Yosemite National Park)

*(Editor's Note: A correction from last year's ANAM, page 31: John Dill is quoted as saying, "...leads Grigri free to 5.10b..." and "...leads Grigri free 5.9, aid A2." It should read, "... leads trad free..." etc. Gremlins, not John Dill, caused this typo.)*

## **FALL ON ICE, INADEQUATE PROTECTION, EXCEEDING ABILITIES**

### **Colorado, Ouray, Ouray Ice Park**

John Ohlson (61) was leading Pic O' the Vic (WI 4) in the Ouray Ice Park. He led up to a stance at a cave—about 20 feet up, and placed an ice screw. He then continued up the next section, which was nearly vertical. About 20 feet above his screw placement, he came off. He essentially landed at the base of the climb. The rope did not come taut until the very end of his fall, and likely provided minor deceleration at most.

John sustained compression fractures to the T12 vertebra, a broken right thumb, and lacerations to his hands and face. Various others treated him at the scene. At first he thought he could walk out, but concern for the severity of his injuries prompted rescue personnel to raise him from the canyon bottom by winch on a litter with a body splint. He was taken by ambulance to Montrose Memorial Hospital.

### **Analysis**

Ohlson had a long history of alpine climbs with modest technical difficulty, but he was a relatively new water ice climber. He had been training