

Additionally, Niblock suffered from a broken leg and Nichols from a broken arm and ribs.

Rescuers set lines and spent the next five hours moving the pair off the ice to a sheltered rock area about 75 yards to the north. By 0100, both men were stabilized, fairly warm, and had taken some warm fluids.

At 0800 the next morning, Helicopter 525 dropped a litter and technical climbing gear at the scene, then shuttled in additional rescue personnel from China Lake Mountain Rescue. Ice and rock anchors were set and the victims lowered down the last half mile of the ice chute. By 1415 the victims were airlifted to the Bishop Airport. From there they were transported to the Northern Inyo Hospital by ambulance for treatment. (Source: From a newspaper clipping sent in without name/date.)

EQUIPMENT FAILURE—WIRED NUT BROKE, FALL ON ROCK, PROTECTION PULLED

California, Yosemite Valley, El Capitan

On October 6, about 1900, Baek Man (27) was leading the pitch off Camp 5 on the Nose, using aid. He had placed a few pieces of protection and was standing on a fixed wired nut when it broke. A small Friend he had placed pulled out during his fall, and he landed hard on Camp 5, 15 feet below.

Baek and his partner, Min Yeon Sik (30) spent the night at Camp 5 and, for unknown reasons, did not yell for help until 0700 the next day. They indicated that Man was complaining of mid-back pain. The NPS rescue team flew to the summit and lowered a ranger-paramedic 900 feet to the scene. He immobilized Man in a vacuum body splint and litter. Because of the back pain and the long haul to the summit, Man was hoisted directly from Camp 5 by the helicopter from Naval Air Station Lemoore, with a Navy medic as the litter attendant. Man's spine was not fractured, but he did have ankle and wrist fractures. He was released from the Yosemite Clinic that day.

Both climbers have ten years of climbing experience, and both were wearing helmets. (Source: Lane Baker, John Dill, NPS Rangers)

SLIDE/FALL ON ICE, INEXPERIENCE, IMPROPER USE OF CRAMPONS, INADEQUATE PROTECTION—UNCLIPPED, PARTY SEPARATED

California, Eastern Sierras, Lamarck Col

On October 22, David Lown (29), a second year family practice resident, and three friends were descending a frozen snow slope below the Lamarck Col plateau. A series of rappels were to be set up with ice bollards for the rappels and ice screws for backup and safety anchors for those waiting to rappel. The slope was 60-70 degrees at the top and gradually decreased to 30 degrees at the base. The sides and base of the slope were surrounded by boulder fields. The four had ascended the slope the previous day without ropes and without incident, except for a borrowed crampon that came loose on Daniel Savelson while ascending. This was resecured without further problems.

David was the first to rappel the initial pitch. The pitch ended at the steepest part of the slope. Prior to removing himself from rappel, David clipped into one ice ax with a daisy chain, thus using the ax to self-belay himself. Once off rappel he set up an anchor with two screws and webbing, and then clipped into the anchor, planning to carve the next bollard. By this time Daniel had rappelled down and was standing on the lip of a sun cup. He was about eight feet to the left and above the anchor, had taken his pack off and secured it to his ax. David removed his own pack and placed it with Daniel's. He was

not hooked into the anchor, so David decided to chop out a flat area in the ice for him to stand on more safely. Before traversing over to below Daniel, David unclipped the daisy chain from his ax, presumably to make it fit easier to swing while chopping. He then unclipped from the anchor which was too far from Daniel. As he traversed over, David switched from front pointing to a modified French technique. At one point he stepped to the left with his right foot, but the crampon did not bite the slope and his foot slid down the ice, with him quickly following.

Instinctively, he instantly threw his ax into the slope in an attempt to self-arrest. However, he was sliding on his back and moving very rapidly down the slope, and the ax only scraped the surface. For a few seconds as he slid, he continued to try to push the ax (which was above and behind him) deeper, but to no avail. He began hitting the many sun cups in the slope, each acting as mini ramps, launching him in the air, and setting both him and his axes tumbling in every direction. He eventually lost consciousness and awoke lying on his back, head pointing downhill on the 30 degree slope, having fallen 400-500 feet and stopped 100 feet from the boulder field. He attempted to right himself but was unable to due to secondary pain from his broken femur. His friends spent the next 45 minutes setting up the rest of the rappels and safely lowering themselves down the slope.

He was moved to a flatter spot on the slope and covered with sleeping bags. Tony Ralf was sent for help. He ran for two and a half hours down the trail before he happened to be spotted by three Orange County police who were off the trail fishing. They had radios with them and called the closest ham repeater, apparently using an obscure frequency. A ham radio operator, who was working on his roof, heard his radio crackling and picked up the call and relayed it to Northern Inyo Sheriff Department. Mountain Rescue had just gone off duty within the last half hour but were still reachable. A helicopter was sent to the coordinates Tony gave using the map he was carrying.

Meanwhile Eric Savelson and Daniel were caring for David, who despite his injuries, was able to provide (according to Eric) helpful ideas for his own care. After checking C-spine as best they could, an ensolite pad was slid beneath him. He was given hot lemonade and some Gu. His fractured femur was placed in a traction splint using a ski pole and webbing. It was at that time that the fractures in his ankle were discovered. He was given some Tylenol with codeine for pain. The helicopter arrived three hours after the fall. With some difficulty the chopper managed to land on the slope. David was placed in a C-collar and then into a litter. An anchor was set up to belay the litter while it was moved down the slope and into the helicopter.

He was flown to Bishop Hospital where later in the evening (and into the next morning) he underwent surgery for his lower extremity fractures. He had lost half of his blood volume, most likely due to the femur fracture. Injury list included the displaced femur fracture, a distal fibula fracture, fracture of the talus in two planes, six broken ribs, broken nose, frontal sinus fracture (requiring surgery), concussion (would be dead without the helmet), dislocated A-C joint and partially torn deltoid in the right shoulder (probably from the attempted self-arrest), several facial lacerations, and various ligament sprains and partial tears. Total hospital time was two and a half weeks, including two days in the intensive care unit. (Source: David Lown, M.D.)

Analysis

The first mistake occurred the day prior to the accident. Since it was his first time climbing on ice, Daniel should have been roped up and belayed, especially near the top which was the steepest of the slope. Learning how to use technical axes and crampons should not be done in an environment where a mistake would be dangerous. An argument

could be made for the roping up of the other three climbers; however, it was each one's decision not to (although the matter was not discussed prior to the climb and each just began climbing as they got to the slope, party separated—an example of poor team work). The other three had variable experience on ice and snow. All had at minimum led one pitch of technical ice and had experience with climbing in moderate alpine conditions. The climb the day before had been Daniel's first time on ice.

As for the accident, first Daniel should have clipped into the anchor prior to removing himself from rappel. If this was not feasible for whatever reason, a second anchor should have been created for him prior to coming off rappel. Given that neither of these occurred, David should have climbed next to Daniel and placed an anchor there. This would have assured Daniel's safety before any ledges were chopped out from beneath him.

Once David created the initial anchor, he should have made all attempts to remain clipped into it. He considered lengthening the webbing on the anchor so he would have more room to move; however, he only had two-foot runners and felt it would have been a hassle and clumsy to girth hitch them in a row to the anchor. In retrospect this is what should have been done.

While traversing on the ice he should have continued front pointing as the slope was pretty steep (60-70 degrees) and to French technique properly in plastic boots is very difficult. On the crucial step he did not place his boot perpendicular to the slope in proper French technique, thus his crampons did not bite the snow. Instead the edge/side of his boot contacted the slope and obviously provided no grip. Also this was his first outing using Black Diamond Switchblade crampons. In contrast to other crampons he had used, the outside edge of these crampons do not run flush with the edge of the boot, they are set in about a half inch from the edge. This also makes using French technique more difficult, as there is a high chance of doing exactly what he did.

He should have kept himself clipped into his ax with the daisy chain if he was not going to be connected to any anchors. If it was cumbersome to chop with the daisy attached, he could have had one ax free to chop with and the other planted firmly with a daisy attached to that one. Finally, for unknown reasons, he did not consistently and securely place his axes in the slope before each step. This goes against everything he believes in and teaches others. One must always maintain three secure points of contact when moving any limb. It is difficult to understand what caused him to stray from this golden rule at this point in time.

As far as the rescue itself, Eric, Daniel and Tony came through in a crisis situation in the way we all hope our friends would. Eric and Daniel provided excellent care (the traction splint was probably a life-saving maneuver) for a severely injured patient, although their only medical training was Wilderness First Aid. The only things that might have been done differently would be the early placement of an improvised C-spine collar and refraining from administering any narcotics to a potential head injury patient (a poor decision made by the patient). Both of these guidelines are based on the mechanism of injury and the high likelihood of both spinal injury (amazingly this did not occur) and head injury, even with a helmet. (This did occur and the facial injuries were a clue to this.) Lastly, elevating the legs and lowering the head is indicated for potential shock, although this might have placed the victim in unsafe position given terrain.

I would like to acknowledge the following people who played critical roles in the rescue and without whom a less than happy outcome might have occurred: Sgt. Kevin McKeown, Orange County Police; Jim Gilbreheh, private ham radio operator; Mike Brown, EMT and CHP helicopter pilot, Fresno, CA; Marshall Wharton, paramedic, CHP, Fresno; Deputy Randy Nixon, SAR Coordinator, North Inyo Sheriff Department;

Volunteers of Inyo County Sheriff Posse SAR Bob Wilson, Mark Lester, and Leonard Bayghenbaugh. (Source: David Lown, M.D.)

(Editor's Note: There were three other major accidents in this vicinity during the summer and fall. One was a solo climber doing a traverse of the Palisades who took a fatal fall out of Clyde Couloir. Another was an unroped climber on Mount Dana who fell 400-500 feet down a couloir to his death. The third involved a couple climbing in the Convict Lake Drainage of Red Slate Mountain in June. They fell several hundred feet to their death, probably because they were off route in poor weather and had no running protection. Gary Guenther, a member of the Mono County Mountain Rescue Team, provided as much information as he had on these. His interesting observation may have some bearing on the accidents. He stated that there was probably more snow left in the Sierras from the previous winter than from any winter in the past hundred years. He said that the fall of 1995 was also the driest fall on record. There were an additional four fatal hiking accidents and eight serious injuries resulting partially from the conditions.

Another indication of the severity and uniqueness of the conditions was that about 25 deer carcasses were found in the region and they were in positions that suggested they had reached a high velocity from uncontrolled slides.)

FALL ON SLICK ROCK, HASTE—APPOINTMENT AT THE BAR, “FAILURE TO RECOGNIZE THE...”

California, Yosemite Valley, El Capitan

Tim Sell and I had just finished climbing Mescalito (VI 5.9 A4) on El Capitan. It was Halloween evening. Although it was getting late, we thought we could make it down the rappels to the bottom of the East Ledges before it got dark.

We repacked our loads frantically, inadvertently burying our headlamps inside the haul bags. We had an appointment in a bar for 7 p.m.! We wanted to have more than a few beers with two climbers who had been a day ahead of us on Mescalito. As it turned out, it got dark more quickly than we expected. Rain seemed to be coming from the west, and we were having difficulty following the cairns in the light of a half-moon behind thin clouds.

At one point, we were just to the side of the actual trail and had to descend a not very steep, but very slick, slab. As Tim slid down the slab, he had his hand on his haul bag, which was sliding down the slab just beside him. I slid down more to the left, with my haul bag still on my back. I was immediately going faster than I had anticipated I would, and a big crack and ledge in the slab was coming up quickly. I tried to use my feet and hands for friction to slow down, but as soon as I did that—snap!! I yelled, “Compound fracture,” even before I looked down at my twisted lower leg to see the huge bulging area about four inches above the ankle.

Tim did a great job splinting the leg with tubing from one of the portaledges. We had to stay put for the night. Since I was showing symptoms of shock he was afraid to leave me alone. Also, we decided it wasn't a good idea for him to try to find his way down the descent in the dark since he'd never been down the East Ledges before. At first light, Tim finished the descent and got help. I was shorthauled (helicopter) down to El Cap meadow about 2:00 p.m., and eventually ended up being helicoptered to Modesto to get a piece of hardware implanted in my leg.

My heartfelt gratitude to the Yosemite SAR Team for their excellent work, in a time when I imagine they are really strapped financially. Also, thanks to the Medi-Flight folks who got me to Modesto for emergency surgery in poor weather conditions.