the base of El Capitan. (Source: Robert Wilson, Ranger, Yosemite National Park)

STRANDED, EXPOSURE, WEATHER, INADEQUATE EQUIPMENT, INEXPERIENCE

California, Yosemite Valley

On the evening of May 26, 1988, Yosemite experienced a cold storm which laid snow on higher elevations of the park. A two person climbing team consisting of Chalres Hampson (33) and William Enger (32) were on the Northwest Face route of Half Dome. During the night they could not stay dry and became extremely cold. The following morning they yelled for help. The weather on May 27 was cold, with Half Dome clear of the clouds only occasionally.

Rangers communicated with the party via loud speaker and observed their responses through a telescope. In this way it was determined that the party felt they needed to be rescued and that they would not survive another night with the equipment they had.

Rescue efforts were begun about 1300 with the park helicopter. However, Half Dome was clouded in until about 1500, when a flight was made to attempt to lower survival gear to the party. Three flights to the dome were made between 1500 and 1715 in an attempt to get equipment to them. Each time the face of the dome clouded up before the equipment could be delivered. Because it was questionable if the weather would allow us to deliver the gear to the stranded party, a ground team of 12 persons started hiking the 14 kilometers and 1500 meter climb to the top of the dome. They carried equipment to perform a rescue of the party by lowering a rescuer from the top.

At 1730 the helicopter was able to get a bag of gear to the party. Then at 1851 a two person team with enough gear to do the rescue was placed on top of Half Dome by the helicopter. By 1915 a second bag of gear was delivered to the stranded party. With the equipment that we delivered to them, we felt confident that they could survive another night of bad weather if we were unable to evacuate them on Sunday.

The two person rescue team on the top was able to lower ropes and one rescuer descended to the party. He assisted them in rigging for ascending the ropes and both climbers were able to jumar under their own power to the summit. The rescuer rigged the climbers' gear and all the survival gear we had flown to them to the end of the rope so it could be hauled later, and then he ascended to the summit, arriving on top after dark. The rescue team then accompanied the climbers down the Half Dome cables and hiked to Yosemite Valley, arriving there about 0030 on Monday morning.

On Monday morning at 1033, three rangers and a helitack crew member were flown to the top of Half Dome to recover the ropes and equipment. They hauled the gear to the top, recovered the ropes and were flown off by 1430. (Source: Daniel Horner, Ranger, Yosemite National Park)

Analysis

On May 30, Ranger John Dill and I interviewed Charles Hampson at the rescue cache in Yosemite Valley. The following is the essence of some of the information he told us about the climb of the Regular Northwest Face Route of Half Dome which he and William Enger did from May 27 to May 28 and the subsequent rescue on May 29.

Hampson was an experienced climber who had climbed Grade VI routes in Yosemite and the Alps and had climbed extensively in the Pacific Northwest and some in Alaska. He had experienced bad weather while on other major routes. Hampson said that Enger was an experienced free climber, but he had not done much big wall climbing on aid.

Hampson and Enger drove to Yosemite together from Seattle. One of the goals of the trip was for Enger to do some big wall climbing. They climbed the South Face of Washington Column soon after their arrival and then decided to do the Regular

Route on Half Dome before they left the Valley.

Hampson told us that he wore cotton pants and a cotton tee shirt or turtleneck to climb in. He also had a heavy wool sweater, wool top and polypro long underwear bottoms, wool socks, wool hat and Gortex rain suit. He climbed in Fires and had tennis shoes for the approach. He thought he had brought wool Dachstein mitts but could not find them on the wall. Enger also climbed in cotton pants and he wore a polypro shirt. Enger also had in the haul bag polypro long johns, socks and gloves, a wool hat and pile jacket, and a coated nylon cagoule and rain pants. Like Hampson, Enger climbed in Fires and had tennis shoes for the approach. Both climbers brought light down sleeping bags and insulating pads. Enger additionally brought a Gortex bivy sack to cover his sleeping bag. Hampson consciously did not bring a bivy sack because he he felt he could share Enger's if necessary.

On Thursday before starting up the trail on the approach, the climbers called the NPS weather and road report tape and got a forecast for good weather through the coming weekend with temperatures in the 20 degree C range and no wind. They tried to register for the climb at the Visitor Center, but got there shortly after it

closed, and so did not.

Hampson and Enger started up the Mist Trail on the night of May 26. They camped (illegally) at the top of the falls (probably Nevada) and a bear got their food during the night. Enger hiked back to Yosemite Valley to get more food on Friday morning. That afternoon they hiked up to the base of the Northwest Face of Half Dome and were able to fix two pitches up the Regular Route that evening.

On Saturday morning they got an early start and climbed all day. About noon Hampson saw the approaching weather front to the west. He worried about it a little, but decided they should continue climbing. He said that he had sat out storms on walls before in Yosemite, that he did not think storms here would last very long and

that their gear was sufficient to wait it out if necessary.

Late in the afternoon they reached the good bivouac ledge at the 11th pitch. However, there was a party below them who yelled up to them they wanted to bivy at eleven and asked if Hampson and Enger would continue to Big Sandy Ledge (top of pitch 17). Hampson and Enger continued up the route intending to bivy on Big Sandy. It started to rain lightly while Hampson was leading pitch 17. As Hampson belayed Enger up to Big Sandy, it started to rain hard and the ropes got completely wet. Hampson had his rain jacket on, but his cotton pants got wet. When Enger arrived at the ledge, it was about 0900 and raining very hard. They set up their bivy in the rain and got into their sleeping bags. They tried to get both sleeping bags into the one bivy cover, but found that they would not fit. Hampson then put his feet in the haul bag and he wore Enger's cagoule over his sleeping bag on his upper body.

Enger was keeping reasonably dry in his bivy sack, but Hampson's poorly pro-

tected down bag was soon soaked and worthless. Hampson then climbed in Enger's sleeping bag with him. They could not get the bag zipped up most of the way and then held it closed around them with their hands. With this arrangement, they were able to keep the one sleeping bag comparatively dry and utilize each other's body heat. They had set up the bivy so fast that Hampson was still in his wet cotton pants and he could not find his polypro long johns. Hampson said that his legs got very cold, but that his feet were OK because he was wearing wool socks.

At times they experienced very high winds. Late in the evening the temperature dropped and the ledge was blanketed with eight centimeters of snow.

They spent the night without sleeping and at times Hampson wondered if they were going to make it. In the morning it stopped snowing and they took turns getting out of the bag to see if they could get their gear set up for rappelling. Hampson found his polypro long underwear bottoms laying soaked on the ledge. He wrung them out and put them on in place of his cotton pants. The ropes were completely frozen with large chunks of ice which proved to be too much effort to remove by running the rope through carabiners. Also Hampson realized his mitts were missing and without them his hands were too cold to use effectively.

After realizing that they could not retreat, they started yelling for help and signaling to the Valley by waving gear. They were worried that no one would hear them or that no one would know they were there because they had not registered. Another party at the base of the climb heard them and reported their cries to the Little Yosemite Valley rangers. (Source: Daniel Horner, Ranger, Yosemite National Park)

(Editor's Note: This lengthy analysis is presented in the hopes that the readers who climb where these weather conditions are possible will remember to prepare adequately. The potential savings to taxpayers and rescuers are significant.)

FALL ON ROCK, FATIGUE, DEHYDRATION, OVEREQUIPPED, INEXPERIENCE ON BIG WALLS

California, Yosemite Valley

On June 4, 1988, at 1200, disptach received a call from Wesley Walton concerning an injured climber on Half Dome. Walton had talked with people on top of Half Dome by CB radio. At 1215, six SARSITE climbers and I were flown to the top of Half Dome starting at 1330. At 1443, Kevin Brown arrived at Big Sandy Ledge after being lowered 150 meters. He met David Banks, who had an uncomplicated injured elbow, bruised seriously enough so the he could not climb. Banks was raised the 150 meters arriving at 1545. Brown, Klotz (Banks' climbing partner) and two Half Dome climbers who had helped jummarred out. All rescuers were flown out, ending at 1847.

Ranger Horner interviewed Banks later. He said that he had injured his arm/elbow in a slow, sliding fall on the pitch below Big Sandy on June 3. He was slightly off route and did not protect well. He fell about ten meters and stopped prior to hitting a large ledge. Banks was lowered to his belayer and then Klotz led the pitch to Big Sandy. Banks took an hour and a half to jumar to the pitch, which he did in a lot of pain. They were also hauling the largest haul bag anyone can remember seeing. (Source: Dan Horner and Bob Howard, Rangers, Yosemite National Park)