

lost all ten toes. The other four survivors were hospitalized for periods of two to sixty days. (Sources: Arizona Mountain Club, Bob Box.)

*Analysis:* After much discussion and reflection, the Board of the Arizona Mountain Club has collectively been forced to conclude that there is very little we can do in a formal way to avoid such incidents. This conclusion stems from consideration of the kind of people who climb mountains and from the social nature of the A.M.C., which depends completely on volunteers for all Club functions. More formal regulation and monitoring of outings would demand a degree of continuous effort for which volunteers cannot be found within the A.M.C. An attempt to mold the A.M.C. in that direction would either result in a direct failure or in such conservatism in the nature of the "permitted" outings as to alienate the large majority of the membership. We can, however, attempt to state the implicit relationship and shared responsibilities between an outing leader (who is sharing his/her time, interests, and experience) and the outing party members (who are drawing upon the leader's time and experience for their own enjoyment and/or development). The outing leader should: (1) Be sure that the outing announcement is sufficiently descriptive to alert those who should and shouldn't consider participation. (2) Describe any mandatory or desirable equipment and/or supplies. (3) Identify an unambiguous time and place to meet for the outing. (4) Supply some responsible person with a list of party members and an anticipated return time. (5) Assign to responsible party members such support roles as bringing up the rear. (6) Be aware of the state of the party and able to make changes in the plan when conditions so dictate. The outing members should: (1) Resolve with the leader any question about their qualifications to participate. (2) Resolve with the leader any questions about equipment and supplies. (3) Take full responsibility for the preparation of any invited guest. (4) Plan on finding everyone gone if you arrive late at the meeting place. (5) Discuss with the leader any last-minute concerns before leaving the meeting place. (6) Do *not* plan to be back at a specific time. (7) Follow the guidance of the leader unless it seems clear that the party will be placed in jeopardy; then be prepared to accept full responsibility for independent actions.

Using available weather data two separate researchers concluded that the wind chill during the night on the mountain was in excess of 100 degrees below zero. Hindsight critics should keep this in mind. The errors made by this party were not great, but the margin allowed by the weather was less. (Sources: A.M.C., Box.)

*California, Mount Whitney.* Eric Eichmann (age 20) and Don Pfirrmann (24) were part of a group of six University of California at Irvine students camping at East Face Lake and climbing various routes on Mt. Whitney. On December 20th Eichmann, Pfirrmann, and another two-man rope started the ascent of the East Buttress route, normally a one-day climb of about six fourth and easy fifth class pitches. The other team reached the summit and spent the night in the building there. Eichmann and Pfirrmann bivouacked about halfway up the route, beneath a huge block known as the "Pewee." They were seen at the Pewee on the morning of the 21st as storm clouds closed in. They continued to climb through the twelve-hour storm. Eichmann fell while leading on easy rock about 200 feet below the summit. Although it was a fall of less than ten feet, it became serious because he struck his head. He was carrying a hardhat but not wearing it because it would not fit on over his parka hood. In spite of Pfirrmann's first aid efforts, Eichmann died after several hours. Pfirrmann bivouacked and on the next morning attempted to finish the climb. He fell, injuring his hand slightly. This injury, together with the fact that he

did not know the difficulty of the remainder of the route and the descent back to camp, persuaded him to return to a ledge where he waited until rescuers arrived. The other four members of the outing party remained at camp on the night of the 21st and all day the 22nd. On the 23rd two men started down the mountain for help. They reached Lone Pine at about noon on the 24th but waited until dark in hopes of seeing a "good news" flare to be sent up from the camp. Seeing none, they contacted the Sheriff and the China Lake Mountain Rescue Group that evening. A rescue team reached East Face Lake by helicopter on the morning of the 25th. They were able to hear calls coming from the mountain. A party of five, including two members of the outing group, started up the easy route, reached the summit, and descended to Don Pfirrmann at about noon. Although he had suffered severe frostbite of the hands and feet during his three days and nights of bivouacking, Pfirrmann was able to descend to the lake under his own power. He was evacuated by helicopter. (Sources: Dennis Burge, Al Green.)

*Analysis:* Eichmann and Pfirrmann started their climb with an unusually large amount of equipment: two one-man tents, hammock, aid slings, thirty carabiners, numerous pitons and nuts, one full-length and one half-length sleeping bag, heavy cameras, and three days' supply of food. Thus encumbered, they progressed very slowly and were overtaken by the storm. In retrospect it appears unwise to have forfeited their capacity to move quickly. As it happened, the sleeping bags were lost in Eichmann's fall, the stove failed to function, and Pfirrmann's own clothing became wet and lost its insulating value. Obviously, hardhats should be worn as well as carried, and winter climbers should arrange to keep their heads both warm and protected. Winter conditions make the climbing itself more difficult, and they multiply the consequences of injuries. After the accident, Pfirrmann might have been able to descend by himself if he had been familiar with the route. His friends apparently took so long to act because they knew Eichmann and Pfirrmann were well equipped and expected to move slowly. Had they climbed up to search and give direct assistance, Pfirrmann might have been reached days earlier.

*California, Yosemite Valley.* On May 29th Richard Jack (age 28) and Peter Williamson (29) completed an ascent of the Grade V route on the Leaning Tower. On their descent they camped for the night at Bridalveil Creek. In the morning they prepared to cross the creek by having one man cross on foot while belayed. Then they would rig a Tyrolean traverse on which the packs and the second man could cross. Williamson removed his clothes, put on his swami belt and seat harness, tied in, and entered the water. He was rapidly swept away and under. Jack was unable to help. He tied off the belay line, attached a second line to it, and finally pulled Williamson's body to shore. (Source: Peter Thompson.)

*Analysis:* The precise spot where Williamson entered the water is unknown, but for a mile above Bridalveil Falls the creek runs in excess of twenty knots. The water temperature is estimated to have been well below 50 degrees. The climbers could have chosen one of two other, unattractive descent routes: five miles of unpleasant bushwacking to the Glacier Point Road, or a rappel down the loose and dangerous Leaning Chimney. They knew the difficulties of these two routes. They did not appreciate the great hazards of river crossings.

*California, Yosemite Valley.* On June 1st Mike Blake (age 19), Bruce Schuler (25), and Brian Watson (21) were climbing the Right Side of La Cosita on El Capitan, a Grade I Class 5.9 route. Watson had climbed the route the previous year and was serving as Schuler's belayer. Blake was spotting the leader for the first few