controlled bleeding from the head. Joshua Tree Ambulance transported Miller to High Desert Medical Center. (Source: Tom Patterson, Ranger, Joshua Tree National Monument)

(Editor's Note: Ropes come untied from harnesses when one's fingers do not follow a correct sequence of tying an appropriate knot.)

LOSS OF CONTROL—VOLUNTARY GLISSADE

California, Lone Pine Peak

On April 30, 1988, Dave Dykeman and a small group of climbers were descending from a peak climb that was aborted due to high winds. There was a week old snow cover on a variably breakable crust. Most members of the group chose a slow, controlled glissade to avoid a possible break-through injury. Ray Wolfe (51) had trouble starting his glissade, but shortly he lost control, including his grip on the ice ax, and tumbled against a rock injuring his knee.

He was unable to walk so a backpack sled was used to move him down to camp. Two messengers were sent out to request a chopper evacuation. The next day Ray was moved to a flat, clear area that had been marked with a colored bullseye and a space blanket wind-sock. The CHP chopper evacuated Ray at midday to the Lone Pine Hospital where it was determined that he had a hairline fracture of the tibia. (Source: Bob Hicks, Angeles Chapter, Sierra Club Safety Committee)

Analysis

Contact with a rock could have been avoided by choosing a clear glissade run-out. Conditions apparently exceeded Ray's skill level. The leader thinks that boots with beveled heels do not hold well on slopes and may have contributed to the out of control slide. (Source: Bob Hicks, Angeles Chapter, Sierra Club Safety Committee)

STRANDED, WEATHER, INADEQUATE EQUIPMENT

California, Yosemite Valley, Washington Column

Two male climbers, both 27, were rescued from the Skull Queen climbing route on Washington Column on Friday, May 6, 1988, when they became 52 stranded in a storm. Pat Teague and I interviewed them, and the following is the essence of their statements:

Climber A has been climbing for ten years, frequently for the last seven. He is in good physical condition, leads 5.10a and A3, and has climbed alpine mountaineering routes. He has also climbed nine Grade V's, the majority of these in Yosemite, and has experienced stormy bivouacs on at least one Yosemite wall. Prior to climbing Skull Queen, he had read the chapter entitled "Staying Alive," in the 1987 edition of Yosemite Climbs, by Meyers and Reid, in which the dangers of storms and several precautionary measures for coping with them are described. He is a professional EMT-1.

Climber B has been climbing consistently for two and one-half years. He is in good physical condition and leads 5.9 and A2, but has little experience with aid (Skull Queen was to be his first Grade V). He has climbed alpine routes during which he experienced bad weather. He had read "Staying Alive" prior to this climb and is a