At 1300, H51 led the Lemoore helicopter, Angel 1, to the scene. At 1840 Angel 1 loaded the victim directly aboard while in a one-skid hover and returned to Toulmne meadows. He was transferred to Centinela Hospital in Mammoth by June Lake Ambulance. His partners hiked out that night, leaving the NPS survival gear at the foot of

the glacier. Rangers recovered it on October 9.

The victim, Richard Hasbrook, stated to me that all members of the party had several years of mountaineering experience and were well equipped. They had climbed the glacier and a couloir above and were descending about 1300 meters when he slipped. He immediately rolled to self-arrest, but before he had slid more than a bodylength, his right crampon caught. His body rotated, his foot didn't, and he suffered a spiral fracture of his right lower leg. The party splinted it with ice axes and had gotten him a rope-length or two down the glacier when we arrived. (Source: John Dill, Ranger, Yosemite National Park)

(Editor's Note: Here is a good example of (1) a climbing party prepared to take care of itself and (2) swift and efficient decision making on the part of the SAR Ranger from Yosemite.)

STRANDED, DROPPED ROPE

California, Yosemite Valley

On October 15, after completing a single pitch 5.7 route in the Church Bowl area called Uncle Fannie Hoffman, Matthew (19) lowered his partner to the ground from a ledge and accidentally dropped his only rope. Due to impending darkness, he remained at the belay ledge and sent his partner, Miller, for help.

Hoffman had seven years of mountaineering experience; however, this was only his second technical rock lead. (Source: Kelly McCloskey, Ranger, Yosemite National Park)

(Editor's Note: There have been a number of incidents like this in the past few years, so this one is included to call attention to the need for being attentive once the apparently key part of the climbing is over.)

FALL ON ICE, CLIMBING UNROPED, PARTY SEPARATED, EXPOSURE California, Mount Shasta

On November 4 Paul Scarborough (55) and his son Dean Scarborough (23) attempted to climb the north side of Mount Shasta. They left their base camp (located at the 3050 meter level) and proceeded via the Hotlum-Bolam Route, which is considered one of the more difficult routes on the mountain. They each carried ice axe and crampons; no other climbing equipment was brought. Much of the climb was over moderately steep, very hard blue ice on which self-arrest is extremely difficult. Conditions deteriorated as a snowstorm blew in, and around the 3950 meter level the visibility was 35 meters. At this point the pair decided to separate. Dean (with his father's encouragement) was to continue to the summit, while Paul was to return to base camp. Dean summitted and returned to base camp, where he found no evidence of Paul's return. Dean hiked out to their vehicle and contacted Siskiyou County SAR. (Source: Tom Grossman, Bay Area Mountain Rescue Unit)

Analysis

Paul Scarborough's body was found on November 11 at 3350 meters by two climbers after an intensive week-long search. (It is believed that the body was buried in snow until that morning.) No ice ax was in evidence. He had sustained superficial head lacerations, and fractures to the leg, arm and ribs; the cause of death was established as hypothermia. It is speculated that he lost his footing, and tumbled/slid several hundred feet down the ice, and that his ice ax was lost during the fall. One of the victim's crampons was dislodged; it is not known if this happened before or during the fall.

It is common (especially in low snow years) for the north side of Mount Shasta to be covered in "blue ice." This blue ice is old, highly transformed snow that is clear and extremely hard and brittle. It can require a fair amount of technique to place specialized ice-climbing tools from a good stance into blue ice; in the event of a fall on this ice, self-arrest may not be possible. In such conditions, unbelayed simultaneous roped travel is not advisable. The decision whether or not to use a belay needs to be carefully

considered. In the absence of a belay, traveling unroped may be preferable.

There were several accidents on Mount Shasta over the past three years. These accidents resulted in five deaths and numerous injuries, many of which go unreported. It is important that climbers recognize that ascent routes on Mount Shasta vary dramatically in difficulty, and that experience obtained on the easier routes may not be sufficient for the harder routes.

Climbers should be aware that they can obtain current information on conditions 24 hours a day by calling (916) 926-5555. (Source: Tom Grossman, Bay Area Mountain Rescue Unit)

(Editor's Note: Dennis Burge, China Lake Mountain Rescue Group, reported three accidents which occurred on Mount Whitney and North Palisade. One was a climbing accident which resulted from a neophyte losing control on a glissade. Burge made an interesting observation regarding the contributing cause: "It is interesting that two accidents occurred within four days of each other on the same slope. Climbing Mount Whitney by the trail is not mountaineering in the summer season, but in November with ice on the trail, it becomes mountaineering. That both victims had ice axes is further evidence of this. The lack of snow this November, due to our drought, caused people to think about climbing it in the late season who probably would not have otherwise tried it then. Over the years there have been many accidents on the same slope in late September and October (at least one fatal). The fact that the permit quota system for overnight climbs makes it hard to get a reservation in the summer season without planning long in advance may also be a contributory factor to these late season climbs and accidents. The quota period now ends on October 15."

The Angeles Chapter of the Sierra Club reported nine accidents for 1990, six of which resulted in fractures. No narratives were provided.)

STRANDED, INADEQUATE EQUIPMENT, WEATHER, EXPOSURE, EXCEEDING ABILITIES

Colorado, Longs Peak

On January 14 at 0900, Mark Swinnerton (34) and Danny Pyatt (34) passed by rangers Kurt Oliver and Jim Detterline at the Chasm Meadows Cabin below the East Face of Longs Peak. The rangers informed the climbers that a storm was beginning, ice/snow