

earlier. The survival blanket he had taken along probably saved his life since the temperatures that night were below freezing (with wind chill). The total cost of this rescue, including dropping rescuers on top by helicopter—\$16,000. (Source: Reed Thorne, Captain—Technical Rescue, Sedona Fire Department)

(Editor's Note: These two incidents were costly—both to a rescuer and the taxpayers. The Sedona Fire Department has been quite busy with climbing rescues in the past few years.)

FALLING ROCK, FALL ON ROCK, CLIMBING UNROPED, NO HARD HATS

Arizona, Oak Creek Canyon Overlook

On June 13, 1988, Doug Berry (20) was using standard chimney procedure to ascend a small spire which had separated from the main face. The spire was composed of columnar jointed basalt typical of tertiary flows at the Oak Creek Overlook area and was about 4.5 meters high. Steve Smeeth (23) was spotting him in typical fashion, but unusual for a chimney. Neither had any equipment or rope with them. Berry had running shoes on while Smeeth had climbing shoes. At a point near the top, Berry apparently applied enough side pressure to push the spire over. In the ensuing rock fall Doug sustained head injuries, lacerations, and bruises. Smeeth was hit on the head with a large rock also. Both sustained concussions. The resulting rescue took over six hours to orchestrate. (Source: Reed Thorne, Captain—Technical Rescue, Sedona Fire Department)

Analysis

While no one could predict that the spire would indeed fall over, by looking at its relationship to the wall, it would have at least been considered. Separated spires from basalt are generally a result of the failure of subsequent strata beneath more so than a product of erosion. They are extremely unstable formations. Both would have been only minimally injured, if at all, if they had been wearing helmets. (Source: Reed Thorne, Captain—Technical Rescue, Sedona Fire Department)

FALLING ICE, STANDING DIRECTLY BELOW ICE CLIMBER

California, Lee Vining Canyon

On January 24, 1988, Bill Isherwood (46) and Bill McConachie (36) hiked with two companions to the ice climbing area in Lee Vining Canyon. McConachie proceeded to lead the first pitch of the middle ice fall while Isherwood belayed from a semi-protected spot to the right of the climb. Upon playing out to near the end of the 50 meter climbing rope, McConachie asked if he could get another three or four meters of rope in order to reach a better belay spot. Isherwood proceeded to move out of the protected belay position and up steep snow to the base of the high angle ice to provide the maximum rope for the leader. (McConachie reports that on hearing that rope was not readily available, he responded not to bother, but that response was not heard below.)

McConachie, in the process of placing an ice screw; dislodged some ice. The largest block, estimated at about 9 kilograms, fell, striking Isherwood directly on his helmet. The blow stunned Isherwood, causing temporary paralysis. Isherwood found