

a lot, and I knew it was a big avalanche. The last thing I remember, before I blacked out, was the avalanche stopping and my trying to get to the surface. But I couldn't move! I thought, 'don't panic.'"

Daum had these thoughts: "I was hanging onto a tree, but the slide pulled me away, and I started swimming to stay on top. I remember thinking, 'Oh, wow, this is an avalanche!' I got one hand up out of the snow, and my head was only 1 foot under, but it might as well have been 10 feet down. I cleared away some space by my face and then it settled in like cement. I could just scratch the snow above my head.

"I thought I was going to die. I was coughing, then I relaxed and thought I would be all right. It was a real pleasant experience. It was like I was detached from my body. Everything was calm and serene, and there was a bright white light."

Murphy was hit hard by the first wave of the avalanche and pinned against a tree. "It felt like someone was pushing a load of snow at me with a bulldozer. Then I slid around the tree into the ditch behind it and was only buried to the knees. I yelled for Larry and Joe but got no answer. I dug myself out and got out my Pieps and went to where I had last seen Larry. I heard beeps on my Pieps and then saw a glove and goggles on the snow. Then I caught a glimpse of a hand sticking out of the snow. It was Larry.

"I felt the hand and it felt limp. I uncovered him and his lips were blue, but as soon as I moved the snow away from his mouth, he began breathing. I dug out the upper portion of his body and his pack. Larry then dug the rest of his body out. I told him to turn off his Pieps and went looking for Joe.

"Holding the Pieps in one hand and the shovel in the other, I picked up the signal from Joe's Pieps. I turned down the volume and followed the signal. By that time, Larry was there and we found Joe on the first probe. We were very lucky. We used a ski pole as a probe, and Joe was 4 feet down. He was almost the full length of the pole under the snow. There were no clues on the surface, and if we had not used the Pieps, we wouldn't have found him."

Holland was buried in the deepest part of the deposition. Murphy and Daum started digging with their shovels and soon uncovered his face. He was breathing shallowly. They uncovered his chest, and he regained consciousness. When they dug him out

completely, they found he had a badly broken and bleeding right ankle.

### Rescue

The men were alive but still in trouble. Their skis were either lost or broken; Holland was in need of medical attention, and they did not have enough food or warm clothing to comfortably spend the night. They decided one man would have to walk out 2 miles through deep snow to the road, while the other two stayed put. They bundled Holland up in the little spare clothing they had, and Daum set out on the long slog to safety.

About 2 hours later, at 1800, Daum arrived at the Silver Fork Lodge in Big Cottonwood Canyon. He telephoned the Salt Lake County Sheriff's Office to report the accident. The deputy called for a helicopter, which flew two experienced deputies and Daum to the scene. It was a tricky flight in the dark, but the rescuers splinted Holland's leg, flew him to an awaiting ambulance and returned to pick up Murphy and Daum. Holland's leg required extensive surgery, but he made a satisfactory recovery.

### Avalanche Data

The avalanche was an SS-AS-4, fracturing 3 feet deep and 150 yards wide. The slab released on a northeast-facing slope at an elevation of 10,200 feet and fell 500 feet vertically. This slope was leeward of the prevailing west winds. The snowpit dug in the starting zone just prior to the avalanche showed 6-12 inches of developing depth hoar at the ground (with a thin crust running through this layer), about 30 inches of equi-temperature snow with some graupel mixed in, and about 6 inches of new snow on top. It appeared to the skiers to be a stable profile, but obviously they hit weaker snow that failed and released the entire slope.

### Comments

These men were well-equipped for an avalanche emergency. Two lives were saved thanks to rescue transceivers and shovels. One man was buried 1 foot deep for about 5 minutes and another 4 feet deep for about 20 minutes. Without the transceivers and Murphy's aid, both men would probably have died. This accident has a special historical significance, for it was the first time in the United States that an avalanche rescue beacon aided in the live recovery of an avalanche victim.