as were several others, on an unimproved area near the Brighton, Guardsman Pass when they were caught in a fast moving avalanche at 1600. A rescue operation, which included rescue dogs from Solitude, located the victims. Lindser was dead under a meter and a half of snow. Carpenter sustained a broken femur. (Source: Lt. Mike Wilkenson, Salt Lake County Sheriff Search and Rescue)

Analysis

While not a climbing accident, this situation is presented to illustrate, as we often do in this journal, that knowledge of mountaineering hazards and techniques is essential for back country skiers and hikers. In this case, back country warnings were in effect and available by phone call. (Source: J. Williamson)

FALL ON ROCK, PROTECTION PULLED OUT

Utah, Little Cottonwood Canyon

On June 12, 1986, Chris Bradley (26) was climbing Half Finger Chimney with two friends. He was leading when his top piece of protection pulled and he fell about 12 meters, suffering head, arm and chest injuries. (Source: Lt. Mike Wilkenson, Salt Lake County Sheriff Search and Rescue)

(Editor's Note: Of the ten reports received from Utah this year, two involved skiers being caught in avalanches, six were hiker accidents in which the victims found themselves in a climbing situation, and only two were directly related to climbing. Given the number of rock climbers and the level of activity in Utah, it seems likely that we are getting only those reports which involve SAR units.)

FALL ON ICE, INEXPERIENCE, INADEQUATE PROTECTION, PROTECTION PULLED OUT, POOR CONDITIONS

Washington, Leavenworth

(On February 22, 1986, Bob Betsworth [31] had an ice climbing accident. He sent the following narrative, which has been edited with the insertion of periods and metric conversions, and corrections of spelling.)

At 1030 four of us were going up to Rainbow Falls in Icicle Creek to climb. Chris and I were going to go first. Chris took the lead on the first pitch. I led the second pitch to the top. Chris asked me to take a look behind the ice up on the ledge of the second pitch. I was about to climb. I told him it was hollow behind the ice wall. It was total separation from the rock wall due to previous heat on rocks, but was frozen at the top to the rocks again. I told him I would lead this vertical pitch because I just climbed three different waterfalls in January with a friend and I had no problem then. But the ice was in much better shape than today. Today it was -4°C out and snowing pretty good (15 to 20 centimeters). I told Chris I never led before. But I will go for it anyway. Chris tied in and I started to climb the second pitch of the waterfall. I went up three meters and put my ice screw in with difficulties. The ice was too thin for a 25 centimeter screw. It was too loose. You could pull it in and out. Maybe I should have used a smaller screw. I saw a ledge two meters above me, so I thought I would climb up on the ledge to put a better screw in. Well, when I got up to the ledge it wasn't that good of a ledge. The ice was past vertical, and I couldn't get an ice screw in the ice. I kept feeling like I was off balance, so

I decided to go for the top, because I was getting weak by holding my ice tool in my left hand. I had to work at it to keep it in the ice. I had only about one and a half meters to go to the top. I chopped a hole for my tube pick and I went to place my right pick in. I peeled away from the ice. Before I fell I got a jittery feeling and had a feeling of fear that things were in shape up here. The ice wasn't as solid as it was below and taking my concentration off what I was doing I fell 12 meters. My protection pulled out on the way down. I did a complete back flip and landed on my feet. As soon as I hit the ground I rolled backwards upside down suspended over a ledge. I yelled I was okay. I had so much adrenaline in me I couldn't feel anything. I was lowered about ten feet (three meters) to a ledge and Chris told me to do a body exam. I knew my left foot was broken so he tied me off and I rappelled down the rest of the way where I was carried off the hill by the rest of my team.

I've climbed Mt. Rainier and have done other climbs after surgery of my left foot. The doctors sewed my left foot on pretty good I guess. I'll be more careful this year. (Source: Report sent to U.S. editor by Bob Betsworth, dated December 14, 1986)

(Editor's Note: Our thanks to Mr. Betsworth for his honest self-analysis.)

FALL ON SNOW, INADEQUATE BELAY, FALL INTO CREVASSE, INADEQUATE EQUIPMENT, FATIGUE, WEATHER

Washington, Mount Rainier

On February 28, 1986, the Gary Speer (34) climbing party of four departed eastern Washington and drove to Carbon River Entrance. The next morning they met Ranger Semler and registered with him for a climb of Liberty Ridge. Leaving the Carbon River road around mid-day, they arrived at and stayed in the Dick Creek BC camp. The next day they hiked and climbed to 2760 meters on Liberty Ridge and made a bivouac. Already part of the party was beginning to show signs of tiring. The next day, a short one, the party climbed the remaining 450 meters or so to the high camp at Thumb Rock. There they say they dug a shallow snow cave, using only ice axes, as they had no shovels. At that point it was realized that Stan Jenoway (25) would not be able to make the climb, so he and Speer decided to retreat down the ridge the next morning.

At 0900 on March 4, the party of two left, going down hill back toward Carbon River. As well, the climbing party of two, Markus Hutnak (19) and Richard Mjelde (33), left Thumb Rock high camp at 0900 for the upper Liberty Ridge route. The climbing party took longer than they thought they would and ended finishing well into darkness. On the summit that night, the party made another bivouac. Early the next morning, in rather poor weather and poor visibility, the party began descending toward Camp Muir on the Ingraham Glacier Direct route. Around 3800 meters the party suffered a series of fairly severe falls, pulling each other down in a tumbling ball. The major part of the fall was around 18 vertical meters to an upside down position, wedged into a crevasse. Injuries were sustained in the fall. Taking around two or three hours to extricate themselves, they found that another bivouac overnight was needed. They stayed that night around 3680 meters immediately next to Gibraltar Rock.

Early on Thursday, the party descended to Camp Muir via Cadaver Gap. They radioed from Muir that they had made it down, but had suffered a fall and had injuries. They intended to melt snow, have some water and soup, and descend the rest of the way to Paradise in intermittent cloudy and clear periods that day. They were tired, very wet