

*Source:* Pete Ford, W. Pfisterer, and Don Linke.

*Analysis:* The members of the party were all fit, well equipped and experienced climbers and had been climbing together several times in the month. They registered for the climb using the Park's self-registration system (introduced a few years ago) and hence did not obtain any advice from the warden service on snow conditions. The Park's Service operates an avalanche detection and protection system at the nearby Marmot Basin ski area, which is only about 10 miles away from the accident site. The winter had been one of very great precipitation which had kept the Warden's service very busy at the ski areas controlling avalanches which left them little time to keep open the Banff-Jasper Highway. The road which had been kept open for the last few winters had to be closed for long periods this season because of avalanches. The history of precipitation in this area indicated the possibility of an avalanche. Earlier in the season there had been a heavy snowfall on top of an icy surface.

The climbers had had no indication at all of the avalanche conditions, either while climbing or while digging the snow cave. The snow came out in solid chunks with no sign of unbonded or metamorphosed layers. There was no cornice above the cave site. A warm front came through at mid-day during the climb and was probably a contributing factor. Pete Ford could hear several minute-long rocky sounding slides during the night as he descended. The cave had been located so as to be not threatened from above, but perhaps it should have also been located other than directly above the slope of the gully. Also perhaps several small caves would have been better than the large one.

Fast thinking and a "Joe Brown" hard hat plus a lot of luck contributed to the survival of Pete Ford.

*Alberta, Canadian Rockies, Mt. Athabasca.* On 20 May Ed Bennington (24), John Root (25), and Barry Watamaniuk (24) were travelling behind another party of three who led a route through the icefall which deviated somewhat from the traditional route on the true left. This variation appeared more reasonable due to a very heavy winter snowfall that had covered or filled in many crevasses and it had the advantage of partially removing the party from the objective dangers of falling ice. The party that had been leading was passed when one of its members dropped a hard hat at the top of the second ice-fall causing the three of them to go back down for it.

The snow was beginning to soften as the sun started to shine on it, so they decided to put on their skis at this point. A party of two on the usual route on the true left-hand side of the glacier passed at this time. John probed the area to the left of a large crevasse but found no signs of a weak snow bridge. John and Ed were waxed first and skied across the probed area to test waxes, then returned unsatisfied and applied a stickier wax. Barry finished loading gear and started off. He appeared to be off balance as he started, probably because he was unfamiliar with cross-country waxes. He may have fallen causing the snow bridge to collapse or it may have just collapsed dropping him about 100 feet. The two who had passed were climbing the third icefall at this time. They were beyond hearing and did not return.

After the accident two of the five climbers went for help and two of the others lowered the third who carried warm down clothing. The victim

was found buried to the waist upside-down at the bottom of the crevasse. He was dug out and found to be not breathing. Artificial resuscitation, mouth-to-mouth, started him breathing but 10 minutes later he stopped and appeared to have died (fluid was coming from his nose). A doctor was lowered down 30 minutes after the accident and pronounced him dead. The body was then removed from the crevasse by the climbers and later evacuated by Park authorities.

*Source:* Ed Bennington, D. G. Linke, and H. Fuhrer, Park Warden, Jasper National Park.

*Analysis:* Party should have been roped. There were many people on the glacier that day (estimated more than 40). These persons were mostly experienced climbers and yet many of them arrived at the accident site unroped. During the rescue a number of climbers would have crossed and recrossed the danger area without a belay if the rescue organizers had not controlled the situation. Persons not active in the rescue repeatedly were told not to stand on the lip of the crevasse. One party stopped under an active icefall despite the falling ice, in order to watch. They were not roped when they arrived and they did not rope up after arrival. These attitudes are the same or worse than that which resulted in the accident. Parties that are doing ski mountaineering should use touring skis rather than racing or running cross-country skis. The latter do not give adequate control in mountainous terrain.

*Alberta, Canadian Rockies, Mt. Athabasca.* On 12 August Burl Mostul and Dan Hale (39) were climbing on the N.W. Ridge of Mt. Athabasca. Mr. Hale lost his footing and slid down approximately 1,000 feet in an avalanche chute. The two had been roped up while crossing the lower crevassed slopes and had unroped to continue on to the top of the ridge. Mr. Mostul was leading the party and they were approximately 300 feet below the top of the ridge when the incident occurred. Mr. Hale attempted to self-arrest twice but on the second attempt lost his ice-axe. He slid down the ice face and over a 30-foot bergschrund and came to rest on old avalanche debris. Mr. Mostul proceeded down to Mr. Hale and found him to be in shock. He left him with his parka and wind suit and proceeded to the highway to report the accident. He left the accident at approximately 1230 and reported to the information bureau at about 1320. A helicopter from Valemont was called in and arrived at Ranger Creek at 1500. Several wardens had gathered at Ranger Creek. In the meantime, Hans Fuhrer, Max Winkler, Alfie Burstrom, and Dale Portman flew to Mt. Athabasca. Additional equipment was driven to the icefields. The helicopter located the injured man but was unable to land with four persons so it landed near the toe of the Athabasca Glacier. Max and Hans then went up and later Alfie and a stretcher. The helicopter could land about 300 feet from the injured man. He was found in severe shock. He was completely roped up to a double rope, and had a chest harness and crampons on. He was wet and lying on his side and could not speak well. He was loaded onto the stretcher and flown directly to Jasper. Without the helicopter, the rescuers felt the man would have died because of exposure and shock. Also, it would have taken about two and a half to three hours to go to the accident site by foot and then four to five hours down. The entire rescue went very well and smoothly.

*Source:* J. Woodrow, Park Warden — Sunwapta Area.

*Analysis:* The party unroped when it was unsafe to do so.