

*3 caught and partly buried; 1 injured***Weather Conditions**

The early part of the winter of 1966-67 at Alta, Utah was characterized by large storms followed by periods of clear weather. In mid-October, a snowstorm dropped 21 inches of snow in the area. A clear period followed and the snow melted off the southern exposures, but patches remained on north-facing slopes. In mid-November another storm left 2 feet of snow on the ground for the winter. The November storm was followed by several days of cold, clear weather, and a tendency toward depth-hoar formation was noted on north-facing slopes. The snowpack gradually built up until mid-December, at which time there was a period of warm, clear weather.

During January 1967 an unusually large amount of snowfall was dropped by the storms that came in rapid succession with only brief breaks separating them. Throughout the month there were only 8 days when no precipitation was measured. One of these interludes occurred on January 18. On the afternoon of the 19th, the winds began to gust up to 30 m.p.h. from the southwest, and clouds filled the sky. It became apparent that a major storm was coming.

Little snow fell on the 19th and the 20th, but the winds continued blowing strongly from the southwest. On January 21, snow began to fall in earnest, and the wind gained intensity. The winds became so strong that day that the Germania chairlift was closed. It was noticed that north- and east-facing slopes were becoming loaded with drifting snow. The temperature was steady at 20° to 25°F throughout the day.

Accident Summary

During the period from January 18 to 28, the U.S. Forest Service was conducting its biannual avalanche school at Alta for Forest Service personnel. The field session for the afternoon of the 21st involved snow-profile studies on the mountain. The original plan was to dig snow pits to check the stratigraphy up high on the mountain in the release zones of some of the larger slides in the area. However,

the closing of the Germania lift caused a change in plans. It was decided to carry out the field work on the ridge below the Albion gun tower, just west of the top of the Albion ski lift.

Leader Ed LaChapelle took the avalanche trainees to an area off the ridge and just east of a short slide path. There they dug a snow pit that revealed 21 inches of wind-deposited new snow overlaying slightly decomposed fine-grained old snow. Below the fairly solid old snow was a weak layer in which equi-temperature metamorphism had taken place. Underlying this layer was 6 inches of weak depth hoar capped by an ice crust. The depth hoar was probably formed after the early October storm, and the ice layer formed during the period of warm weather prior to the November storm. The layer of equi-temperature metamorphism crystals (ET crystals, for short) reflected the clear period following the November storm.

Snow Ranger Ron Perla was in the snow pit explaining the stratigraphy to the trainees. When he found the depth hoar, he decided that conditions were highly unstable. He asked the more experienced LaChapelle for his opinion, and LaChapelle said that he agreed strongly with Perla's diagnosis. The avalanche occurred almost immediately after these comments.

Meanwhile, shortly after 1500, four skiers— Bill Peterson, Steve Haber, Robin Hayes, and Janie Haber—departed from the Albion lift and headed out Never-Sweat Ridge in search of untracked powder. The four were expert skiers, the two men being ski instructors from Vail, Colorado. The closing of the Germania lift had eliminated some of the better powder snow runs; therefore the four decided to look for a challenge off the Albion lift, basically a beginner and easy intermediate area. The party skied out the ridge to a point just west of the route the Forest Service personnel had taken. Upon reaching the top of the short, steep slide path off Never-Sweat Ridge (now named the Vail Slide) they stopped momentarily; then Peterson skied about half-way down the slope, stopping next to some small trees. At this point, members of the avalanche school heard him calling out to the