

COMMENTS

The riders were apparently climbing a very steep slope shortly after heavy snowfall, with more than one person exposed to the hazard. Given the scant details available for this accident, the authors can make no further comments.

ABOVE PINECREST, EMIGRATION CANYON, UTAH |

19930225

February 25, 1993

One backcountry tourer caught, buried, and killed. The group had made runs on gradually steeper terrain through the day.

SITE

Emigration Canyon is in the Wasatch Range. The canyon mouth is on the northeastern side of Salt Lake City and runs northeast. The canyon splits at the top, and Burr Fork turns north. Pinecrest is a cluster of cabins and homes in the upper end of Burr Fork. North of Pinecrest are a variety of slopes for backcountry skiers to choose from.

WEATHER AND SNOWPACK SUMMARY

An intense storm began on February 24. By early afternoon on February 25, over 30 inches of snow had accumulated. The UAFC updated their forecasts (recorded onto a call-in phone line) at 15:30 because of the rapidly increasing avalanche danger.

**High
avalanche
danger**

ACCIDENT SUMMARY

Patrick Ellsworth (29 or 30) was an avid skier who lived in Pinecrest. He was very familiar with the terrain in upper Burr Fork and skied it frequently.

Ellsworth called his friend Rick Whitson (37) at work. Ellsworth was very excited about the snowfall, and convinced Whitson to join him for an afternoon ski tour. They drove to the trailhead a short distance past Ellsworth's house and began breaking trail. Their friend Richard Hagio started later, but as planned moved faster on the broken trail and caught up to the pair. All three had transceivers, shovels, and ski poles that converted to avalanche probes. Their group included four dogs: Ellsworth's, Hagio's, and two local Pinecrest dogs who decided to tag along.

Over the course of four runs, the trio gradually moved into steeper and steeper terrain. They saw no indications of instability.

We were euphoric after our first run. Bottomless and effortless, it was everything we had hoped for. Each run added more exclamations to our repeated refrains of ecstasy.... Each successive run began a little farther out the ridge than the previous one, with a slightly different aspect and increasingly steeper slope. Lulled into a false sense of security, we didn't realize that we were about to push the limits just a degree too far.⁸⁰

On their fifth run, it was Ellsworth's turn for first tracks. He started around 17:30. After a few turns, he dropped out of sight behind a stand of trees. Hagio waited for an agreed-upon time before dropping in. Below the trees, the slope steepened slightly to 36 degrees, and Hagio saw the crown of an avalanche. He yelled "Avalanche!" back up to Whitson.

RESCUE SUMMARY**Terrain trap**

Hagio descended the avalanche to the main debris pile in a gully at the bottom of the slope. Whitson searched along the flanks of the slide where clumps of trees had caught piles of debris. He was desperately hoping to see his friend's ski tracks.

Hagio picked up a strong transceiver signal in the main debris and honed in on the location. Whitson skied down and prepared to help. He was unable to fully assemble his probe poles. Abandoning the probe, he began digging. The pair dug straight down, “but the cold, powdery snow kept sloughing back into the hole.”⁸¹ It took about 10 to 15 minutes for the pair to reach Ellsworth under three to six feet of avalanche debris. They hit his ski first and had to dig a larger hole to reach his head. Ellsworth was buried face-down; he had both polestraps and one ski attached. They eventually had enough space to roll Ellsworth's upper body over and begin CPR. “We continued until we had no energy left and were becoming overly cold; hope abandoned us. By now, too much time had elapsed for a successful resuscitation. It must have been at least 30 minutes, maybe more.”⁸²

The pair skied down the trail, and then down the road to Ellsworth's house. Ellsworth's dog would not leave the avalanche site. Ellsworth's wife Jessica was a coworker of Whitson and Hagio's. Whitson broke the news to Jessica, then called his own wife. Finally, he called 911 to report the fatality.

When rescuers reached the avalanche site, Ellsworth's dog was aggressively protecting his body. It took rescuers a few minutes to calm the dog down and recover Ellsworth's body.

AVALANCHE DATA

Ellsworth triggered a soft slab avalanche in the storm snow. The crown face was two to three feet deep and 100 feet wide. The avalanche ran 200 vertical feet and the debris piled into a gully. The slab consisted of storm snow, and the avalanche ran on an ice crust at the old snow surface.

TYPE	TRIGGER	R SIZE	D SIZE	BED	ASPECT	CHARACTER
SS	AS			I	ESE	S

COMMENTS

“They pushed the slope angle just a couple degrees too far,” said Tom Kimbrough, a USFS avalanche forecaster.⁸³

The trio were experienced backcountry skiers and aware of avalanche danger. They were unaware of the upgraded avalanche forecast, but knew that all the new snow could be hazardous. They began skiing on lower-angled terrain. Seeing no indications of instability, each run was a little farther out the ridge—and each run was a little steeper. Snow was also accumulating as their slope angles increased, and they found the intersection of increasing load and slope steepness on their final run.

There were eight other major avalanches in the Wasatch on the afternoon of February 25. In Little Cottonwood Canyon, about 20 miles south, six avalanches ran across the highway and trapped skiers at Snowbird and Alta ski areas. About ten miles farther south near Sundance, an avalanche destroyed one home and damaged two others. A separate avalanche ran across the ski resort's access road.