

December 1, 2000

One backcountry snowboarder caught, buried, and killed

WEATHER AND SNOWPACK CONDITIONS

November weather in the Teton Pass area of Wyoming had brought abnormally cold temperatures and periodic light snowfalls. From November 24 to 30, just under two feet of new snow was recorded at nearby Jackson Hole Mountain Resort. Persistent winds from the west and southwest were strong enough to produce blowing snow, which loaded the northeast-facing portion of Glory Bowl. December 1 was a clear day with moderate temperatures and calm winds.

ACCIDENT SUMMARY

Mt. Glory, at 10,080 feet elevation, looms above 8,431-foot Teton Pass. Glory Bowl is a large avalanche path on the east slope of Mt. Glory. When the path runs big, it buries Wyoming Highway 22, which crosses the avalanche path above the runout zone. The Wyoming Department of Transportation frequently mitigates avalanche hazard to the highway with artillery and fixed installations. The slopes around the pass, including Glory Bowl, are popular with skiers and snowboarders.

On November 30, Sean Macauley drove to Teton Pass and hiked to the top of the Glory Bowl. When he got there, he didn't like what he considered to be sketchy snow conditions, so rather than ride down the bowl, he snowboarded a safer line along the trees near an area known as Twin Slides. But he planned to return the following day with a pair of snowboarding friends, Joel Roof (28) and Steve Westmoreland.

A miscommunication among the three men led to Roof driving alone early on the morning of Friday, December 1. He parked at the pass and began a solo trek up the boot track toward the top of Mt. Glory with his snowboard strapped to his back. A short time later, Macauley and Westmoreland arrived at the pass and began their own hike up.

Roof got to the top ahead of his would-be companions. He started his descent into the bowl while they were still climbing and out of sight. He triggered a large avalanche that swept him down almost 2,000 feet and buried him. He was not wearing a beacon. A short time later, Macauley and Westmoreland got to the top, saw the fresh avalanche, and saw their friend's snowboard track end at the fracture line.

RESCUE SUMMARY

The avalanche roared across the highway at about 08:35, blocking the road with debris six to 10 feet deep but fortunately not hitting any vehicles. Motorists called the Teton County Sheriff's Office at 8:38 to report the avalanche. Meanwhile, Macauley and Westmoreland rode down Glory Bowl looking for Roof, to no avail. At the highway, they told the people on the road that they feared their friend had been caught in the avalanche. Macauley then called 911, which alerted Teton County SAR.

Macauley also told people on the road that he knew Roof owned an avalanche beacon but did not know if Roof was wearing it. Several motorists got their own beacons from their cars and began searching the debris for a signal. They got no signal, but someone found a glove on the snow.

Fairly soon after that, Teton County SAR arrived and coordinated a probe line. At 09:37, the probe line made a hit just above the highway. Shovelers dug Roof out from six feet of snow. He had been buried a little more than an hour and did not show obvious signs of trauma, though his snowboard was broken in two. Roof did not respond to resuscitation efforts, and the coroner later determined he had died of asphyxiation.

AVALANCHE DATA

The avalanche was classified as SS-ARu-R3. The fracture was only 1.5 to two feet deep but was 1,500 feet wide and pulled out almost half of the rider's right side of the bowl. The bowl narrows into a gully before hitting the road, concentrating the debris. The avalanche fell about 2,200 feet vertical. The slope aspect was east-northeast, putting it leeward of the prevailing southwest winds. The average slope angle across Glory Bowl is about 35 degrees. For this avalanche, the alpha angle was 29 degrees.

Snow depth in the upper starting zone varied from 32-52 inches. The avalanche bed surface was a crust layer from the early part of November. The failure plane was a layer of depth hoar with grains two to four mm in size. The depth hoar grains were well developed and striations were easily visible. Storm snow and wind-blown snow had buried this layer over the previous six days.

COMMENTS

An unanswered question is why Roof did not take his beacon with him this day. That decision (or oversight), coupled with his decision to go solo—did he even know his friends were fairly close behind him?—proved fatal. Riding in avalanche terrain without a transceiver and alone almost completely removes any chance of companion rescue.

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the
**SNOWY
TORRENTS**

Avalanche Accidents
in the United States
1996-2004

Traveling alone

Inadequate
rescue
equipment

Persistent Slab
avalanche