

## **Very Long Burial and Rescue**

Utah, Wasatch Range, Silver Fork

On March 12, 2022, a party of six, with two guides, ascended from Grizzly Gulch in Little Cottonwood Canyon toward East Bowl Pass overlooking Silver Fork, which flows north into Big Cottonwood Canyon. While traveling, the group separated into Group A and Group B, planning to ski different routes and then regroup below Silver Fork's West Bowl. Group A consisted of four clients and one guide, moving at a bit faster pace, while Group B consisted of two clients and one guide.

After climbing to the rim of East Bowl, Group A ascended to East Peak, safely descended the northwest ridge and East Bowl, and then waited for Group B on a bench above a gully at the base of West Bowl. Group B arrived at East Bowl Pass and headed up Davenport Hill to ski Cabin Ridgeline northward into Silver Fork, where they would meet the skiers of Group A.

Group B descended Cabin Ridgeline one at a time in pitches. On the final ski pitch to join Group A, the first skier safely descended. While the second skier was midway down the pitch, an avalanche released above them. The party below yelled "Avalanche!" and the skier was able to head off the slope and away from the slide. However, the guide at the top of the pitch was caught, carried, and fully buried down in the gully below.

At approximately 12:30 p.m., one of the party members called 911 and the group quickly booted toward the debris pile. After a beacon search and positive probe strike deep under the surface, the skiers dug furiously, extracted the patient, and cleared his airway. It took 23 minutes from the time the avalanche was initially triggered to the time the skier's airway was cleared.

The skier was breathing and had a pulse when the airway was cleared. Having been strained through trees in the avalanche, he experienced trauma on his face and torso [six broken ribs, a bruised lung, and facial lacerations, according to a published report].

Five minutes after the buried skier was recovered, Solitude ski patrol arrived on the scene. The skier was hoisted out by Lifeflight around 2:30 p.m.; he was in critical but stable condition. The remaining party members skied out with Solitude ski patrol.

## ANALYSIS

The Utah Avalanche Center had issued a Special Avalanche Bulletin for the day of the accident. The forecast avalanche hazard was Considerable on north to east aspects at all elevations, following a week of stormy weather that buried a weak layer of faceted snow formed during a period of drought in January and February. Clearing skies and a sunny weekend lured many skiers out despite the hazard. The avalanche center's bulletin for March 12 warned, "Dangerous avalanche conditions combined with great powder and beautiful weather make accidents likely. There have been many close calls this week, but luck eventually runs out."

The guides in this party were Winslow Passey, who led Group A, and Willie Benegas, who led Group B and was buried and rescued in the avalanche. Passey is an AMGA-certified ski mountaineering guide with over two decades of experience, and Benegas is among the most experienced high-elevation guides working in North America. In a personal account of the accident included with the Utah

Avalanche Center report, Passey reported that the whole party had discussed the avalanche hazard and performed beacon checks before the tour, and during the initial ascent they dug three pits to assess conditions. Passey also said she carefully checked slope angles all day using a shaded Cal Topo map, in order to stay away from steeper terrain.

In an interview in Outside, Benegas attributed the accident to overconfidence, estimating he had skied this same slope 150 times without incident. "It has been an extremely difficult year," Benegas told Outside. "Our snowpack has been challenging to forecast on the micro-terrain assessment aspect."

The Utah Avalanche Center report said a couple of things went right for [Benegas] that could have very easily gone wrong:

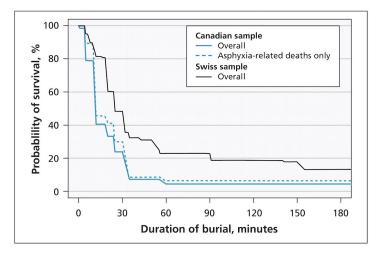
The skier lived despite being buried for 23 minutes under nearly two meters of snow. [The first probe strike was at 1.5 meters, but Benegas was facing diagonally downhill; the rescuers first uncovered his boot and pack and had to dig extensively to reach his face and clear his airway.] Below the 15-minute mark in a burial, the probability of survival drops rapidly. At the 23-minute mark, the probability drops to 35 percent.

A skilled team was close by. Since [Benegas] was the last in his group at the top of the pitch, and Group A was already at the bottom of the slope, in most situations like this the rescuers would have had to transition back to uphill ski mode to reach the burial site. In this case, they were able to reach the site on foot, saving them valuable time. As well, the two clients with Group B had less avalanche training than the members of Group A. The close location of Group A allowed the more experienced members to run the rescue.

This easily could have been a multi-burial situation. At the time of the avalanche, two skiers were within the path. (Sources: Utah Avalanche Center, Outside.com.)

Read the avalanche center report.

## Images



A 2011 study examined survival of people completely buried in avalanches in Canada and Switzerland between 1980 and 2005. In both cases the survival rate plunged after 15 to 20 minutes of burial, but the survival rate fell quicker in Canada. A maritime snow climate, with wetter and denser snow, was associated with the fastest drops in survival rate.

## **Article Details**

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