

A final factor to consider is the dramatic temperature rise in the 24 hours before the avalanche. Could that have contributed to the avalanche release? A rising temperature in a dry snowpack affects the slab's stiffness, but does not necessarily make it weaker. In this accident, the rapid loading effects of a significant snowfall (in excess of three feet in the days before December 26) and strong winds causing heavy blowing snow were the primary factors that created a high avalanche danger. Any temperature effect would be strictly a second-order effect.

20000111 **SQUARE TOP, WEST OF CANYONS VILLAGE AT PARK CITY,
UTAH | January 11, 2000**

Two sidecountry skiers caught, buried, and killed

WEATHER AND SNOWPACK CONDITIONS

West-to-southwest winds had been blowing in the Wasatch Range of Utah on January 10 and 11. The winds had transported enough recently-fallen snow to load north-through east-facing slopes along the Wasatch crest.

ACCIDENT SUMMARY

On January 11, Park City residents Greg (47) and Loren (41) Mackay were skiing at a resort northeast of Park City that was then named The Canyons (now Canyons Village at Park City). Friends described the husband and wife as very good skiers who looked for powder but never seemed reckless in this pursuit. At about noon that day they were seen at the backcountry access gate near the top of the Ninety-Nine 90 chairlift. There, a ski patroller discouraged them from leaving the ski area that day. The Mackays went anyway.

The couple then skied and hiked about a mile west across a saddle to a 9,770-foot peak that is a popular backcountry location for skiers and snowboarders. The local name for the peak is Square Top. It is steep, with slope angles of 37 to 38 degrees, and is known avalanche terrain. At some point in their descent, they triggered an avalanche that buried them both.

RESCUE SUMMARY

When the Mackays failed to pick up their son Connor (3) from day care on Tuesday afternoon, Sheriff's deputies and several friends began looking for the missing couple. That night, a friend found the Mackays' car in the Canyons parking lot. This find triggered a search of the Canyons' ski terrain through the night, yielding nothing.

The following morning, during a helicopter search of the terrain surrounding the ski area, rescuers saw the avalanche on Square Top, with ski tracks going in and none coming out. About 45 search and rescue volunteers and ski patrollers then went to the site. The rescuers concentrated their search down the fall line from the ski tracks entering the fracture line, but found no visible clues or beacon signals. A probe line began working uphill from the toe of the debris and soon had success.

Searchers first found a ski, then a body, and then, about 20 minutes and 60 feet farther uphill, the second body. Neither body showed obvious signs of trauma, so it appeared death was by suffocation. The woman was buried about 18 inches deep; the man 3.5 feet deep.