

**Date:** Sunday afternoon, 1/18/1998

**Activity:** Snowmobile

**Location:** Near Lion Rock, south-southeast of Blewett Pass, central Washington Cascades

**Avalanche Type:** SS-AM-R3-O, 200 ft wide, 2-4 ft slab depth, 4-500 ft vertical fall distance; Slide released to depth hoar near ground

**Narrative:**

The victim was high marking a relatively steep (30-35 degrees at the high mark point to 40-50 degrees near the rocks above near the ridgeline) east facing slope at about 6000 feet elevation when his machine got stuck at the high mark. While trying to pull his machine around, the slope about 100 feet above him fractured to the ground, subsequently carrying him and his machine about 4 to 500 vertical and burying him under 2-3 feet of snow. Nearby snowmobilers used trail marker wands to probe for the victim but failed to locate him. After avalanche control of adjacent slopes to protect rescuers Monday morning produced further large climax slides, organized rescue efforts Monday afternoon found the victim through coarse probing. The victim was located about 60 feet below and 20 feet across the slope from his machine.

The victim was not wearing a transceiver, and snowmobilers who responded to the accident did not have probes or shovels. The weather at the time of the accident appears to have been overcast with some light snow. Currently wind speed and direction are unknown. It is also unknown if the victim had any avalanche training.

**Snowpack:**

The snowpack depth near the scene of the accident ranged from about 2 feet to over 6 feet (in wind deposited areas). Recent snowpits near the site as well as snowpits done at the fracture line indicated 12-24 inches of recrystallized snow near the ground, with depth hoar/cup crystals to 4-5mm close to the ground and well faceted snow to 2 mm near the top of the recrystallized snow. During the past 10 days about 2-4 feet of wind slab was deposited over the faceted snow, with several distinct layers within the wind slab. Ski penetration near the site was about 12 inches, and boot and snowshoe penetration was reported to be at the ground in some areas. Avalanche control done near the accident site to protect rescuers released several climax slides to the ground--in fact every shot produced climaxes to the ground.

**Avalanche Center Forecasts:**

Avalanche warnings for high avalanche danger at all elevations were issued on Saturday for Sunday, and Sunday's morning forecast specifically detailed the exposure, weak snowpack structure and related avalanche dangers along the Cascade east slopes. It is unknown if the victim had any knowledge of the snowpack or of the forecast danger.
It is interesting to note that another snowmobiler related avalanche accident occurred last Thursday along the east slopes of the central Oregon Cascades (on Newberry Crater near Paulina Peak). This event had a more positive outcome, however, as the victim's friends were able to dig him out from under 5 feet of snow using tree branches and the windshield from one of their snowmachines. This event was subsequently presented as a paper and a very emotional talk by the victim at the **1998 International Snow Science Workshop in Sunriver, OR**.