# *Morning Star Peak Avalanche Accident*

**Saturday, December 4, 2010**

**Date:** 2010-12-13
**Submitted by**: Oyvind Henningsen—Everett Mountain Rescue and Mark Moore—NWAC
**Place**: Morning Star Peak, north-central WA Cascades
**Slope specifics**: 3100-3700 ft elevation, NE aspect, 25-50 degree slope angle
**State**: WA
**Country:** USA
**Fatalities**: 1
**Summary:** 1 climber caught, partially buried, dead from trauma

## Accident and SAR Summary:

Subject left trailhead alone (with dog) on 12/4/10 (Saturday 08:33) intending to climb the SE ridge of Morning Star Peak. Night prior was cold and clear. Saturday was sunny and warmer. Subject was off route and traveled up the mountain on a westerly direction north of the intended route. Subject climbed up a ridge with a prominent gulley on climbers left. (see terrain photos)

Subject reported overdue by spouse late Sunday morning. Everett Mountain Rescue was paged out and responded. Ground teams entered the field at dusk on Sunday. Helicopter located tracks going up the mountain ending in a cliff band around the 3500 ft elevation level. Ground teams located tracks and followed same to the cliff band. The tracks went into the gulley. No tracks seen in gulley or elsewhere. Small avalanches and rock falls heard in the valley and icefall observed into the gulley. Helicopter searched gulley and adjacent slopes. Ground teams searched ridge to north of gulley with voice, whistle, transceivers. Ground teams evacuated Sunday evening as area deemed unsafe for travel in the dark. Ground teams inserted again early on Monday, followed tracks to last seen area and entered the gulley. Obvious signs of an avalanche in the steep, confined gulley. Voice, whistle, spot probed, and transceiver searched gulley. 2 K9 teams searching. Subject located by ground team visual, and found deceased on 12/6/2010, 11:15 am at 3,100 ft elevation on skiers left side of gulley. Subject's dog located alive on surface 10 feet from subject. Subject partially buried

## Topo Map of Accident Site and Terrain Photos

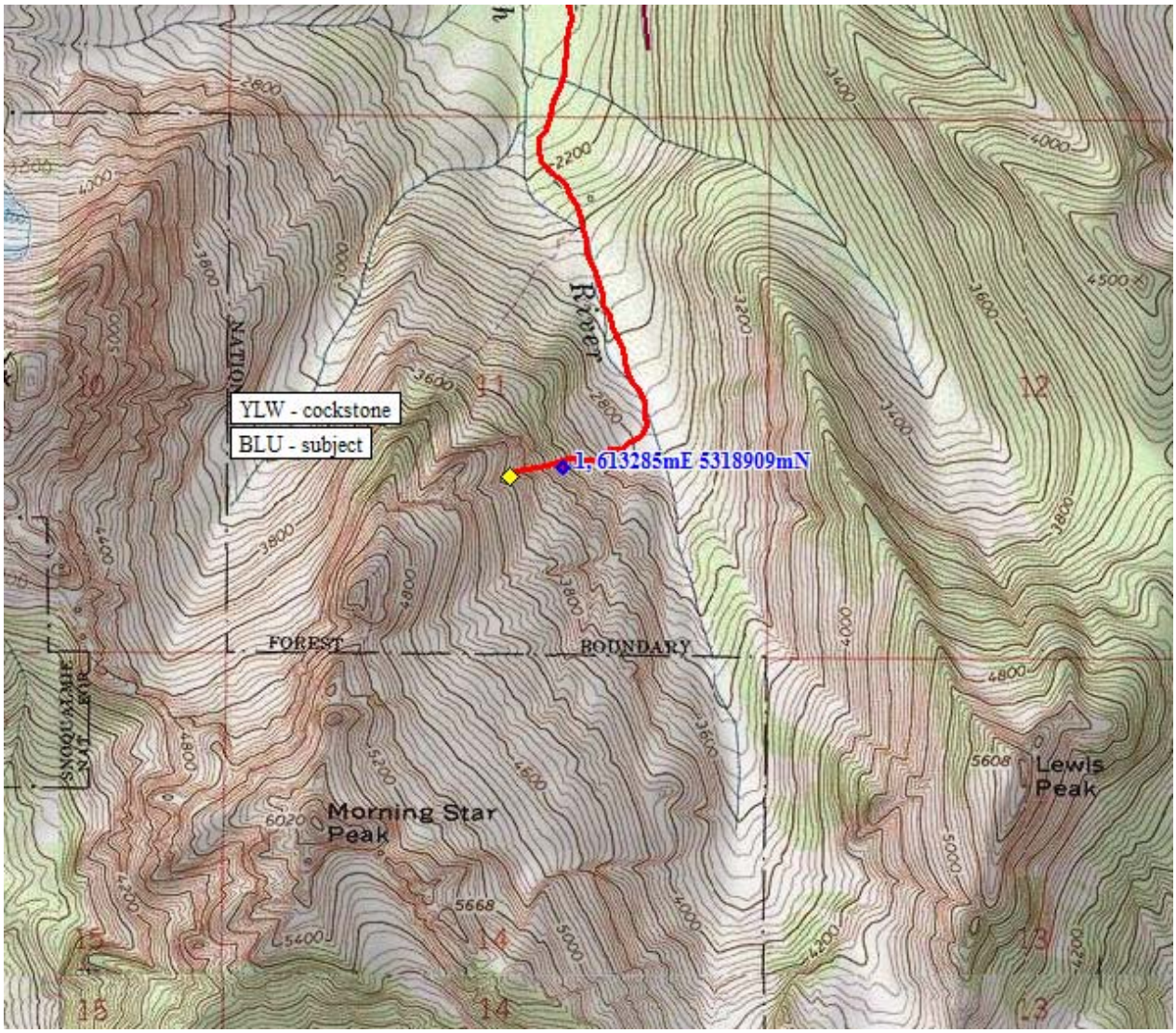



**Figure 1. Topographical map of area.**

**Figure 2. Terrain up from subject location – ridge on right, gulley on left.**

**Figure 3. Gulley up from subject location**

**Figure 1. Looking down gulley from above entry point showing flank and flow marks.**

**Figure 2. Looking up gulley from above entry point showing flank and flow marks**

**Figure 3. Chockstone above gulley entry point**

## Ancillary Accident Information:

The following avalanche forecast issued by the NWAC on Saturday the 4th indicates a forecasted moderate avalanche danger in the accident area, slightly increasing. However, as is evident from the accident, even with a relatively shallow snow pack, a moderate danger in very steep terrain with terrain traps can be fatal.

**Detailed Avalanche Forecast**

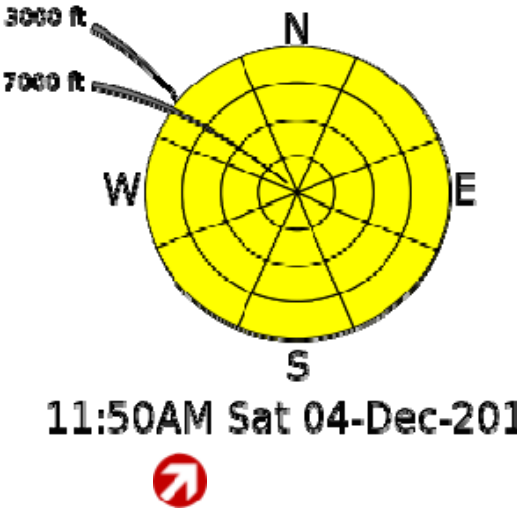
Northwest Weather and Avalanche Center Seattle Washington

1150 AM PST Sat Dec 04 2010

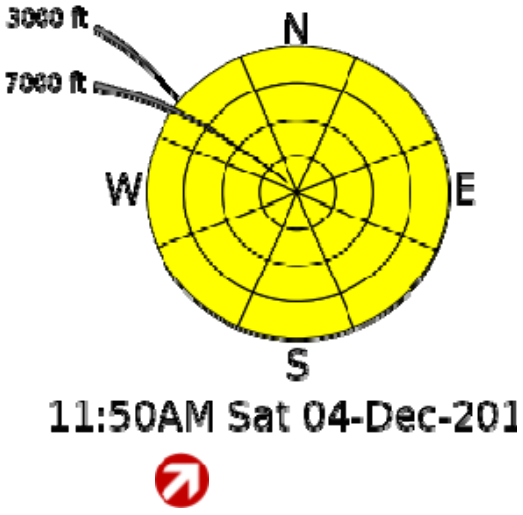
# Zone Avalanche Forecasts

**Olympics, Stevens Pass, Snoqualmie Pass, White Pass, WA Cascades near and west of crest - north of Stevens Pass, WA Cascades near and west of crest - between Stevens and Snoqualmie Pass, WA Cascades near and west of crest - between Snoqualmie and White Pass, WA Cascades near and west of crest - south of White Pass, Mt Hood area**

Danger Rose for Saturday




Danger Rose for Sunday




Click here for complete definitions of the avalanche danger scale.

**Forecast**

**Saturday and Sunday**: Moderate avalanche danger below 7000 feet.

**Snowpack Analysis**

A strong front moved across the area early in the week. Sites near and west of the crest generally had 10-22 inches of snow during that time with a warming trend and some freezing rain at Snoqualmie. Many storm cycle wind and soft slab avalanches were reported during that time from Mt Baker to Mt Hood. Light amounts of snow were seen following the storm with a cooling trend.

A period of stabilizing generally occurred late in the week with reports of mostly stable snow and good snow conditions found on the FOAC Exchange and Turns All Year for higher elevations near and west of the crest. Wind and soft slab layers from the storm early in the week should be most likely to linger on north to east slopes at higher elevations. Near surface crust layers seem likely at Hurricane, below about 5000 feet in the Cascades and in the Cascade passes, and below about 6000 feet at Mt Hood.

Some new surface hoar frost or near surface faceting has been reported on Saturday morning such as by the Alpental, Crystal and Mt Hood Meadows ski patrols on Saturday morning. This could act as a weak layer if buried by future snowfall.

A shallow snow pack should limit the avalanche danger through the weekend at the lowest elevations.

**Detailed Forecasts**

Saturday

Fair weather should be seen in the Olympics and north Cascades with some clouds and a chance of light snow showers in the south Cascades Saturday and Saturday night. The main change is that local strong southeast to east ridge top and pass winds may transport snow. Therefore watch for isolated new shallow wind slab layers on west aspects at higher elevations and hence the slight avalanche danger increase on Saturday. Remember to practice safe travel techniques on Saturday.

Sunday

Slightly increased clouds may be seen on Sunday and Sunday night with a continued chance of light snow showers mainly in the south Cascades. Local strong southeast to east ridge top and pass winds may continue to transport snow. Therefore continue to watch for isolated new shallow wind slab layers on west aspects at higher elevations with a slight avalanche danger increase expected on Sunday. Continue to evaluate snow and terrain carefully on Sunday.