

# Granite Mountain Avalanche Fatality, December 31st, 2015

Report prepared by NWAC

Incident snapshot (All avalanche fields estimated from interview with Seattle Mountain Rescue)

**Time and Date:** Mid-day or afternoon, December 31<sup>st</sup>, 2015

**Location:** Granite Mountain, King County, Mt Baker-Snoqualmie Forest, Washington State

**Number in Party:** 3 Snowshoers

**Number caught:** 1

**Number partially buried, non-critical** (*non-critical means head was exposed*): 1

**Number killed:** 1 (Trauma)

**Avalanche type:** Hard Slab

**Trigger:** est Snowshoer, Unintentional

**Size – Destructive Force:** est D1 or D2

**Size – Relative to Path:** Unknown

**Start Zone Aspect:** SSW

**Start Zone Elevation:** Unknown

**Sliding surface:** est In new snow

**Height of Crown Face:** Unknown

**Width of Fracture:** Unknown

**Vertical Fall:** Unknown, but presumed to be several hundred feet

**Slab Hardness:** est Pencil

**Slab Grain Type:** est Wind broken precipitation particles or Wind Packed (Rounded Grains)

**Terrain Trap:** Yes, Trees in Runout

**Party crossed start zone before avalanche:** Unknown

**Location of subject relative to Start Zone:** Unknown

**Avalanche occurred during:** Unknown

**Signs of Instability Noted by Group:** Unknown

**Avalanche safety gear carried by party:** None

**Avalanche Training and Experience:** Victim was a very experienced climber/snowshoer with at least some formal avalanche training and familiar with the NWAC avalanche forecast. The other two snowshoers reportedly had little experience.

**NWAC Forecast Zone:** Snoqualmie Pass

**NWAC Avalanche Danger Rating in effect for start zone (near treeline):** Moderate

**Narrative and Rescue:** After departing from the trailhead around 10:30 or 11:00 AM, the other two snowshoers in the group turned back near treeline (3900 ft) due to the strong winds and blowing snow. They were behind the victim and lost visual contact as he ascended above treeline and out of sight.

The initial 911 call was placed by the other members of the group in the afternoon after the victim failed to return. Seattle Mountain Rescue (SMR), one of several SAR units involved in the rescue effort, was contacted by King County Sheriff's Office at 5:15 PM on 12/31/15.

A SMR team climbed through high winds during the evening and night of 12/31/15 to check the route and summit for the missing snowshoer. SMR bivied in a snow cave near the summit until first light and then descended to continue searching.

Olympic, Tacoma, and Everett Mountain Rescue teams were called in as well to help with the search on New Year's Day. As the SMR team descended, they found avalanche debris and requested the additional teams help search the area. Shortly after, an Olympic Mountain Rescue Team spotted the victim as they entered the debris field from below. All teams then worked to evacuate the victim back to the trailhead.

#### Supplemental Rescue Notes:

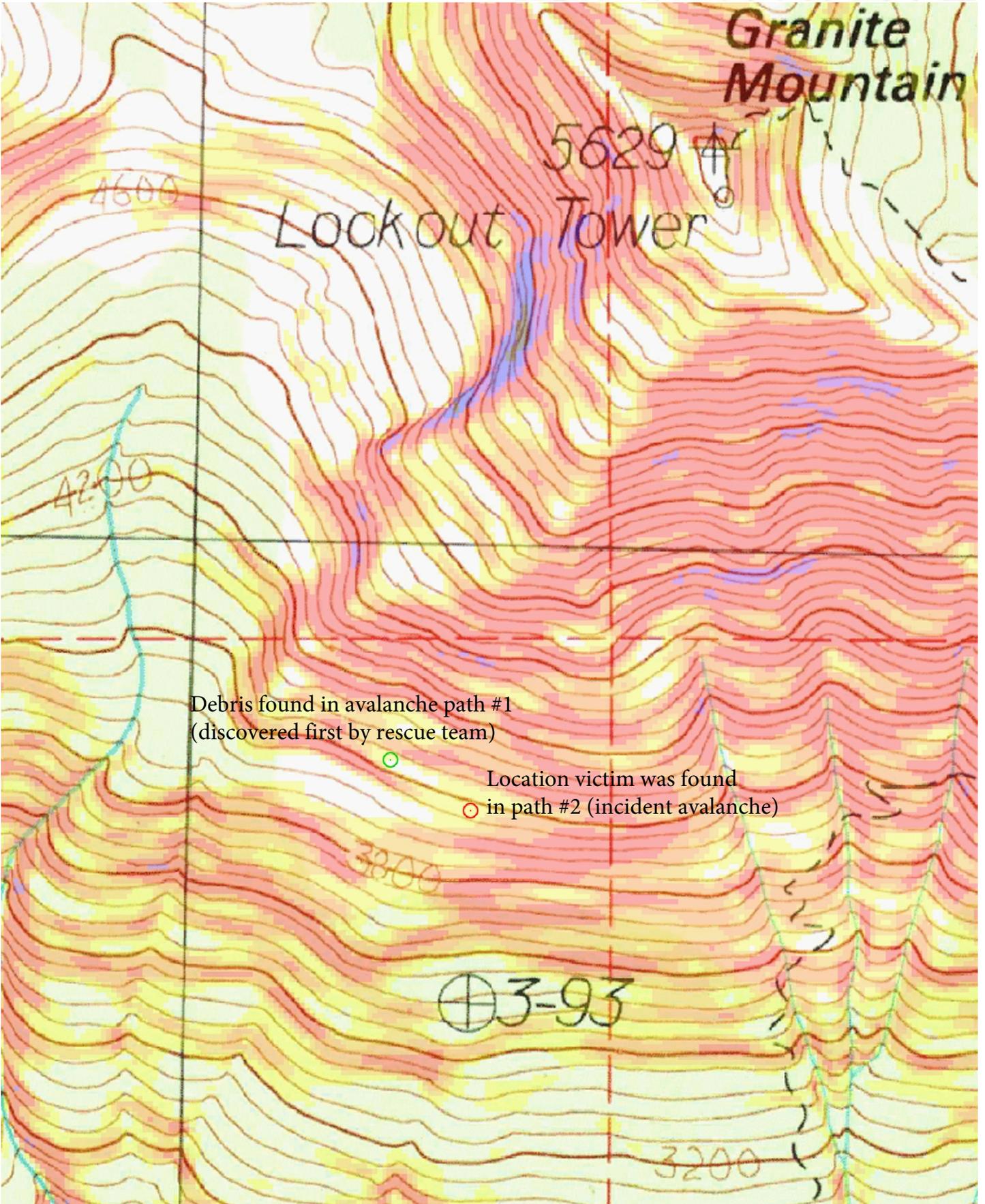
- Strong winds continued overnight and through the morning of the 1st, SMR estimated 70 mph, “lean into wind”, Beaufort scale interpretation for that description equals 34-40 knots (40-45 mph) with higher gusts likely.
- No large cornice formation: Traditional east facing cornices obliterated by east winds, only one east-facing cornice noted.
- Ridgelines scoured by winds, crampons used above treeline.

#### Comments from NWAC Forecasters (Dennis D'Amico)

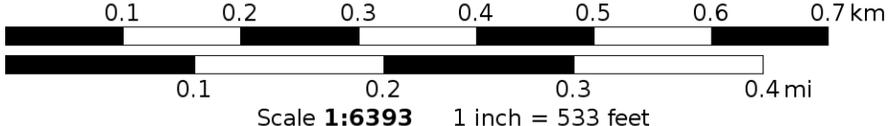
After the snowiest week in Snoqualmie Pass's recorded history (Dec 18th-24th) and the snowiest December overall (records courtesy WSDOT), December ended on a dry note with three consecutive dry days. Snoqualmie Pass weather station winds were consistently moderate out of the east 24-36 hours prior to this incident, with much stronger winds experienced west of the Snoqualmie Pass Summit, including at Granite Mountain (see photos/videos). Temperatures stayed cold due to the easterly flow despite free-air freezing levels significantly warming for areas further to the west such as the Olympics and Mt. Baker area.

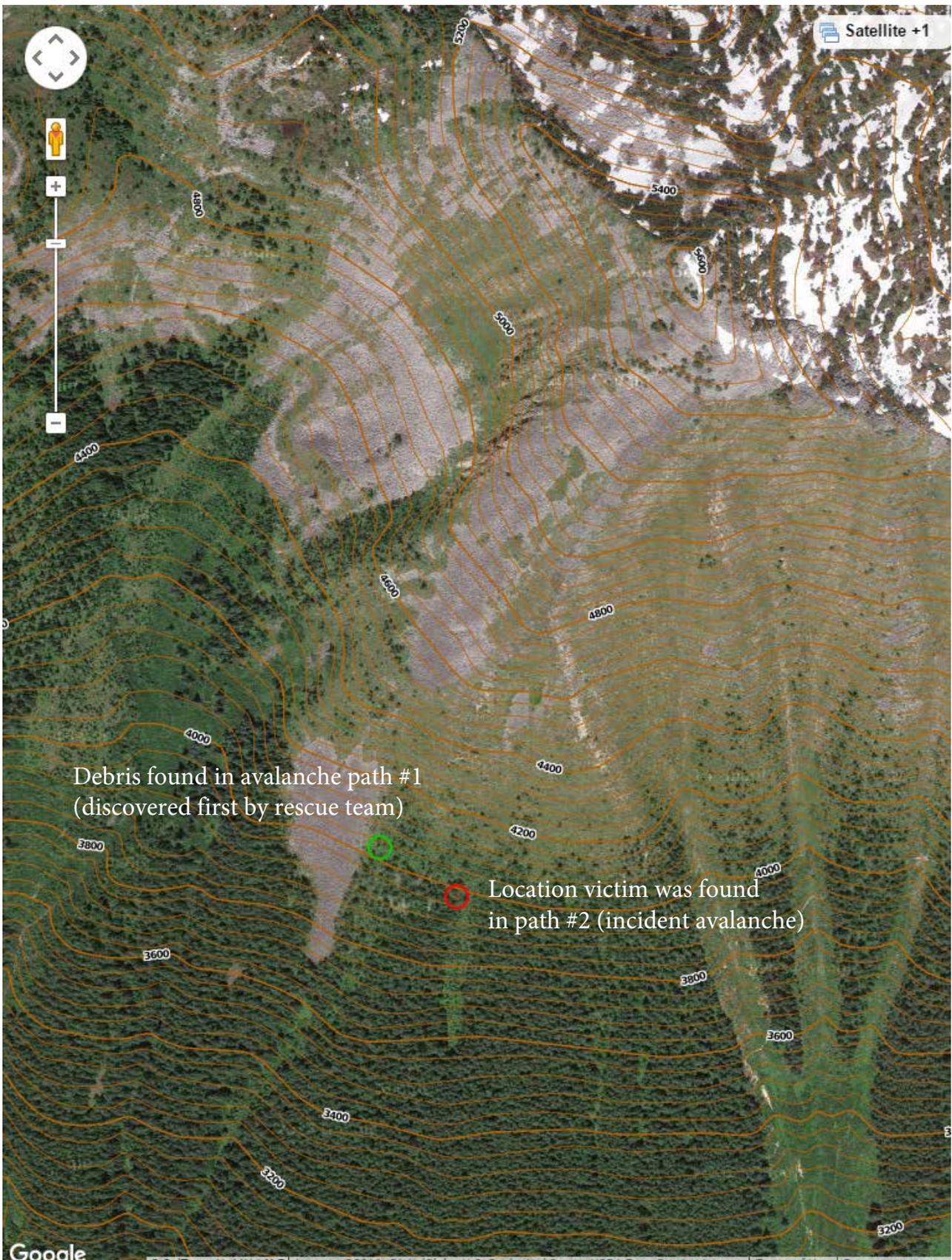
Despite the lack of specifics regarding this incident, we can say that it was probable that the victim triggered a shallow wind slab that developed because of the strong east winds through the Snoqualmie Pass area. Several generally small skier triggered wind slabs were reported in the Snoqualmie Pass and Mt. Rainier area from December 30<sup>th</sup> through January 1<sup>st</sup>. Both areas are subject to east wind events loading non-traditional westerly aspects. Relevant public observations submitted to NWAC of shallow human triggered wind slab avalanches on December 31st are attached near the end of this report. The notable difference between the public observations and the fatal avalanche is that the fatal avalanche ended in a deadly treed terrain trap.

NWAC did not interview the other two members of the group whom had stopped near treeline while the victim continued his ascent. Since there were no witnesses with this incident, we do not know if the separate wind slab avalanche to the west (identified in photos) of the fatal avalanche was natural or human triggered.



Mercator Projection  
WGS84  
USNG Zone 10TFT  
CalTopo.com





Debris found in avalanche path #1  
(discovered first by rescue team)

Location victim was found  
in path #2 (incident avalanche)

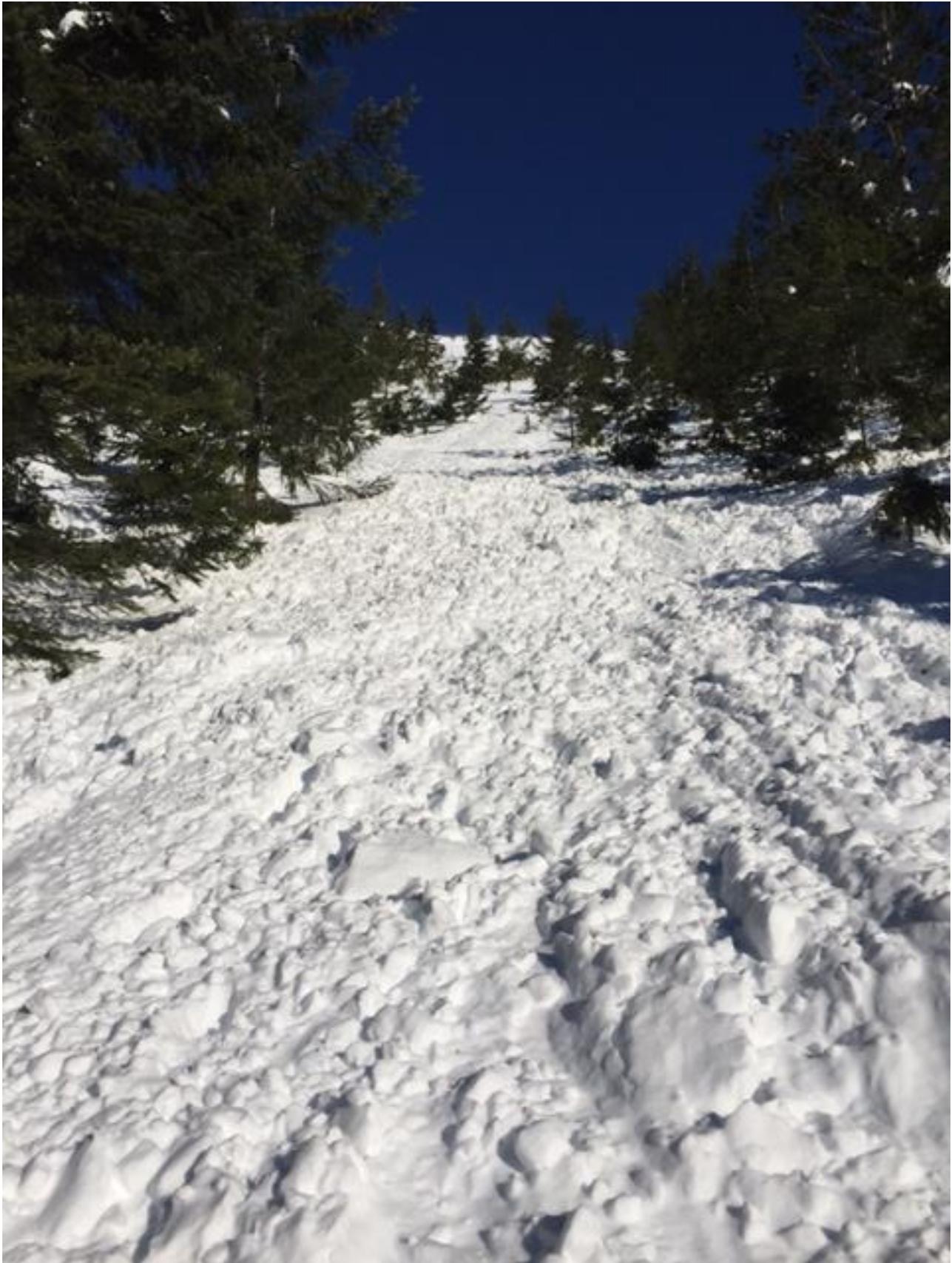


Photo 1: Looking uphill at avalanche path #2 (incident avalanche) where the victim was found. Victim was found about 30 feet to the left of the photo location.

Photo 2: Location where the victim was found in path #2.



Photo 3 and 4: Looking uphill and downhill respectively of avalanche path #1. Debris found in path #1 was discovered first. The victim was later located to the east in path #2.



Additional photos and videos from a solo climber on Granite Mountain that morning prior to the incident can be found at: <http://www.nwhikers.net/forums/viewtopic.php?t=8019362>



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## Recreational Observation

Skinning up to the "mainline chute" of the Kendall Chutes (approached via skiing Commonwealth Basin and Sterling Direct)

Dec. 31, 2015, noon PST

**Weather:** Clear, cold and windy.

**Snowpack:** Mostly dry, unconsolidated powder, with some subtle crusts in some places, and some new shallow wind-affected/windslab in others (lee slopes near ridgelines).

**Area Description:** North facing slopes of the ridge above Kendall Lakes (Kendall Chutes)

**Avalanches:** While skinning up to the "Mainline Chute" I set off a very small wind-deposited slab which propagated above me into a small, shallow dry/slab windslab avalanche that carried me about 50-100 feet with no burial or injury.

**Latitude:** 47.438366

**Longitude:** -121.379786

**Did you see any avalanches?** Yes

**Did you trigger any avalanches?**

Yes **Was anyone caught in an**

**Avalanche?** Yes





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Recreational Observation

## Snoqualmie Pass

Dec. 31, 2015, 10 a.m. PST

**Elevation:** Near treeline

**Aspect:** W

**Did you see any avalanches?** No

**Did you trigger any avalanches?** No

**Was anyone caught in an Avalanche?** No

**Comments:** On the west / leeward side of Tinkham, snow below the rideline was wind loaded for 50 - 100 feet below the crest (at 4.8K), and readily cracked, with limited propagation. This included the upper reaches of the Twin Lakes Couloir / Zipper Chute, which we declined to ski. Descending in the trees on the same aspect further south, the top 6 inches of snow were highly faceted and rotten feeling, but on a stable / solid base.



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## Recreational Observation

Our party of two were coming out from an overnight in the Tatoosh area - following the road route from Reflection Lake. When we arrived at the avalanche zone above Narada Falls, we observed many wind-blown features on the road and the route was completely covered. Further progress on the south end of the zone demonstrated some cracking (18" to 24") in the front of the snowshoes. Snowpack analysis revealed a wind-slab had been formed from the previous nights wind. Additionally, some surface hoar was observed on the night prior in the Reflection Lake area. We deemed the route too dangerous and retreated to the Mazama Ridge route for safe crossing.

Dec. 31, 2015, 8:15 a.m. PST

**Weather:** Clear sky with variable winds at 15-20 with gusts to 30.

**Snowpack:** Storm layer well formed and consolidated. Observed 8" to 10" wind slab layer on NW Facing slope above Narada Falls.

**Area Description:** Above Narada Falls / Inspiration Point - MRNP

**Avalanches:** No natural or human-triggered avalanches were observed.

**Observation by** Tim Kirk

**Latitude:** 46.774612

**Longitude:** -121.743536

**Did you see any avalanches?** No

**Did you trigger any avalanches?**

**No Was anyone caught in an**

**Avalanche?** No

## Northwest Avalanche Center Washington

Department of Transportation

Snoqualmie Pass, Washington

3770' temp above Lake Keechelus

| MM/DD | Hour<br>PST | Temp       | Temp       | Temp       | RH         | Wind         | Wind         | Wind         | Hour           | Total          | 24 Hr         | Total         | Press       |
|-------|-------------|------------|------------|------------|------------|--------------|--------------|--------------|----------------|----------------|---------------|---------------|-------------|
|       |             | F<br>3760' | F<br>3770' | F<br>3010' | %<br>3010' | Avg<br>3760' | Max<br>3760' | Dir<br>3760' | Prec.<br>3010' | Prec.<br>3010' | Snow<br>3010' | Snow<br>3010' | mb<br>3010' |
| 1/1   | 1000        | 11         | 10         | 14         | 86         | 24           | 32           | 87           | 0              | 0              | 0             | 74            | 1031        |
| 1/1   | 900         | 9          | 9          | 12         | 88         | 27           | 35           | 85           | 0              | 0              | 0             | 75            | 1031        |
| 1/1   | 800         | 11         | 9          | 11         | 89         | 28           | 38           | 85           | 0              | 0              | 0             | 75            | 1031        |
| 1/1   | 700         | 11         | 9          | 11         | 89         | 26           | 31           | 93           | 0              | 0              | 0             | 75            | 1031        |
| 1/1   | 600         | 11         | 9          | 12         | 89         | 22           | 29           | 95           | 0              | 0              | 0             | 75            | 1031        |
| 1/1   | 500         | 13         | 10         | 12         | 90         | 20           | 31           | 97           | 0              | 0              | 0             | 75            | 1031        |
| 1/1   | 400         | 12         | 14         | 13         | 89         | 18           | 25           | 114          | 0              | 0              | 0             | 75            | 1031        |
| 1/1   | 300         | 12         | 14         | 13         | 90         | 17           | 24           | 134          | 0              | 0              | 0             | 75            | 1031        |
| 1/1   | 200         | 12         | 15         | 13         | 88         | 17           | 24           | 119          | 0              | 0              | 0             | 75            | 1031        |
| 1/1   | 100         | 13         | 15         | 14         | 87         | 20           | 25           | 119          | 0              | 0              | 0             | 75            | 1032        |
| 1/1   | 0           | 12         | 17         | 14         | 88         | 18           | 24           | 132          | 0              | 0              | 0             | 75            | 1032        |
| 12/31 | 2300        | 12         | 16         | 13         | 89         | 18           | 27           | 120          | 0              | 0              | 0             | 75            | 1033        |
| 12/31 | 2200        | 13         | 12         | 13         | 90         | 21           | 29           | 85           | 0              | 0              | 0             | 74            | 1033        |
| 12/31 | 2100        | 13         | 14         | 13         | 89         | 18           | 28           | 74           | 0              | 0              | 0             | 76            | 1033        |
| 12/31 | 2000        | 13         | 13         | 13         | 89         | 20           | 28           | 78           | 0              | 0              | 0             | 76            | 1033        |
| 12/31 | 1900        | 13         | 12         | 14         | 89         | 19           | 28           | 73           | 0              | 0              | 0             | 76            | 1032        |
| 12/31 | 1800        | 14         | 14         | 14         | 89         | 20           | 28           | 72           | 0              | 0              | 0             | 75            | 1032        |
| 12/31 | 1700        | 15         | 15         | 15         | 89         | 21           | 29           | 66           | 0              | 0              | 0             | 76            | 1033        |
| 12/31 | 1600        | 16         | 17         | 17         | 87         | 18           | 29           | 65           | 0              | 0              | 0             | 76            | 1032        |
| 12/31 | 1500        | 17         | 18         | 20         | 82         | 22           | 30           | 65           | 0              | 0              | 0             | 76            | 1032        |
| 12/31 | 1400        | 17         | 17         | 22         | 75         | 24           | 34           | 70           | 0              | 0              | 0             | 75            | 1032        |
| 12/31 | 1300        | 18         | 18         | 24         | 73         | 21           | 28           | 69           | 0              | 0              | 0             | 75            | 1032        |
| 12/31 | 1200        | 17         | 17         | 24         | 74         | 16           | 26           | 63           | 0              | 0              | 0             | 75            | 1033        |
| 12/31 | 1100        | 17         | 16         | 21         | 76         | 12           | 26           | 80           | 0              | 0              | 0             | 75            | 1033        |
| 12/31 | 1000        | 15         | 14         | 17         | 84         | 14           | 26           | 90           | 0              | 0              | 0             | 76            | 1033        |
| 12/31 | 900         | 13         | 12         | 16         | 86         | 14           | 30           | 111          | 0              | 0              | 0             | 76            | 1032        |
| 12/31 | 800         | 15         | 12         | 14         | 87         | 13           | 22           | 100          | 0              | 0              | 0             | 75            | 1032        |
| 12/31 | 700         | 14         | 13         | 15         | 85         | 16           | 26           | 75           | 0              | 0              | 0             | 77            | 1031        |
| 12/31 | 600         | 15         | 13         | 14         | 89         | 21           | 28           | 81           | 0              | 0              | 0             | 77            | 1031        |
| 12/31 | 500         | 14         | 13         | 14         | 90         | 22           | 28           | 84           | 0              | 0              | 0             | 77            | 1031        |

# Snoqualmie Pass

**Issued: 6:00 PM PST Wednesday, December 30, 2015** by Garth Ferber

NWAC avalanche forecasts apply to backcountry avalanche terrain in the Olympics, Washington Cascades and Mt Hood area. These forecasts do not apply to developed ski areas, avalanche terrain affecting highways and higher terrain on the volcanic peaks above the Cascade crest level.

**The Bottom Line:** A MODERATE danger means human triggered avalanches are possible. Watch mainly for possible wind slab on a variety of aspects and for possible loose wet avalanches on steep solar slopes. Watch out for dangerous tree bombs and stay in sight of your partner.

Issued: 6:00 PM PST Wednesday, December 30, 2015 by Garth Ferber

# Elevation

## Thursday

## Outlook for Friday



Above Treeline

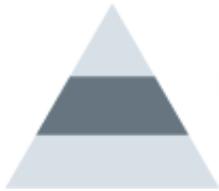


Moderate

Heightened avalanche conditions on specific terrain features. Evaluate snow and terrain carefully; identify problem features.



Moderate



Near Treeline



Moderate

Heightened avalanche conditions on specific terrain features. Evaluate snow and terrain carefully; identify problem features.



Moderate



Below Treeline



Low

Generally safe, watch for unstable snow on isolated terrain features.



Low

### Danger Scale

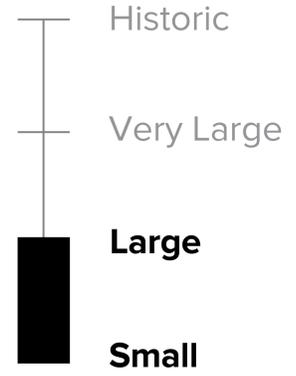
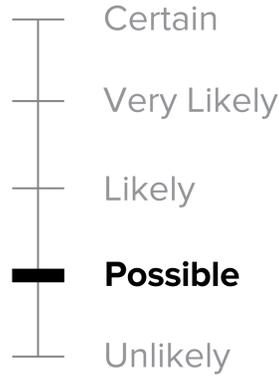
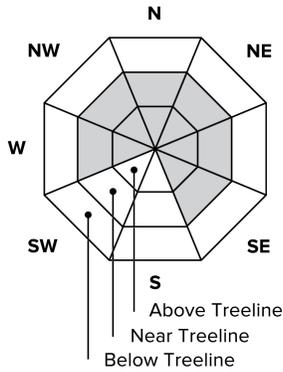
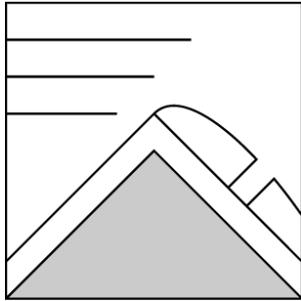


Issued: 6:00 PM PST Wednesday, December 30, 2015 by Garth Ferber

# Avalanche Problems for Thursday

## Wind Slab

Wind slabs can take up to a week to stabilize. They are confined to lee and cross-loaded terrain features and can be avoided by sticking to sheltered or wind scoured areas.



Avalanche Problem

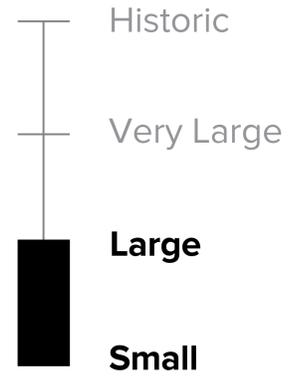
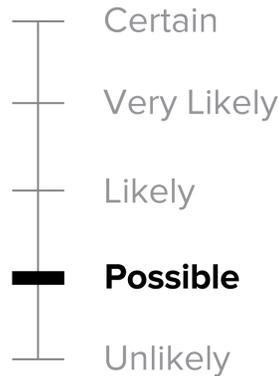
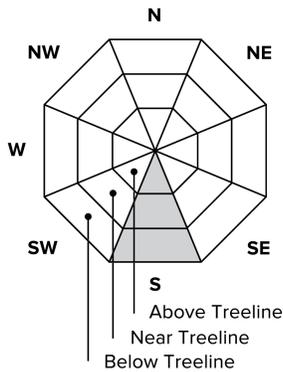
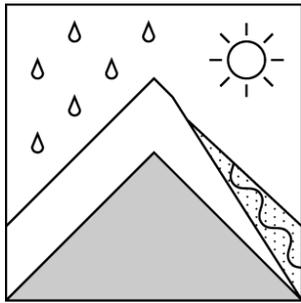
Aspect/Elevation

Likelihood

Size

## Loose Wet

Loose wet avalanches occur where water is running through the snowpack, and release at or below the trigger point. Avoid terrain traps such as cliffs, gullies, or tree wells. Exit avalanche terrain when you see pinwheels, roller balls, a slushy surface, or during rain-on-snow events.



Avalanche Problem

Aspect/Elevation

Likelihood

Size

# Snowpack Analysis:

A cool very snowy storm cycle brought 5-9 feet of snowfall along the west slopes the week ending December 24th. Light additional accumulations in the past week have allowed the snowpack to slowly settle with good skiing. A weak weather system Sunday and Monday helped create some new mostly small and mostly shallow wind slab in many areas.

There have been numerous triggered wind slabs the past week but with each passing day the ease of trigger seems to be diminishing. Storm slabs have all but settled and are no longer a problem of note. Storm snow has been gradually settling but remains mostly right side up and continues to offer some excellent conditions.

Here are summaries for a couple of the latest reports for the west slopes.

A report via the NWAC Observations for Moonlight Bowl on Skyline Ridge at Stevens Pass on Tuesday indicated generally unreactive wind slab and right side up snow on steep north slopes and no signs of instability.

NWAC pro observer Lee Lazzara was in the Bagley Lake area near Mt Baker on Tuesday and found a generally right side up snow pack with some wind slab but also lacking a weak layer or interface. Lots of skiers around Bagley Lakes triggered only small loose dry avalanches. A small loose wet was also seen on the south side of Table Mountain.

NWAC pro observers Dallas Glass and Ian Nicholson were on Chair Peak at Snoqualmie today and reported that wind slab was a bit more prevalent there than the past couple days. Dallas triggered a small wind slab on a 35-40 degree north slope at about 5500 feet. They saw another skier triggered wind slab on a southwest slope about 600 feet below a ridge. They felt wind slab should be possible there on a variety of slopes and to 1000 feet below ridges.

## Detailed Forecast for Thursday:

Sunny weather should be seen on Thursday. Warmer temperatures should be seen at higher elevations in the north Cascades by Thursday afternoon. Cool temperatures with possible low clouds should be seen in the Cascade passes especially Snoqualmie.

This weather should allow older wind slab to continue to slowly settle and stabilize. Wind slab will most likely be found on north to southeast aspects near and above tree line. New wind slab may also be found on west to northwest aspects mainly in the Cascade Passes. Any wind slab avalanches should be confined to surface layers. Watch and test for inverted strong over weak storm snow.

The sunny weather and warmer temperatures at higher elevations mainly in the north Cascades should bring the possibility of loose wet avalanches Thursday afternoon on steep solar slopes. Watch for surface wet snow deeper than a few inches, initial roller balls and natural loose wet avalanches on steep solar slopes where snow may shed from rocks or cliffs.

A lot of snow has been seen in trees lately along the west slopes. Stay away from trees if you see trees starting to shed snow due to sunny weather on Thursday afternoon. A tree bomb can be just as fatal as an avalanche!

There have been snow immersion fatalities in tree wells already this season at Snoqualmie and in Canada. Tree wells may still be lurking so stick near your partner in the trees and maintain visual contact.



**American Avalanche Association  
Forest Service National Avalanche Center  
Avalanche Incident Report: Short Form**



**Occurrence Date** (YYYYMMDD): 20151231      and **Time** (HHMM):

**Comments:** All avalanche characteristics and incident details are estimated from interviews with Seattle Mountain Rescue whom extracted the victim the next morning. No fracture line profile was visible the next day due to continued wind loading. NWAC was unable to interview the other two members of the victim's party. See full NWAC report for details and pictures.

**Reporting Party Name and Address:** Dennis D'Amico  
Northwest Avalanche Center  
7600 Sandpoint Way, Bld 1  
Seattle, WA 98115

**Avalanche Characteristics:**

Type: HS                                      Aspect: SSW  
Trigger: AI                                      Slope Angle:  
Size: R \ D -12                                  Elevation:      m / ft  
Sliding surface (check one):  
 In new    New/old    In old    Ground

**Location:**

State: WA County: King Forest: Mt Baker - Snoqualmie  
Peak, Mtn Pass, or Drainage: Granite Mountain  
Site Name:  
Lat/Lon or UTM:

| Group                             | Number of People | Time recovered             | Duration of burial | Depth to Face<br><input type="checkbox"/> m / <input type="checkbox"/> ft |
|-----------------------------------|------------------|----------------------------|--------------------|---|
| Caught                            | 1                |                            |                    |   |
| Partially Buried—<br>Not critical | 1                | 9:45 AM<br>next day        | est 18-24<br>hrs   |   |
| Partially Buried--<br>Critical    |                  |                            |                    |   |
| Completely Buried                 |                  |                            |                    |   |
| Number of people injured:         |                  | Number of people killed: 1 |                    |   |

| Dimensions<br><input type="checkbox"/> m / <input type="checkbox"/> ft |          | Average   | Maximum         |
|--|----------|---|-----------------|
| Height of Crown Face   |          |   |                 |
| Width of Fracture  |          |   |                 |
| Vertical Fall  |          | est several<br>hundred feet   |                 |
| Snow   | Hardness | Grain Type  | Grain Size (mm) |
| Slab   | P        | Wind broken<br>precipitation<br>particles or<br>Wind Packed                             |                 |
| Weak Layer   |          |   |                 |
| Bed Surface  |          |   |                 |
| Thickness of weak layer:   |          | <input type="checkbox"/> mm / <input type="checkbox"/> cm / <input type="checkbox"/> in |                 |

Burial involved a terrain trap?  no  yes → type: Trees in Runout  
Number of people that crossed start zone before the avalanche: Unknown  
Location of group in relation to start zone during avalanche:  high  middle  low  below  all  unknown  
Avalanche occurred during  ascent  descent

| Subject | Name        | Age | Gender | Address | Phone | Activity    |
|---------|-------------|-----|--------|---------|-------|-------------|
| 1       | Doug Walker | 65  | M      | Seattle |       | Snowshoeing |
| 2       | Unknown     |     |        |         |       | Snowshoeing |
| 3       | Unknown     |     |        |         |       | Snowshoeing |
| 4       |             |     |        |         |       |             |
| 5       |             |     |        |         |       |             |

**Equipment Carried**

|                          |                          |                          |                          |                          |             |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|-------------|
| 1                        | 2                        | 3                        | 4                        | 5                        |             |
| <input type="checkbox"/> | Transceiver |
| <input type="checkbox"/> | Shovel      |
| <input type="checkbox"/> | Probe       |
| <input type="checkbox"/> |             |
| <input type="checkbox"/> |             |

**Experience at Activity**

|                                     |                                     |                                     |                          |                          |              |
|-------------------------------------|-------------------------------------|-------------------------------------|--------------------------|--------------------------|--------------|
| 1                                   | 2                                   | 3                                   | 4                        | 5                        |              |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Unknown      |
| <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> | Novice       |
| <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> | Intermediate |
| <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> | Advanced     |
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> | Expert       |

**Avalanche Training**

|                                     |                                     |                                     |                          |                          |          |
|-------------------------------------|-------------------------------------|-------------------------------------|--------------------------|--------------------------|----------|
| 1                                   | 2                                   | 3                                   | 4                        | 5                        |          |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Unknown  |
| <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> | None     |
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> | Some     |
| <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> | Advanced |
| <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> | Expert   |

| Signs of Instability Noted by Group            | Injuries Sustained                  |                                     |                                     |                          |                          | Extent of Injuries or Cause of Death |                          |                          |                          |                          |                    |
|--|-------------------------------------|-------------------------------------|-------------------------------------|--------------------------|--------------------------|--------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------|
|  | 1                                   | 2                                   | 3                                   | 4                        | 5                        | 1                                    | 2                        | 3                        | 4                        | 5                        |                    |
| <input checked="" type="checkbox"/> Unknown    | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | None               |
| <input type="checkbox"/> None                  | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | First Aid          |
| <input type="checkbox"/> Recent avalanches     | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Doctor's care      |
| <input type="checkbox"/> Shooting cracks       | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Hospital Stay      |
| <input type="checkbox"/> Collapse or whumphing | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Fatal              |
| <input type="checkbox"/> Low test scores       | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/>  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Asphyxiation       |
|  |                                     |                                     |                                     |                          |                          |                                      |                          |                          |                          |                          | Head Trauma        |
|  |                                     |                                     |                                     |                          |                          |                                      |                          |                          |                          |                          | Spinal Injury      |
|  |                                     |                                     |                                     |                          |                          |                                      |                          |                          |                          |                          | Chest Trauma       |
|  |                                     |                                     |                                     |                          |                          |                                      |                          |                          |                          |                          | Skeletal Fractures |
|  |                                     |                                     |                                     |                          |                          |                                      |                          |                          |                          |                          | Other: Trauma      |

**Damage** Number of Vehicles Caught:          Number Structures Destroyed:          Estimated Loss: \$

**Accident Summary** Include: events leading to accident, group's familiarity with location, objectives, route, hazard evaluation, etc. See attached report

**Rescue Summary** Include: description of initial search, report of accident, organized rescue, etc.

After departing from the trailhead around 10:30 or 11:00 AM, the other two snowshoers in the group turned back near treeline (3900 ft) due to the strong winds and blowing snow. They were behind the victim and lost visual contact as he ascended above treeline and out of sight.

The initial 911 call was placed by the other members of the group in the afternoon after the victim failed to return. Seattle Mountain Rescue (SMR), one of several SAR units involved in the rescue effort, was contacted by King County Sheriff's Office at 5:15 PM on 12/31/15.

| Rescue Method            | 1                        | 2                        | 3                        | 4                        | 5                        |             |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|-------------|
| <input type="checkbox"/> | Self rescue |
| <input type="checkbox"/> | Transceiver |
| <input type="checkbox"/> | Spot probe  |
| <input type="checkbox"/> | Probe line  |
| <input type="checkbox"/> | Rescue dog  |
| <input type="checkbox"/> | Voice       |
| <input type="checkbox"/> | Object      |
| <input type="checkbox"/> | Digging     |
| <input type="checkbox"/> | Other:      |

A SMR team climbed through high winds during the evening and night of 12/31/15 to check the route and summit for the missing snowshoer. SMR bivvied in a snow cave near the summit until first light and then descended to continue searching.

Olympic, Tacoma, and Everett Mountain Rescue teams were called in as well to help with the search on New Year's Day. As the SMR team descended, they found avalanche debris and requested the additional teams help search the area. Shortly after, an Olympic Mountain Rescue Team spotted the victim as they entered the debris field from below. All teams then worked to evacuate the victim back to the trailhead.

Supplemental Rescue Notes:

- Strong winds continued overnight and through the morning, SMR estimated 70 mph, "lean into wind", Beaufort scale interpretation for that description equals 34-40 knots (40-45 mph) with higher gusts likely.
- No large cornice formation: Traditional east facing cornices obliterated by east winds, only one east-facing cornice noted
- Ridgelines scoured by winds, crampons used above treeline

**Attach additional pages as needed. Include weather history, snow profiles, reports from other agencies, diagram of site, photographs, and any other supporting information**

Additional information including narrative, topographic maps, NWAC avalanche forecast in effect, relevant weather history, public observations and incident photos are available in NWAC full report.

**Please send to: CAIC; 325 Broadway WS1; Boulder CO 80305; [caic@state.co.us](mailto:caic@state.co.us) and to the nearest Avalanche Center.**