

# Chair Peak: Cache Couloir Avalanche Incident

**02/24/2023**

Report by Dallas Glass

## Incident snapshot:

A solo skier was ascending from Snow Lake Divide onto the North Slope of the Chair Peak via a hanging snow ramp above the Cache Couloir when he triggered a wind slab avalanche. The tourer was caught and carried downslope over a very large cliff and came to rest near the bottom of the couloir, about 30ft above Snow Lake. The injured skier was mostly on the surface but could not stand due to his injuries. A nearby party of five traveling across Snow Lake heard the injured party's screams and responded to the accident. They arrived on scene at approximately 12:35 pm.

After a quick assessment, they sent two members to obtain cell coverage and call 911. The rescuers attempted to stabilize the victim and protect him from the very cold and windy conditions. Other nearby parties also joined the efforts at the base of the Cache Couloir.

The initial call to emergency services was placed at 12:57pm. King County Sheriff's Office dispatched resources to the accident including the Medic 1 Helicopter. Flight medics were inserted at the scene where they packaged the patient for transport. The victim was flown from the site at around 3:45 pm to a nearby hospital with significant injuries.

On February 25, an NWAC forecaster and Seattle Mountain Rescue volunteers visited the area to observe this and several other recent avalanches in the vicinity. They were unable to access the crown of the avalanche due to significant remaining hazards on the unsupported snow ramp.

**Occurrence Time and Date:** Approx 12:20 pm Friday, February 24, 2023

**Time First Reported to SAR:** 911 called at 12:57 pm

**Recovery/Rescue Time:** Helicopter evacuated the patient at approx. 3:45 pm.

**Lat/Lon:** Approx: 47.46496, -121.45583

**Location:** Chair Peak, near Snow Lake, King Co., Mt Baker-Snoqualmie NF, WA

**Number in Party:** 1

**Number Caught:** 1

**Number Partially Buried, Critical or Not-critical:** 1 non-critical

**Number Completely Buried:** 0

**Number Injured:** 1

**Number Killed:** 0

**Avalanche Type:** SS

**Trigger:** ASu

**Size:** R3 /D1.5

**Start Zone Aspect:** N

**Start Zone Angle:** Avg 35-45

**Start Zone Elevation:** 4700

**Height of Crown Face:** Approx: 8-12 in

**Width of Fracture:** Approx: 150 ft

**Vertical Fall:** Approx: 700 ft

**Burial involved a terrain trap:** Yes, cliffs and trees

**Number of people that crossed start zone before avalanche:** Unknown

**Avalanche occurred during:** Ascent

**Location of group in relation to start zone during avalanche:** Center of the start zone

**Avalanche Safety Gear Carried:** Yes

**Avalanche Training and Experience at Activity:** Unknown

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

**Extent of Injuries:** Significant Orthopedic Injuries

**NWAC Forecast Zone:** Snoqualmie Pass

**Avalanche Danger Rating:** Considerable Above and Moderate Near and Below Treeline

<https://nwac.us/avalanche-forecast/#/forecast/3/120423>

**Public Observation:** [Cache Couloir 2/24/23](#)

[Avalanche Occurrence Observation](#)



Image 1: A overview of the accident site as seen from King County Medic 1. Photo: Courtesy of King County Sheriff's Office

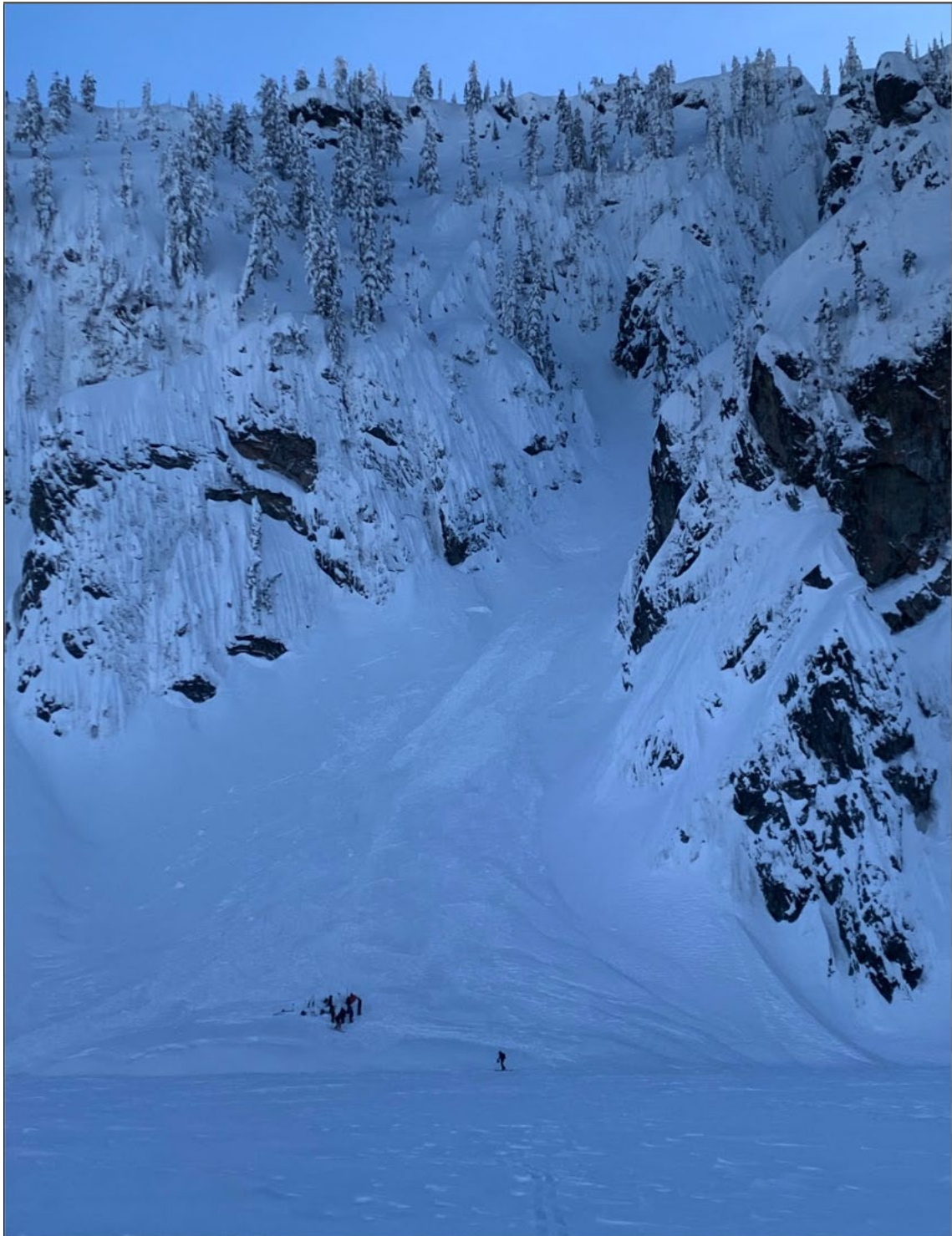
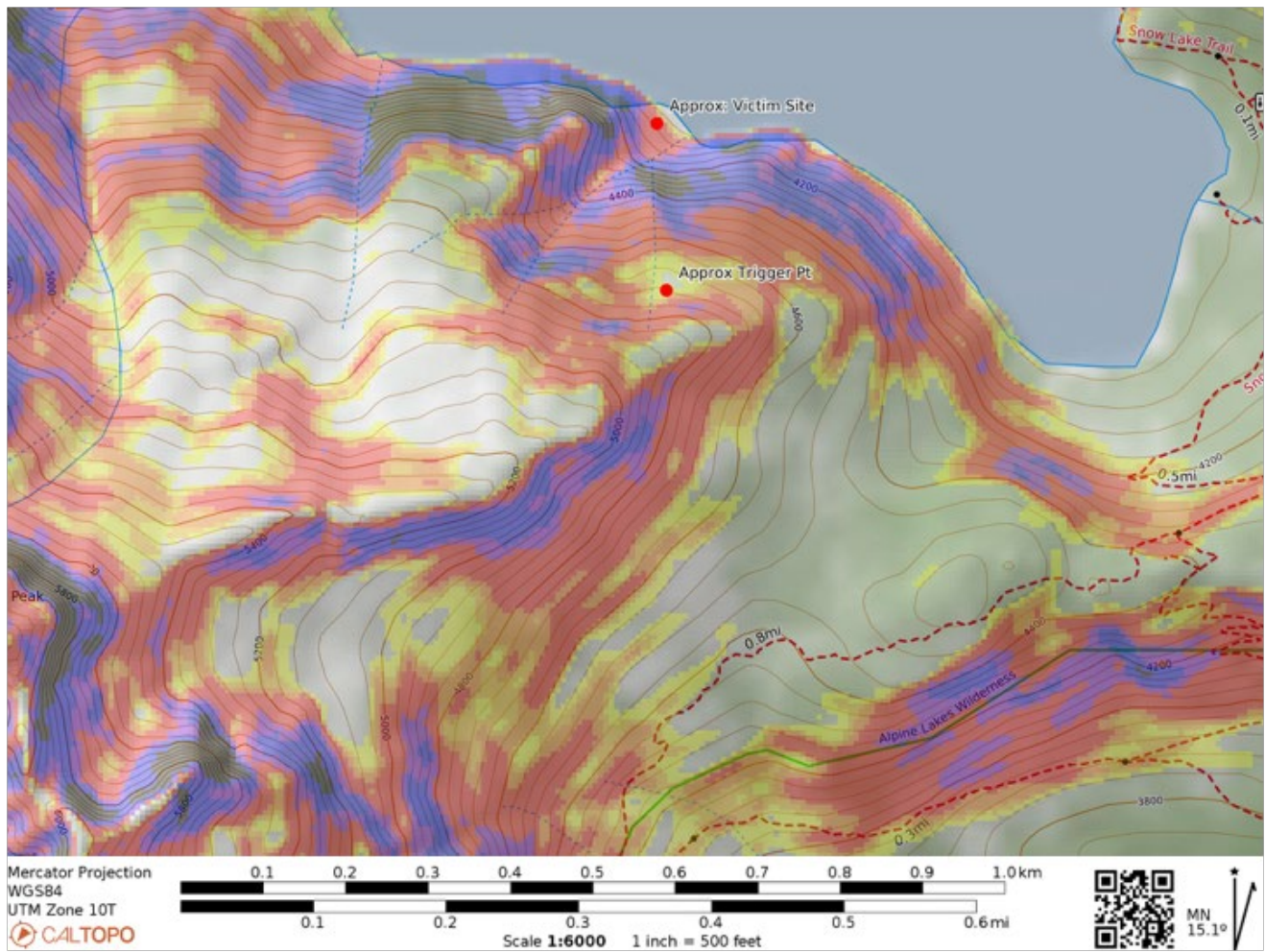


Image 2: The accident site as seen from Snow Lake. You can see the crown below the cliff in the upper middle of the image. Photo: Tim Black





# BACKCOUNTRY AVALANCHE FORECAST

## SNOQUALMIE PASS



### ISSUED

Thursday, February 23, 2023 - 6:00PM

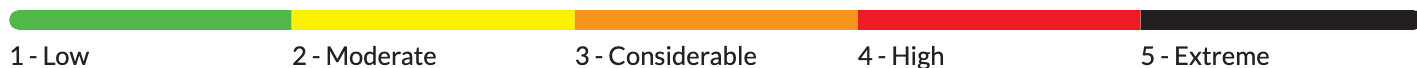
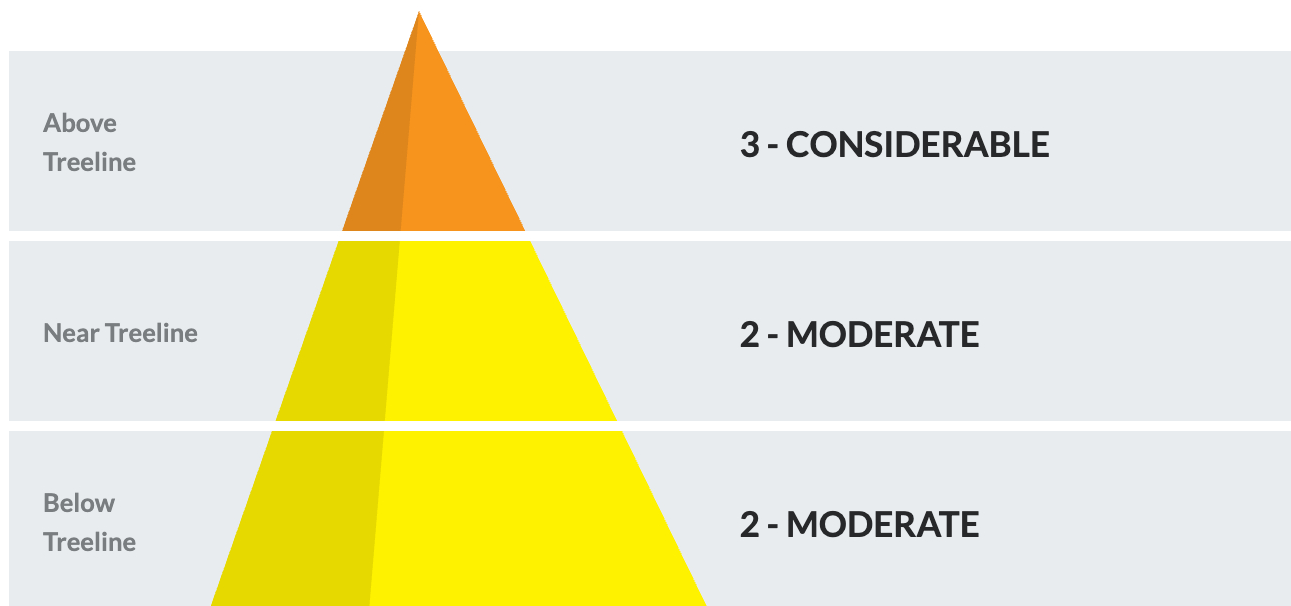
### AUTHOR

Katie Warren

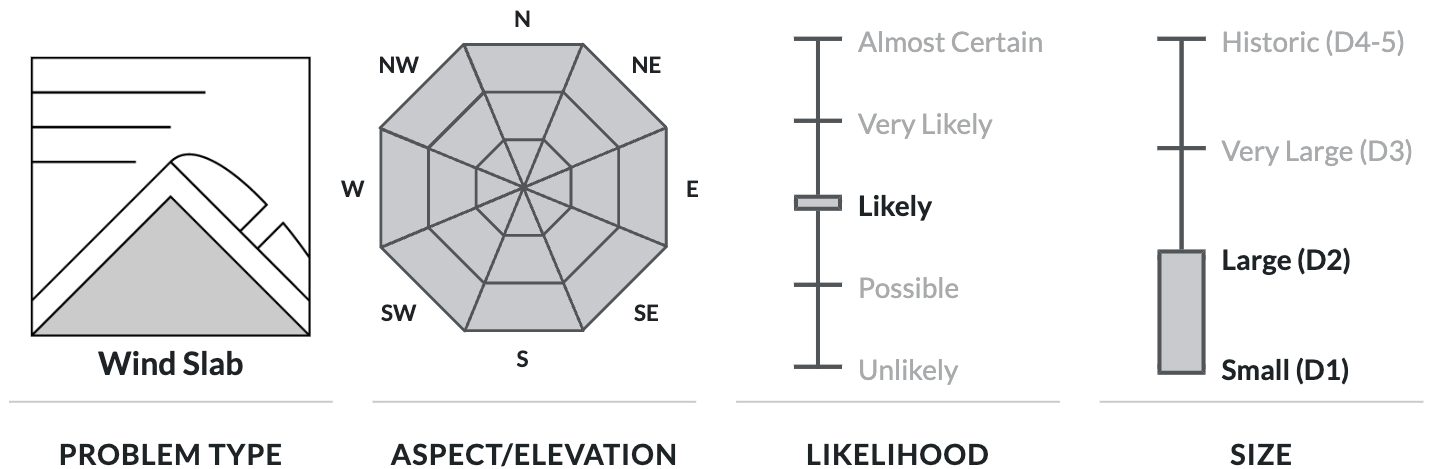
### THE BOTTOM LINE

Avalanches in wind drifted snow will continue to be easy to trigger on Friday. So avoid steep slopes with pillow-like drifts and confined alpine terrain features. We expect these slabs to be larger, more widespread, and easier to trigger as you ascend in elevation.

### AVALANCHE DANGER



## AVALANCHE PROBLEM #1



Many reports of skier-triggered wind slabs came in on Thursday. You can anticipate little change in these sensitive wind slabs with cold temperatures and continued easterly winds. This easterly wind direction can surprise backcountry travelers used to focusing on slopes or aspects that are more commonly wind loaded by the typically westerly winds. Steep slopes below ridges and confined alpine terrain features such as chutes and gullies are likely places to trigger these wind slabs.

It may be challenging to avoid these wind slabs at elevations above treeline, and you can also expect to find them on open slopes at lower elevations. Ease into the terrain using smaller, less consequential slopes to see how the snow reacts. If you find cracks or feel firm hollow snow underneath you, step back and stay off these suspected wind-loaded areas.

In wind-sheltered areas, it's still possible that you could trigger a storm slab avalanche on steep unsupported rollovers. As the sun comes out and temperatures moderate, you may still see some small dry loose avalanches running in very steep terrain. Don't let a smaller avalanche knock you over and take you for a ride above a terrain trap.

## **FORECAST DISCUSSION**

**Avalanche Fatality: Colchuck Pk, East Central Zone: [Read the preliminary report here.](#)**

It was an active day on Thursday, with multiple reports of human-triggered avalanches. Most of these avalanches were on wind loaded test slopes and intentionally triggered. However, a skier was caught and carried a short distance by a small avalanche in a confined terrain feature, and they were on the surface and uninjured. [Read more in the Observation.](#) A large natural storm slab occurred on Chair Peak, and we suspect a cornice fall may have been the trigger. We do not think that this avalanche involved older snow layers. While we expect this avalanche to be the exception rather than the norm, we can't rule out larger storm slab avalanches with the amount of recent snow that has fallen. So slowly approach new terrain and assess conditions before committing to challenging terrain.

The recent snow is generally right side-up with up to 2' of snow above the heavier, wetter snow received earlier in the storm cycle. With several inches of fluffy, low density snow to end the storm, several natural dry loose avalanches were observed in steeper terrain. Current observations of recent avalanche activity involve just the recent snow above the rain crust/refreezing wet snow. We are still monitoring deeper interfaces in the snowpack, such as the 2/17 or 2/13 melt-freeze crusts. While we don't suspect these layers to be active, there is still an unlikely possibility of avalanches on these layers. This would most likely occur in isolated areas with a larger trigger, like a cornice or a smaller avalanche that steps down deeper in the snowpack.