Bearpaw Avalanche Incident
02/26/2023

Report by Irene Henninger

Incident Summary:
On February 26, 3 backcountry travelers accessed the Bearpaw Mountain area of Canyon Creek. They snowmobiled to a ridgeline before transitioning to ski/ride nearby terrain.

The group reported being aware that the new storm snow may have bonded poorly with a weak old surface. As an initial assessment, the team performed a ski cut across a steep slope beneath a cliff band, which produced no results. They then descended a NW facing slope and returned to the ridgeline without incident.

For their second lap, the group chose a route skiers' left of their initial run on a slightly more westerly aspect. The first person on the slope triggered a large slab avalanche. The skier tried to outrun the slide, without success. He then pulled his airbag's trigger, but it did not deploy. The skier reported being thrown head over heels several times during the event. Despite the violence of the slide, his skis did not release.

The avalanche came to rest on a bench feature, with large table-sized chunks of debris. Initially, the victim was not deeply buried. However, a second wave of debris, "possibly hangfire or additional sluff" buried them deeper. The skier was buried upright and reported being able to create an air pocket. He could see a bluish light through the snow. The skier was able to punch his hand toward the surface and call for help.

The two snowboarders quickly arrived on the scene and dug him out. The injured party's head was reported as being buried 2-3 feet beneath the surface. The partners splinted his injured leg and extricated the skier down to lower-angle terrain. From there, one member of the party retrieved a snowmobile and evacuated the skier to the trailhead and additional medical care.

The skier sustained several orthopedic injuries. The injured party stated that while they suspected they would trigger an avalanche, it broke larger and wider than anticipated.

Occurrence Time and Date: Feb 26, 2023, just after 1200hrs
Time First Reported to SAR: No report to SAR.
Recovery/Rescue Time: Event occurred just after 1200hrs to hospital at 1545hrs
Location: Bearpaw Mt, Whatcom Co, Mt Baker-Snoqualmie NF, WA

Number in Party: 3
Number Caught: 1
Number Partially Buried, Critical or Not-critical: 0
Number Completely Buried: 1
Number Injured: 1
Number Killed: 0

Avalanche Type: SS
Trigger: ASu
Size: R2 /D2
Start Zone Aspect: WNW
Start Zone Angle: Est: 40 degrees
Start Zone Elevation: Approx: 5600 feet

Height of Crown Face: 8-36” reported by party
Width of Fracture: Estimated 80m (260 ft)
Vertical Fall: Injured party estimated to be carried 75 vertical meters (250 ft).

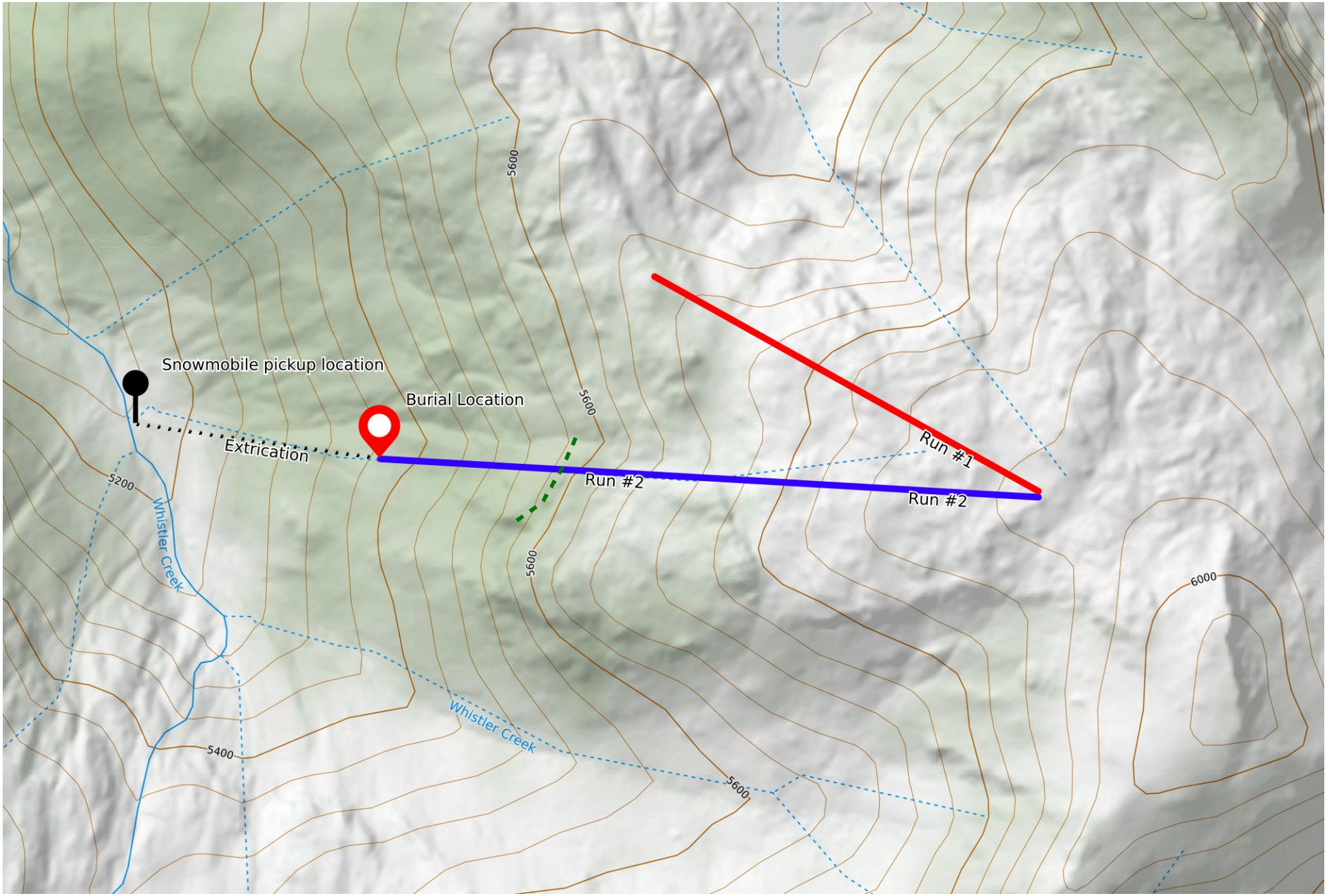
Slab Characteristics: Unknown
Weak Layer Characteristics: Unknown
Bed Surface Characteristics: Unknown

Burial involved a terrain trap: Yes, Bench
Number of people that crossed start zone before avalanche: 0
Avalanche occurred during: Descent
Location of group in relation to start zone during avalanche: Two snowboarders above on the ridgeline, skier on the slope.

Avalanche Safety Gear Carried: All had Shovel, transceiver, probe
Avalanche Training and Experience at Activity: Level 1 and Level 2
Signs of Instability Noted by Group: None noted
Extent of Injuries: Serious orthopedic injuries

NWAC Forecast Zone: West North Zone
Avalanche Danger Rating (Above, Near or Below Tree-line): Considerable All Elevations.

Photo taken by the party. Blue lines are the avalanche crown, red circle shows burial location.



Mercator Projection
WGS84
UTM Zone 10U
CALTOPO

0.1 0.2 0.3 0.4 0.5 km
0.1 0.2 0.3 mi

Scale **1:3000** 1 inch = 250 feet

MN
15.5º

NORTHWEST AVALANCHE CENTER - HTTPS://WWW.NWAC.US/

BACKCOUNTRY AVALANCHE FORECAST

WEST SLOPES NORTH

ISSUED

Saturday, February 25, 2023 - 6:00PM

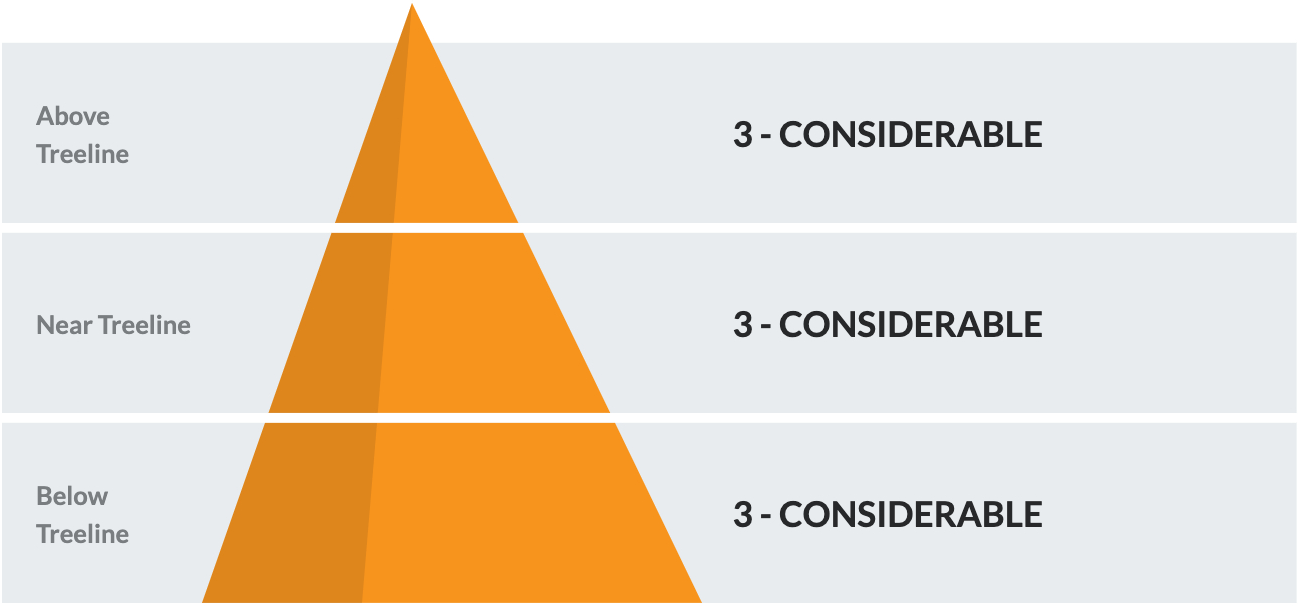
AUTHOR

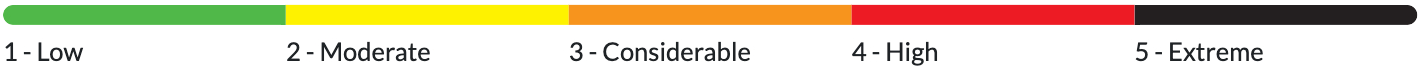
Lee Lazzara

THE BOTTOM LINE

An approaching storm will bring 1-2’ of new snow and strong winds. Plan on starting - and probably finishing - your day in simple, lower-angle terrain with limited exposure to big slopes above. Avoid all avalanche terrain if you see widespread signs of instability like shooting cracks or natural avalanches or if the storm just doesn't let up .

AVALANCHE DANGER

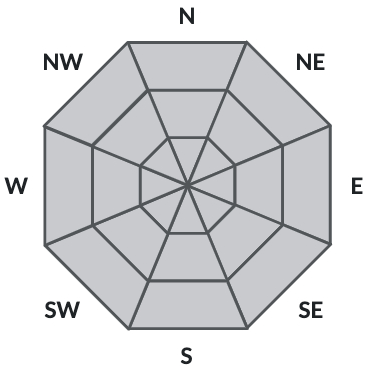




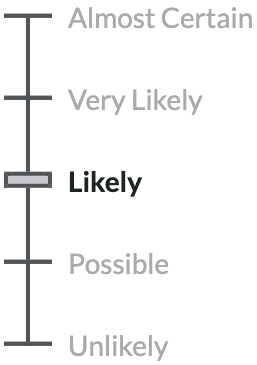
AVALANCHE PROBLEM #1

Storm Slab

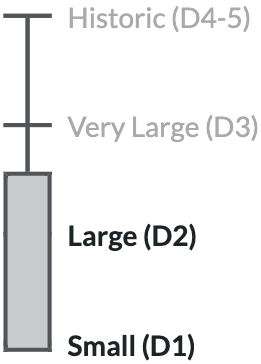
PROBLEM TYPE



ASPECT/ELEVATION



LIKELIHOOD



SIZE

Sunday won't be a day to sneak around big avalanche terrain. Dangerous conditions should continue through the day as long as the snow keeps piling up and winds keep blowing. It's up in the air if we will see a cycle of large natural avalanches. But the setup is in place with new snow and wind slabs forming over a snow surface that weakened (as in facets and surface hoar) since the last storm.

You are more likely to trigger an avalanche in wind loaded terrain but there should be enough snow that all slopes should be considered suspect. Blowing snow should clearly show you which slopes are the most susceptible to triggering an avalanche. If you find sheltered terrain with deep uncohesive new snow then dry loose avalanches are the next hazard you need to contend with.

FORECAST DISCUSSION

Winds ramped up ahead of the storm with gusts in the 50's by late afternoon. Shallow but reactive wind slabs were found on leeward slopes and signs of wind effect were commonplace in exposed areas. There were two reports of backcountry travelers getting caught and carried in shallow wind slab avalanches in the afternoon. These occurred on Mt. Ann and also near Ptarmigan Ridge. **Wide propagation with one of these avalanches hints that the weak surface of facets and/or surface hoar is now buried and will contribute to avalanche danger on Sunday.**

Some questions remain about Sunday's forecast. If the bulk of snowfall and strong winds come overnight and then taper in the morning, travel around and even in smaller avalanche terrain could be a reasonable proposition by day's end. If heavy snow showers and strong winds persist then the rating is effectively High and all avalanche terrain will be a no-go. The potential for larger, widely propagating avalanches releasing at the old snow surface of facets or surface hoar adds another layer of uncertainty. The best policy will be to plan on a mellow day and default to terrain with little to no exposure to avalanches.

Avalanche danger is rated Considerable at all elevation bands. It will be more dangerous in upper elevation, wind exposed terrain. Heavy snowfall at low snow levels means typically "safe" terrain might be a bit more heads up than usual.