

Austin Canyon Avalanche Fatality
1 Snowmobiler, fully buried and killed
Snake River Range, Idaho
April 3rd, 2020

Synopsis:

On April 3rd a group of ten riders left the Pole Canyon trail head south of Victor Idaho, their goal was to complete a long loop in the Snake River Range. At approximately 1430 hours, the lead rider (Rider 1) climbed a steep southeast facing slope in an attempt to reach a saddle around 9,500 feet. While Rider 1 was ascending he triggered an avalanche. Rider 1 was unable to ascend to the saddle and made the turn to descend back down the slope. He was caught in the avalanche while descending. During his descent, Rider 1 was forced over a steep roll at a high rate of speed which caused him to become airborne for 50-70 feet according to witnesses. Rider 1 landed with his snowmobile in a near vertical position. This was the last time Rider 1 was seen before disappearing in the avalanche.

GPS Coordinates Location:

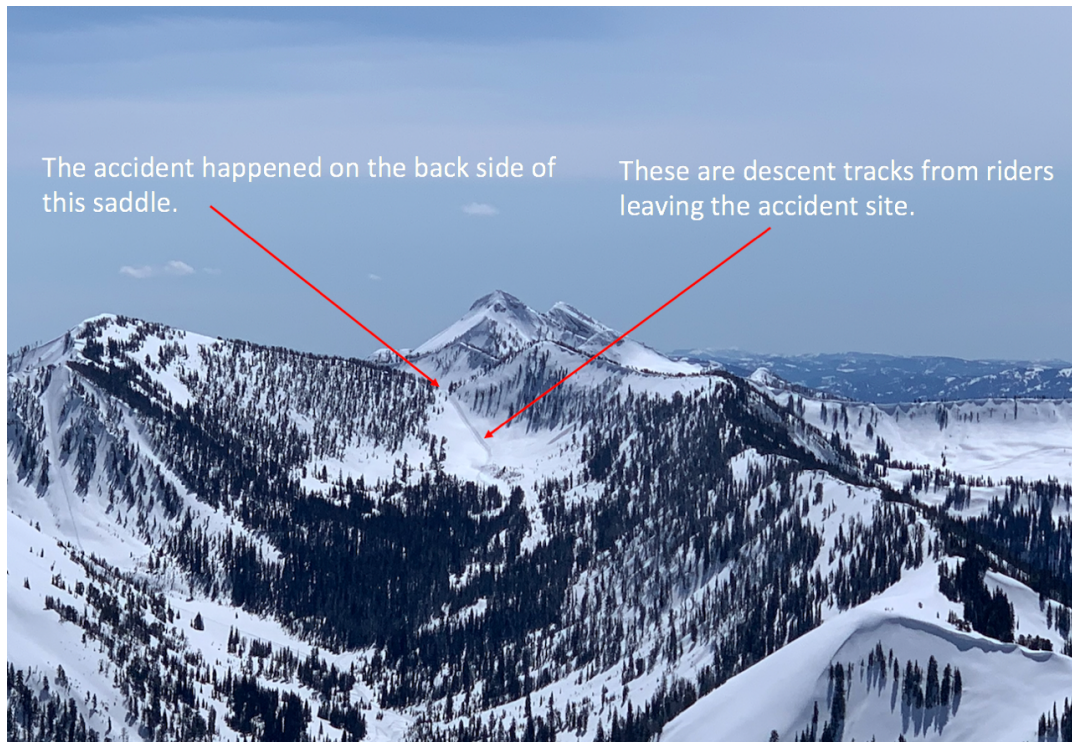
South East Face in upper Austin Canyon, approximately 9500 feet.

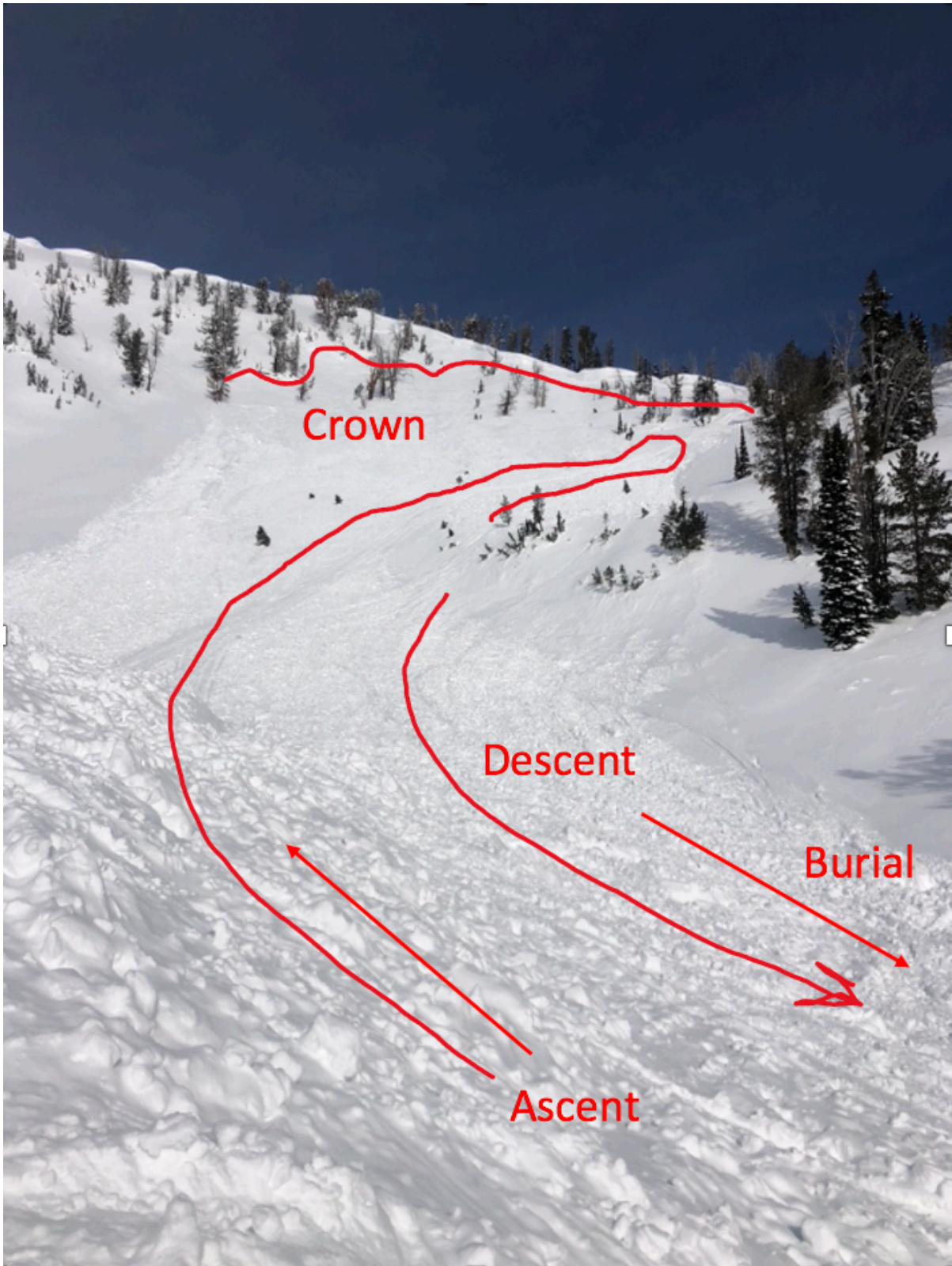
Crown - 43.382663, -111.092689

Burial - 43.381293, -111.089892

Coordinates are approximated since an on-scene investigation was not completed

Photos:





Estimated ascent and descent line. Rider 1 was buried outside of the photo near the left flank.



Looking up the slide path, both flanks are visible, the crown is visible below the cornice.



Approximate location of the victim.



Approximate location of the victim's snowmobile.

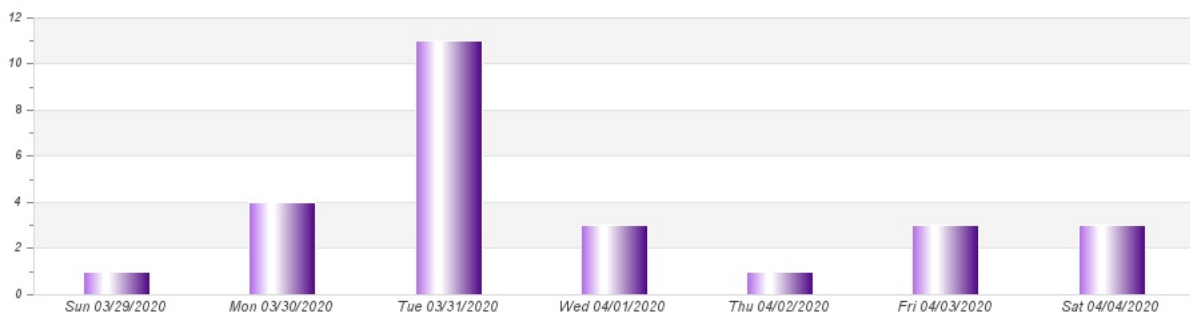


Exiting the accident scene on 4/4/2020 after the victim and his snowmobile were recovered.

Weather:

A significant storm dropped nearly 20" of snow totaling more than 2" of snow water equivalent (SWE) in the days leading up to the accident. The day of the accident, skies were partly to mostly cloudy and southwest winds were blowing an average of 16 mph. Mountain temperatures were in the teens F. Between 3/29/2020 and day of the accident, 4/3/20, 2.31" of SWE was recorded at the Raymer Study Plot in Jackson Hole Mountain Resort at 9,300 ft. All weather information was pulled from Jackson Hole weather stations located 18 miles from the accident site.

Snowfall for 7 days from Sunday 03/29/2020 at Bowl 9,580'



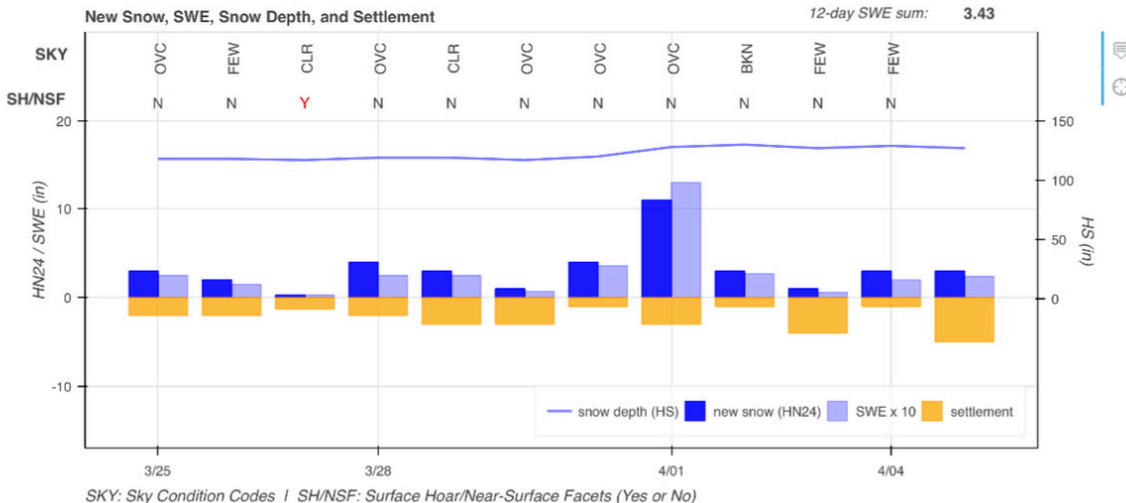
25 Mar 2020 .. 05 Apr 2020



Mid Mountain Raymer Rendezvous Bowl

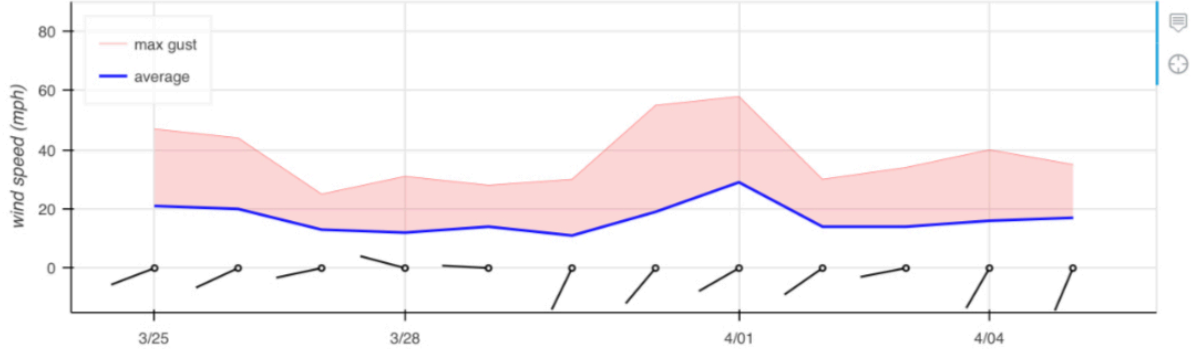
12-day new snow sum: 38.3

12-day SWE sum: 3.43



Summit Raymer

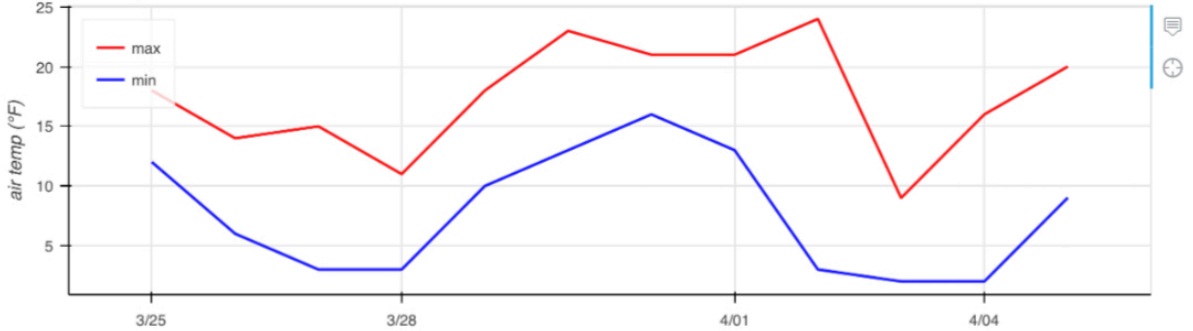
Wind Speed & Direction



Note: wind direction vectors indicate compass direction that wind is from.

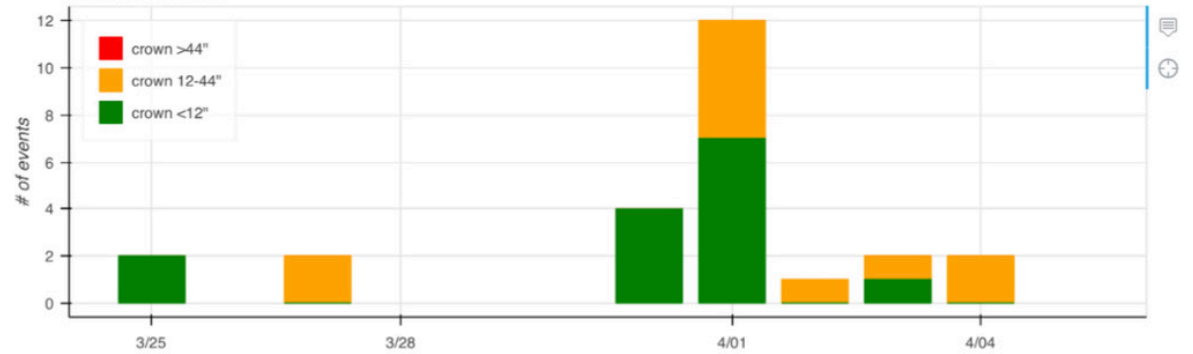
Summit Mid Mountain

Air Temp

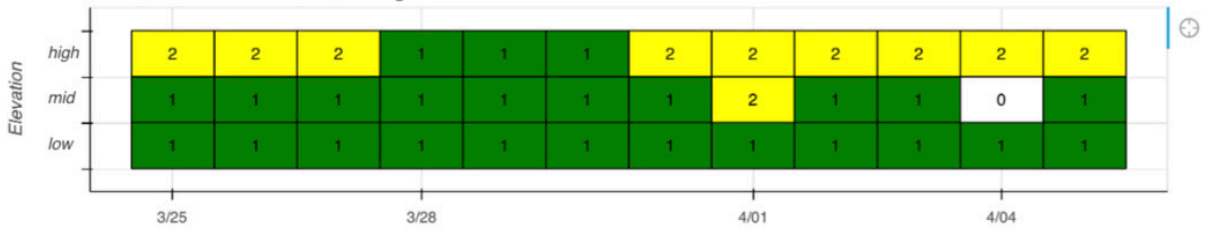


All Area BC

Avalanche Events

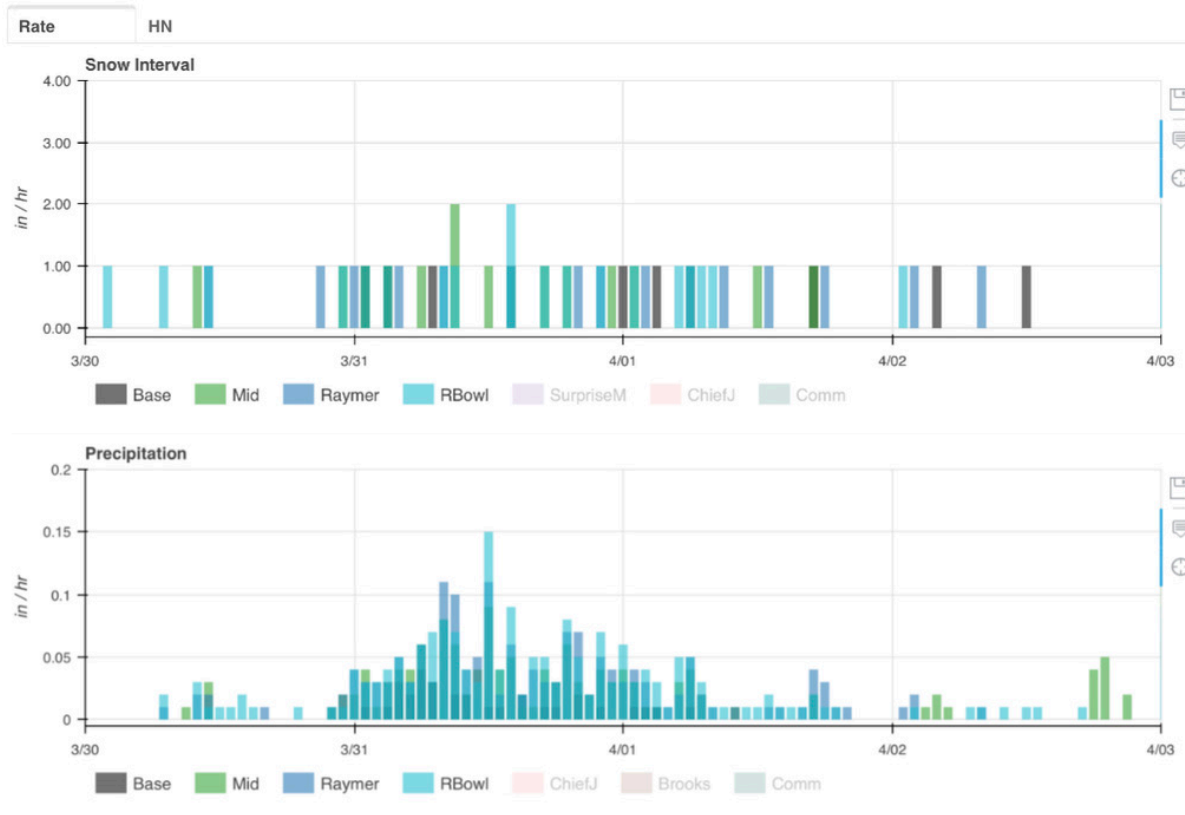


Teton Area Avalanche Hazard Rating



ELEVATION: low: 6,000' - 7,500' | mid: 7,500' - 9,000' | high: 9,000' - 10,500'

HAZARD: 0: No rating | 1: Low | 2: Moderate | 3: Considerable | 4: High | 5: Extreme



Snowpack and Avalanche:

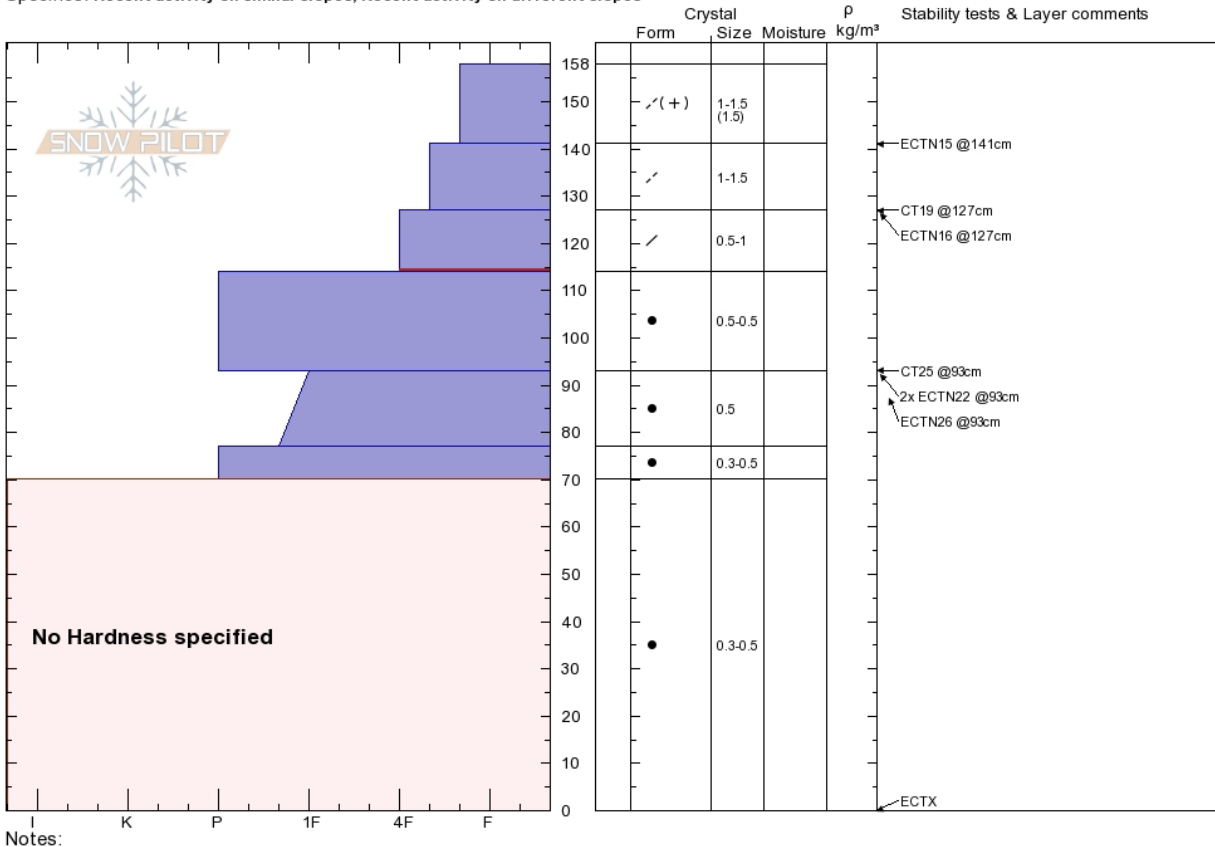
The Bridger-Teton Avalanche Center in Jackson Wyoming issued the daily avalanche forecast at 0640 on 4/3/2020. Members of the group read the forecast and were aware of the current avalanche problems. The forecast danger rating was LOW for low and mid elevations and MODERATE at upper elevations. Wind slabs were the primary avalanche problem at upper elevations on all but west facing aspects.

The avalanche occurred on a steep southeast facing slope at the head of Austin Canyon. This area is complex terrain that involves navigating many different avalanche paths. The slope where the avalanche occurred had large overhanging cornices on the ridge above, indicating this slope was prone to wind loading. The avalanche released beneath the cornices. The avalanche is classified as SS-ASu-D2-O. It released at an elevation of 9,400 feet and ran approximately 1,700 feet slope distance ending at an elevation of 8,800 feet. The crown was reported to have been 18-24 inches deep.

The day after the accident, a test pit was dug on a similar aspect and elevation. All failures were within the top 65cm of the snowpack (25.5"). There were no identifiable persistent weak layers and it is suspected that the avalanche failed on the new snow-old snow interface. It is likely the slope received additional wind loading that created a heavier load and more cohesive slab. The

day after the accident, the new snow appeared to be well bonded to the old snow surface and multiple extended column tests failed to produce full propagation. The snowpack structure beneath the new snow was strong and stable. The test pit was dug approximately 3.5 miles N/NE of the accident site.

Palisade Peak Bill Radecky Stability: HS:158 Layer Notes:
Teton Pass 04/04/2020 - 2:33pm Air Temperature: 127-114cm:Problematic layer
ID Co-ord: 43.43635N, -111.07775W Sky Cover: FEW
Elevation: 9459 ft Slope Angle: 23° Precipitation: NO
Aspect: SE Wind Loading: previous Wind: S Light Breeze
Specifics: Recent activity on similar slopes; Recent activity on different slopes



Rescue:

As the group watched the avalanche occur, several members yelled and waved at Rider 1. Rider 1 was descending near the left flank and initially was not caught. The natural fall line pushed Rider 1 toward the main part of avalanche. Descending at a fast rate of speed, Rider 1 was carried over a large roll over that caused him to be launched 50-70 feet downhill. When Rider 1 landed his snowmobile was nearly vertical, landing on the back section of track and tunnel. At this point the group lost visual contact with Rider 1. When the avalanche came to a stop the nine remaining members of the group immediately went into rescue mode. All members quickly switched their transceivers to search and began looking for surface clues. The debris pile was small enough that it was quickly covered. Rider 1's snowmobile was located but there was

no sign of Rider 1. Members of the group picked up occasional false readings they believed were the result of other members switching back and forth from receive to transmit. After it was determined they were not getting a signal from Rider 1, they transitioned into a probe search and initially searched downhill of the victim's snowmobile which was visible. At one point, a rescuer believed they had a positive probe strike, but unfortunately it was a false positive.

At this point one member of the rescue group used a GPS messaging device to alert family members that they would be running late. The SOS feature was not activated. The rescue group had a meeting and decided to work uphill from the visible sled, following what they believed was the natural flow of the avalanche. The victim was found with a probe strike 30-50 feet above his snowmobile. Rider 1 was fully buried for 2-2.5 hours before he was uncovered. Rider 1 was found in a semi-prone position with his head downhill. He was wearing an avalanche transceiver, but it was not turned on. He was also wearing an avalanche airbag but did not deploy it. Rescuers stated that he was 4 feet deep. CPR was initiated without success. It is not known exactly when the group activated the SOS feature on their GPS messenger. Based on information from BCSO deputies, it is believed they activated it approximately 90 minutes after the avalanche occurred. The victim's avalanche transceiver was turned on and checked after the accident, it functioned properly.

Take Away Points:

- A full equipment check needs to be performed before traveling in the backcountry. Every member needs to verify they have a functional shovel, beacon and probe. Transceiver range checks should be done regularly.
- Avalanches will occur after fresh snowfall or loading events, independent of well-developed weak layers. New snow needs to be carefully assessed 24-48 hours after a storm.
- Call for help and activate SOS features quickly. Travel times and logistics for SAR groups take time, get them activated early, they can always be cancelled if they are not needed.
- Avalanche airbags work well in many cases. However, they need to be deployed quickly in order to maximize their effectiveness. They are not a "get out of jail free card", they are a last resort to minimize consequences.
- No one is immune from making mistakes, no matter how much formal training or experience they have. Consistently following fixed procedures or a checklist will minimize the chance of making preventable mistakes.

Question should be directed to:

Bill Radecky

Owner/Educator

Six Points Avalanche Education

406-640-1139

info@avalancheclasse.com