Remotely Triggered Avalanche Lionhead

Lionhead Ridge Lionhead Range 2/19/2025 Code SS-AMr-R3-D2-O Elevation 8600 Aspect SE Latitude 44.71450 Longitude -111.31800 Notes

As we approached our second pit site on the lip of Moto Hill (southeast <u>aspect</u> at 8600'), I stopped and looked back in time to see avalanche debris slamming into the trees on a connected slope below. We remotely triggered the avalanche from 150 feet away. It broke 200' wide and 1-3 feet deep. It ran an estimated 200' vertical feet (based on a slope map. We couldn't safely access the toe of the debris). The avalanche failed on a layer of Fist hard facets. This is interesting because it is these mid-elevation slopes in the LH area that seemed really weak on previous visits to the area. The slope may have some wind-loading, but it was minimal and not the cause of this avalanche.

We dug a pit on an east <u>aspect</u> around the corner and down from Airplane Bowl (before the avalanche) and found a similar snowpack setup. 150 cm of total snow and half was composed of weak facets. ECTP22 and P24 on the mid-pack January layer of Fist hard facets and <u>surface hoar</u>.

Take Homes:

- 1. Lionhead seems to be the epicenter of persistent <u>slab</u> instability. It is the weakest I have seen. Southern Madison and Southern Gallatin seem to be similar and I would group them together when describing conditions.
- 2. Mid-elevation slopes are thin and weak and can clearly avalanche. This is problematic because many folks play in lower elevation terrain when conditions are dangerous... While small compared to the upper bowl, the avalanche we triggered would have been deadly. It was deep and it would have strained its victim through trees.
- 3. We heard about a similar remote-triggered avalanche in Black Canyon today. This has me nervous that I missed something in the Centennials. While we didn't see anything too concerning there yesterday outside of wind-loaded slope, I am not happy about two remotely triggered slides less than 20 mile away.

Number of slides 1 Number caught 0 Number buried 0 Avalanche Type

Soft slab avalanche Trigger Snowmobile **Trigger Modifier** r-A remote avalanche released by the indicated trigger R size 3 D size 2 Bed Surface O - Old snow Problem Type Persistent Slab Slab Thickness 24.0 inches Vertical Fall 200ft Slab Width 200.00ft Weak Layer Grain type Faceted Crystals Weak Layer grain size 3.00mm Weak Layer Hardness F Attached Videos Remotely Triggered Avalanche Lionhead 19 Feb 2025 Snow Observation Source Remotely Triggered Avalanche Lionhead Slab Thickness units inches Single / Multiple / Red Flag Single Avalanche Advisory Year 24-25