Skier triggered large slide on Flanders Mountain

Flanders Creek Northern Gallatin 1/9/2021 Code HS-ASu-R4-D2.5-O Elevation 9800 Aspect E Latitude 45.43590 Longitude -110.94400 Notes

From obs: "We dug a pit and found a really weak snowpack! Regardless of the poor <u>stability</u> result, we proceeded to ski an East facing bowl south of Flanders Mountain knowing that the slope angle was low and only flirted with 30 degrees in some parts of the bowl. We could have chosen to ski the trees further to our left, but after evaluating the consequence associated with skiing the bowl, we decided that the center of the bowl did not pose too big a risk given we skied one at a time. My partner skied first, he skied practically all the way back to the skin <u>track</u> when the slope failed and the entire bowl released. He was pretty well out of the way of danger by the time the bowl began to move. From our perspective, the <u>trigger</u> happened at the bottom of the slope.... The bowl was not the only slope that slid, the avalanche propagated around the ridge and released a <u>slide</u> on the more south-easterly facing <u>aspect</u> just south of the bowl. We tail-tucked and went home glad no one was caught or hurt."

GNFAC forecasters visited the site on 1/11/21. We measured the maximum slope angle in the start zone at 35 degrees with an average slope angle of 33 degrees. The debris in each path was up to 2-3 meters deep. The avalanche broke on a layer of weak <u>faceted snow</u> 70 cm above the ground, and propagated almost 1000 feet wide. The crown was 2-3 feet deep.

Number of slides 1 Number caught 0 Number buried 0 Avalanche Type Hard slab avalanche Trigger Skier **Trigger Modifier** u-An unintentional release R size 4 D size 2.5

Bed Surface O - Old snow Problem Type Persistent Weak Layer Slab Thickness 30.0 inches Vertical Fall 500ft Slab Width 1000.00ft Weak Layer Grain type **Faceted Crystals** Weak Layer grain size 2.50mm Slab Layer Grain Type Decomposing and Fragmented precipitation particles Images Skier triggered on Flanders, both crowns Flanders skier triggered Skier triggered on Flanders, crown pit Skier triggered on Flanders, second path Skier triggered large slide on Flanders, second path 2 Skier triggered on Flanders other end of crown Skier triggered on Flanders 2 Large Flanders slide, crown 2 Skier triggered on Flanders Attached Videos Investigating skier triggered slide, Flanders - 11 Jan 21 Skier triggered large slide on Flanders - 9 Jan Slab Thickness units inches Single / Multiple / Red Flag Single Avalanche Advisory Year 20-21