Date: 2014-12-27

Submitted by: West Central Montana Avalanche Center (WCMAC)

Avalanche Specialist: Dudley Improta

Location: North Fork of Placid Creek near Seeley Lake

Approximate coordinates: N47.2385 X W113.7186

State: MT

Country: USA

Fatalities: none – damage incurred to snowmobiles

Summary: 4 snowmobilers caught, 2 partially buried, 2 completely buried

Synopsis:

On Saturday December 27 a group of five snowmobilers were riding in the north fork of Placid Creek near Seeley Lake, MT. The area is locally known as the “north fork bowls”. The group was in an area known as the “first bowl” or “little bowl”.

This is a popular area for riding. There is a large parking lot off of Boy Scout Road dedicated for snowmobile parking and access. The local snowmobiling club, the Driftriders, maintains extensive trails and a warming cabin in the area.

At approximately 13:20 an avalanche was most likely triggered by one of the riders. The group was “carving” or “side-hilling” in the bowl. The two completely buried riders, rider A and rider B, were off their sleds when the slide triggered. Rider A had hit a log underneath the snow and was working to free his sled. They heard someone holler “avalanche” and they were hit by the snow. The two riders who were partially buried managed to extricate themselves. Rider B was buried approximately 3 feet below the surface and was recovered with an avalanche transceiver in approximately 10-14 minutes. Rider A was not wearing a transceiver and was thrown over his sled by the snow and also buried 3 feet below the surface. The avalanche pushed his sled next to where he was buried. After 10 minutes or so, rider A was succumbing to a lack of oxygen when he felt his sled move next to him. This spurred him to move against the sled; the rescuers felt the return movement and dug rider A out; approximate buried time 14 minutes.

Rider B’s helmet was unstrapped and the avalanche blew it off his head; while Rider A’s helmet was strapped and stayed in place. He was able to get his hand near his face and helmet and felt this helped create an air pocket.

Although there was significant damage to the sleds, both riders were able to ride out and did not sustain injuries. Seeley Lake Search and Rescue met the party at the nearby warming cabin.

Steve Karkanen and I attempted to get into the area on Sunday, December 28. Local riders assisted in our effort. The area received 24 inches of snow within 24 hours after the avalanche. We were only able to get within a mile of the site. This is where we did our snow profile. The avalanche occurred on a S/SW aspect. Since we did not actually see the debris or get to the site the classification and our estimate of the snowpack does contain some conjecture.

The avalanche is classified as HS-AM-R2-D2.

**Weather and Snowpack**

West Central Montana had very cold weather during the latter part of November and a period of warming in early December. The early cold weather produced weak faceted snow; the warm weather capped this snow with a melt-freeze crust. A return to cold weather produced more faceted snow above the crust. This structure was subsequently buried with mid and late December snow. This layer had been noted with snow profiles and stability tests through December. The layer was failing in tests with high strength but high energy. This created a classic low probability / high consequence situation.

The North Fork Jocko Snotel recorded 13 inches of snow with .5 inches of SWE in the 24 hours preceding the avalanche.

Recent northwest, north and northeast winds had loaded southwest terrain.

**Conclusion**

Quick thinking and quick actions from the group led to the successful recoveries. Searching the top of avalanche debris or a “scuff search” is an important tactic. If you find gear; move it or pull on it. The rescuers did exactly the right thing to move rider A’s sled; this directly led to his rescue.

The incident reinforces being prepared for avalanches when riding on or near steep terrain. It also reinforces the protocol of knowing where your entire group is; particularly of being aware of riders above and below your position, and only exposing one rider at a time to avalanche danger.



