Union Creek Avalanche Accident

February 19, 2012

Date: 2/19/2012

Location: Union Creek Basin. Back country east of Crystal Mountain Resort .

Summary: Three skiers triggered and caught by ~20-inch deep X 250 ft wide slide. Two skiers partially buried (chest deep) and one skier totally buried. One skier able to self extricate and with help of other partially buried skier was able to locate totally buried party member with probe. Rapid recovery of buried skier resulted in no significant physical injuries.

Report prepared by and provided courtesy of Zeno Martin and Pamela Baker—also see link on <u>Turns</u> <u>All Year</u>

Incident Narrative:

In the backcountry east of the Crystal Ski resort on February 19, 2012, our party of three triggered two slab avalanches on two different aspects in the Union Creek basin. The second slide event buried all three of us. Two of us were partially buried chest deep but not injured and the third completely buried. We were able to rescue ourselves and travel out with no significant physical injuries, though we were shocked by the events we experienced. We later learned of the deadly avalanches near Stevens Pass and Snoqualmie Pass that had occurred the same day.

Details

Our party was Z, Ms. P and J. We have been backcountry skiing together, including in this area for 10 years. We broke trail from the parking lot to the col at Bullion Basin that looks down to the Union Creek drainage to the East. At the ridge we kicked a few cornice edges (one close to body size) down onto the east slopes. Up to this point, we observed no signs of instability, no natural slides, no cracking, no settling. We continued to skin up the ridge traveling south and then descended the east facing slope. We had all skied this slope many times in the past. We skied the top half with no incidents and still no signs of instability. Snow felt a bit dense. We regrouped at the top of the lower section which becomes a steeper rollover. Z skied first to the bottom with no incident and still no signs of instability, and waited at the base of run - in not the safest zone. J then started to descend near Z's tracks and the slope fractured just at or below J about 80-ft across with a 12 inch crown (this was about 10 am). The slide did not entrain J. Seeing a slide above coming down, Z quickly moved to a safer spot and the slide ran about 250-300 feet vertical. J and P then skied down the crusty bed surface and we regrouped. At the bottom, we discussed and agreed to avoid any big bowls, steep slopes and east facing slopes.



Photo above: 10AM slide on E facing slope.



Photo above: 10AM slide from later in the day vantage.

A second group of three then descended the same slope we just did, stopped at the rollover, observed

our slide, yelled if we were all ok, then skied down the bed surface. At the base, our group and the other briefly chatted. The other group said they did an Extended Column Test at the top, and indicated some surprise to see the slide lower down the slope.

Our group decided to continue skiing but to stick to lower angle treed terrain on a nearby north facing aspect slopes. These were also slopes we had all skied many times in past. We continued to break trail where we proceeded to go. We made two skinning ascents and ski descents on the nearby treed north facing slopes and did not observe any further signs of instability, aside from our first run event.

Our fourth skin climb up was to ski another north facing run, with a "small mellow" bowl near the ridge line that lead to old growth tree slopes. As we climbed out of the old growth, we ascended the low angle east side of the bowl and were going to make one switchback to gain the saddle of the ridge. At about 2 pm, Z was breaking trail and was about 25 ft ahead of the others, and maybe 100-ft vertical shy of the ridge saddle. Immediately after making the one switchback turn, the whole bowl fractures about 20-ft above Z, and we are now all caught in the snow pack sliding down. (~20 in. crown , ~250 ft across)

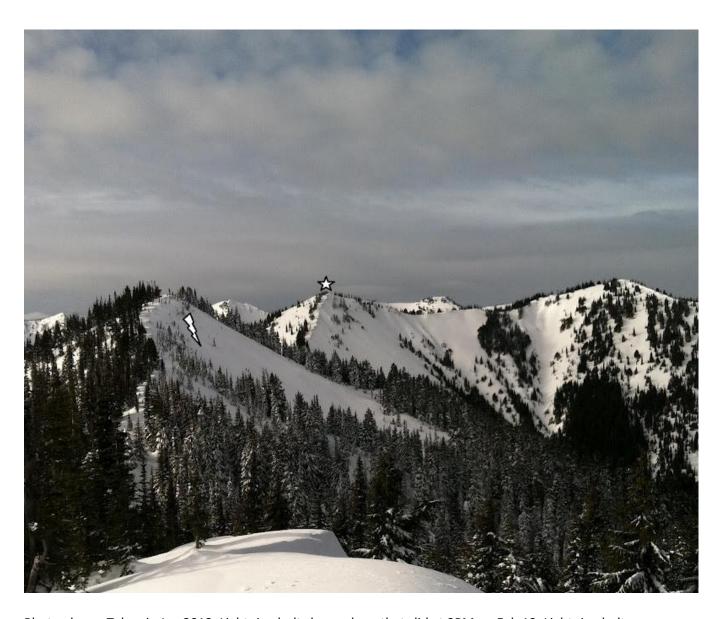


Photo above: Taken in Jan 2012. Lightning bolt shows slope that slid at 2PM on Feb 19. Lightning bolt shows trigger spot. The star is Crown Point and is included for reference. Photo is looking west.



Photo above: Looking up from near where Z came to rest. J and P were buried on other side of yellow coat behind tree on left.

I kept thinking to try to stay on top but felt the snow pulling down on my skis like anchors. My head was always above in the slide. As the slide continued I got pulled in deeper. Came to rest after about a 150-ft vertical foot slide with snow around my chest, my two arms were free. I couldn't see anyone. I called out and J responded, he was ok but buried. J was blocked by a tree from my view, and now I was about 25ft down slope of him. We confirmed that neither of us could see P. This was bad. J said he was stuck. I was stuck too. I knew I had to find Ms. P and fast. I dug down to my bindings by hand and punched the Dynafit levers to release from my buried skis. Stood up. Pulled my shovel out. It felt like it took too long to assemble, fumbling with the webbing in the way of shovel assembly. I called to J to switch his beacon to search mode. I tried to switch my beacon (Tracker) to search and saw a "--". Why no "SE"? Eff! J called out that P was near him. I turned my beacon off thinking it not working, no time for beacon forensics - J had a hit anyway. I hurried over to where we thought she might be buried. Started shoveling quickly. Nothing. Where is she? J, get me your probe. J assists even though he is buried up to his chest with his skis anchored in about 4-ft down. We fumble to assemble the probe. Seems to take way too long to deal with the requisite screw threading to get the probe assembled. Start probing, no hits. Where is she? Thinking that time is of the essence, panic and frustration creep closer to mind. J, get me your beacon again. 0.7 m. She's near. Probe again - hit! Dig. Dig into a ski pole. Kept digging. Probed again, hit again. Keep digging. I dig into a pant leg and I see slight movement. I keep calling out to hang in there and we're coming. I then dig into her backpack. Now I go to dig out her head and get her air. She is face down, head down slope and breathing. J is very near P and although still anchored to his skis, he has better upper body mobility by now and can reach downslope into the pit to assist clearing snow away from Ms. P. At this point I know we're all alive.

We dig out knowing we're ok, find everything and discuss the best route out.



Photo above: P standing in the pit in which she was buried. J was buried just on the other side of P's green jacket.

Mistakes:

Despite the clear warning from the first slide, and our group decision to stick to low angled treed terrain, we ventured into an open bowl where the second slide occurred.

Only J had a probe. Two of us consciously did not bring ours.

Hadn't practiced beacon search in several years. The seconds required to switch to search seemed an eternity and I failed at the simple task.

Allowed entire group to be caught. At other times we did skin with intention to expose only one, we let our guard down.

Lessons:

Deep burials can happen in "small" slides.

Beacon AND probe can save a life. Practice with both.

Big events can occur with NO field observable warning signs (not talking about NWAC Warnings/Forecasts).

Limit group exposure. Only expose one person at a time especially when skinning in avalanche terrain.