## Crystal Mountain—Northway Avalanche Accident December 2, 2007

## **Accident Summary**

**Time:** 2<sup>nd</sup> December 2007, approximately 15:00 hrs **Location:** Near Northway, Crystal Mountain, WA

**Activity**: Avalanche control, skiing, professional ski patrol

Caught: 2

**Buried:** 2: 1 completely buried, 1 mostly buried and able to self extricate; performed rescue on

totally buried partner.

**Injured**: 0 **Killed**: 0

## Preliminary Accident Narrative:

(Narrative prepared by Paul Baugher, Professional Patrol Director for Crystal Mountain Resort):

Statement of Paul Baugher Northway Avalanche Accident December 11, 2007

On Sunday December 2, 2007, Chris Morin and I were doing avalanche control in the Pucker's Right and Upper Penny Dawgs Area of the North Backcountry. The mission was to protect the Northway Chairlift line for work on the chair. Two other control teams were operating in the vicinity.

This was the second day that the ski area had been open for the season and this particular area had not received any avalanche control. The area is all steep expert terrain with most slope angles in the upper 30 degree range. On Saturday December 1, the snowpack in the North Backcountry was approximately 40cm deep. It contained a mix of advanced and intermediate facets near the ground. Mixed forms and broken stellars were present in the upper portion. The well forecasted and anticipated "big storm event" arrived Saturday afternoon. By Sunday at 11:30 a total 26" (1.47 SWE) of new snow had fallen and the precipitation intensity had increased to .17"/hr. The winds averaged in the 20's with gusts in the 40's during the period. The temperature also continued to increase during the period. By 11:30 the local forecasted avalanche danger was changing from high to extreme.

Chris and I had just controlled the exit chute of Upper Penny Dawgs with two hand charges. We released a fairly large avalanche running on facets at the ground (SS-AE- R4-D2-G). Our control route was over at this point with the exception of making our way out of the rest of the North Backcountry safely. We descended the bed surface of the path into the Northway chairlift line and then followed it to where it intersects with the Northway drainage. We stopped in an open area slightly uphill and on the left side of the drainage. Chris and I decided we would need to put skins on our mountaineering skis in order to break trail downhill as we made our way out of the drainage. Chris had just started moving (separating for spacing) and was 20' away from me. I was putting my skis back on when we were both struck by a small natural avalanche that released on a short steep slope on the left side of the drainage (SS-N-R2-D1-S).

Chris and I were both knocked over and buried. At first I thought it was just a harmless sluff but as I was already waist deep in the snow it was enough to knock me flat and cover me to the point where the "lights went out". Fortunately I was very shallow and had the use of both my arms. I uncovered my head. I immediately looked for my partner and could see that he was completely buried. I was able to get my chest uncovered within a minute (my radio was in a chest pack). I called "code 2 – my partner is buried". I knew exactly where Chris was as we had not been carried at all and I was watching him when we were hit. Next I looked at the short slopes that make up the drainage sides and saw that a small 6" – 1' fracture had occurred within the new snow. There did not appear to be any remaining immediate threat in our vicinity and we had just controlled the avalanche paths above affecting our location in the drainage.

I had lost both skis and after I extricated myself I immediately went toward Chris. I determined that movement without my skis would have taken me 20 minutes to cover the 20' I needed to reach Chris. I returned immediately to look for my skis and found them quickly. I received a radio call and responded that I would not respond to any calls while searching for Chris. I then moved on skis to Chris who had by this time gotten a hand to the surface and was shaking it. I got to Chris and dug him out while yelling into the snow that he was going to be OK. I exposed his pack to the point where I could reach one of the shoulder straps, put my arm through it and levered backwards (as you would pull a person into a raft with their life vest). His head came out right away. He was breathing OK but said he was starting to have difficulty breathing just before he came out. I notified dispatch that Chris was OK and we were preparing to move out of the area toward lower Northway. The dispatch log records the total time from Code 2 called until Chris was reported out as 2 minutes. There was obviously some time lag before I had been able to reach my radio. Both Chris and I think the time was closer to 7 minutes. We finished extricating Chris and then gathered our gear and proceeded to make our way out of the drainage using route selection on the right wall and using spacing until out from underneath any remaining hazard. Once we were away from any potential runnout we waited for the 2 other control teams to join us. We then proceeded to hike/ski until we reached the Crystal Mountain access road. This involved approximately 1.5 hrs of very difficult travel from the time of the accident.

## A few footnotes:

- 1. This accident occurred at the beginning of a very big avalanche cycle and we would have not considered doing the control in this area had it not been for an urgent request from senior management. This was a special mission to protect workers in getting the new Northway lift on line. After initially saying no we determined we could do the mission safely. It is important to note here that had we insisted on "no" we would not have had to do the mission. However, this is a classic "risk versus reward" problem.
- 2. The accident occurred in an area that was "relatively benign terrain".
- 3. The avalanche involved a very small amount of snow. In fact, if we had not been in the deep snow up to our waists already we would not have had a problem at all. Chris was in a little more of a depression in the terrain than I was.
- 4. Before this accident had occurred the maintenance mission was called off by the maintenance supervisor when the full measure of the storm and difficulty of travel was appreciated. I was so focused on the control mission that had been requiring my full attention that I was frustrated upon hearing of the cancellation. I probably should have been relieved.
- 5. During this avalanche cycle that continued for the next few days a total of 2 avalanche fatalities near Snoqualmie and 3 presumed avalanche fatalities near Crystal (searched for 5 days without success) occurred.