

December 6, 2014 Rainbow Ridge area Avalanche Narrative  
by survivor Michael Hopper

The winter of 2013/14 was the worst we had ever experienced in my nearly twenty years of skiing in the Eastern AK Range. Rain in January led to massive wet slab avalanches the like of which we had never seen and effectively ended our ski season as no snow was subsequently in the offing. Early winter 2014/15 (November '14) started out just as bleak. By early December we still had no snow to speak of at the Lodge at Black Rapids when Erik called with word of 12 inches having fallen during the previous week eight miles further south @ DOT's Trim's Camp. I drove south and found evidence indeed of several-days'-old snowfall @ Trim's and the Rainbow Basin and Ridge area further south had its first blanketing of snow. So we agreed to meet early Saturday AM, 12/6/14, at the lodge.

The forecast for the Rainbow Ridge area was for continued unseasonable warmth, highs @ 18 degrees, and cloudy with light winds. We left the lodge @ 10:10 AM and arrived at the turnout @ MP 205 Richardson Highway @ 10:30. That turnout is just south of the approach line to a gap in the Rainbow Ridgeline that we have accessed for many years for backcountry skiing. The "gap" (actually Fossil Creek drainage) provides access not only to several side valleys and slopes along its roughly two mile length but also to the McCallum Creek drainage and its vast topography. We were headed to the crest of the gap passage where a side valley headed north to a high bowl Erik and I had skied early season at least once before. I have skied this drainage early, middle and late season for many years. Ridges top out above 5,000' and it holds snow into late spring. Unlike other side valleys, this area does *not* have significant rocky outcroppings which were the trigger points for the main slide activity we have observed in the area (with exception of the wet slab releases of the previous winter).

About half way up the gap approach the pass narrows between two steep valley walls. The snow level was by far the lowest I had ever seen. Traveling up the creek (and avoiding open water leads, unheard of in December in the past), we experienced whumphing on probably two occasions, which we attributed to hollow snow bridges over the creek. We observed one small slab release at the bottom of the north facing valley wall, about 15'X20'. It slid down to bare ground for most of it, wind slab on the rest. We made note of the slab but were not unduly concerned. This steep (40 to 45 degrees), rock outcropping studded slope typically releases over the entire winter. We always ski out of the run out zone in this area. One of the whumphs occurred in this area, again over the creek bed, and that was somewhat disconcerting but we continued on.

When we reached the pass summit, we turned left, north, up our intended slope's creek bed. The valley runs about a half mile at a gentle slope to its head where it splits into two distinct large bowls. About half way up the approach we heard a third small whumph. Further disconcerted we agreed that if we heard anything further we would turn

around. We were still on relatively level ground and over a creek bed, so not unduly concerned but alerted.

We reached the head of the valley and its distinct dividing knob and ridge, and stopped to have lunch. From that point the ascent steepened as we began the final climb up the right bowl slope along the base of a large spine that ran off the ridgeline. The snow here was encouraging to us. It was deeper than on the approach (now @ 10 inches powder snow) and well consolidated. Pole probes revealed no layering or hard sliding subsurface, nor rock/ground. In other early season trips, our biggest concern had been one of coverage, avoiding hidden rocks. We were encouraged that, despite the record low coverage in the approach creek bed, the snow at this higher level (@4000') was significant and eased our concerns re: inadequate snow coverage.

The light was pretty flat as it often is at this time of year in the AK Range and we began planning our descent as we began the final ascent, thinking we would have to follow our uptrack down to take advantage of its contrast. However, as the slope steepened to @ 35 degrees and we began switchbacking through snow that was decidedly less deep, Erik noticed a change in the snow composition: @ Five inches of powder was now sitting on what appeared to be a hard pack of wind-affected snow. I took note of Erik's finding, and we began easing over closer to the safety of the rounded spine to our right and out of any avalanche path. We agreed that the sketchy slope snow was not a good descent path and began taking note of rocky signposts on the spine to guide our descent away from the iffy main bowl slope. Maybe one switchback above that discussion, with Erik higher up the slope with Rowdy my dog, heading back to the right and the safety of the spine, and me, about ten feet down slope and further out on the main slope's face, we heard a quiet whumph. Erik remarked "Did you hear that? I had time to look directly upslope and saw about twenty feet away what appeared to be a foot-high whitewater wave appear on the slope horizon. I turned back to the right in time to see the avalanche come over the rear quarters of my dog Rowdy as he ran towards the safety of the spine. I knew I would be swept but I had a beacon. I believed Erik to be out of the danger zone and on the margins of the release and so yelled "Watch for Rowdy", as I knew he would be covered and did not have a beacon. I was immediately overwhelmed, cut down, sideways to the slide. I estimate the time of the slide to be @ 1:30 as it took us about 2 ½ hours to reach that high in our ascent.

I can clearly recall the experience of the slide. It went on forever, maybe 10 seconds, and towards its end I remember praying for it to stop as I knew if it reached the valley floor I was doomed in a terrain trap. (Upon visiting the site two weeks later for a recovery mission, we found the leading edge of the debris was about 75 yards above the creek bottom. We realized it was two slopes that had slid – the one we were on and an adjacent slope that fractured all the way to the ridge. The avalanches joined in the drainage about 100 yards above where it all stopped – and I ended up buried.) My experience of the slide was that I was on my stomach sliding down the slope engulfed. I had the presence of mind to keep my right hand in front of my face trying to create an air space, to no avail. I also recall attempting only briefly to "swim" to the surface realizing immediately it was fruitless. When the slide stopped, I swept snow from in front of my face to breathe. Though I'd felt like I was on my stomach sliding head first, when it all came to a halt, I found myself upright and tilted to my left, skis downhill, with my right forearm and hand free to clear space to breath. My left was encased at an angle away

from my body. I initially inhaled a lot of snow but soon cleared. It took a while for me to understand that I had ended up at the leading edge of the debris field. The snow was an arm's length-plus over my head. The only reason I could push snow away was that I effectively created a window off the leading edge. Had my right arm been encased, instead of my left, I would not have survived as my right arm only was in reach of the leading edge.

Once I realized I could breathe and had survived the slide itself, I began to think about rescue. I still believed Erik had been clear of the slide. I discovered my ski pole was still on my right wrist and once I freed it, I stuck it up above the hole I had created trying to signal Erik. I yelled once or twice to no avail. I soon realized Erik must be similarly trapped as was Rowdy and began considering self-rescue. I had limited motion with my right forearm and began slowly pushing small amounts of snow away from my face and then my chest. But I had only pile gloves on and soon found the snow too hard to dig out with my hand. I also had begun essentially creating a sloping hole around me as I could only push the snow I'd freed only so far away. I then remembered the "signal" ski pole and retrieved it as a digging tool. I also found that, with its basket end, I could effectively push snow I'd dug out over the edge of the debris field. I began with its aid to slowly dig myself out. I was able with the pole to dig out my encased left arm. Once that was freed, I was more quickly able to dig out in front of my torso. I then could twist enough to free my shovel (which I always keep at the ready on back of my pack). Once I had the shovel, my self-rescue was assured. After freeing my torso I was able to dig down to my boots and free myself from my skis. I then climbed out of the hole, immediately put on all my available clothes and head covering. I then pulled out my beacon, placed it on search, and immediately heard rapid beeping. I looked upslope and saw about ten to twelve feet away, a black object I quickly realized was a glove. When I scrambled to it, I began digging down and quickly saw it was Erik's gloved hand he'd managed to shove to the surface to signal his location. I soon uncovered his lifeless face and tried to clear his airway but quickly realized he was gone. I hardly recognized him without his lifeforce. His eyes were closed and I could detect no signs of life. His head lolled on his neck. I did not take a pulse. He was not breathing and I just knew he was gone.

By that time, @4:30 PM by my estimate, the light was rapidly going and I put on my headlamp. I dug out my skis, took off the skins and put the skis on. I had only one ski pole and was physically exhausted, having dug for @ 3 hours without stop. I was also seriously chilled but not hypothermic as best I could tell. When I attempted to ski, I noticed my right leg was significantly weakened/impaired, though I felt no pain, etc. I favored that leg as I side-slipped my way down to the valley dividing point where Eric and I had had lunch earlier. At that point I felt out of avalanche danger and just tried to safely slide my way down without falling. I wasn't sure I could rise if I managed to fall. I did stop to collect our ice axes and crampons that we had left down lower on the approach when we realized they weren't necessary.

I slowly made my way out to the highway, where ultimately I flagged down a trucker before intercepting the Ft. Greeley ambulance and Black Rapids rescue team on their way to the site. I had previously managed to get word of the accident to my wife at the lodge via a motorist heading south.