



AAC Publications

RAPPEL ANCHOR FAILURE

Wyoming, Wind River Range, Cirque of the Towers, Wolfs Head

July 6 was the second day of climbing in the Cirque of the Towers for Alex Satonik (35) and Peter Haley (29). After climbing Pingora the previous day, they decided to try the equally classic East Ridge of Wolfs Head (10 pitches, 5.6). Satonik wrote to ANAC that, “The day started with a brisk approach. We reached the base and proceeded to simul-climb the first portion of the knife-edge ridge. With some grunting through the horizontal chimney and a few wandering pitches, we summited at 11 a.m. We had a brief rest and then started the standard descent route.

“The first two rappels were easy to find, and the cordage looked good. After some scrambling across the west face, we found the next two sets of rappels, again deeming the cordage to be in reasonable condition. After more sideways scrambling, we arrived at the fifth rappel. I inspected the visible sections of the cordage—two lengths of 5mm to 6mm cordelette. I yanked hard on the anchor. The cord held the pull and handled well. It did not show indications of severe sun damage. However, it was wedged into a crack, and I could not see the back side of the material.

“I threaded the rope and after checking my ATC, I loaded the rope and sat back. Almost immediately, I was accelerating downward. Roughly halfway down, my feet impacted a small ledge, causing me to somersault. I landed on a ledge at the bottom of the rappel, mostly on my back and left side. I had fallen about 50 feet.

“I knew I was badly injured. I heard my partner calling out. He was stranded above without a rope. I had an older personal locator beacon (PLB) that didn’t have two-way communication. SAR responded that their helicopter was out on a rescue but would refuel and be at our location in an hour. I untangled myself from the rope and did a self-assessment. I had broken both legs and I had an open fracture on the right. There were some painful spots on my back and my right arm was weak. I had also broken my helmet into three pieces and had multiple facial lacerations. I did my best to communicate these injuries to my partner, who relayed them to the 911 dispatcher.

“Roughly an hour after calling in, we heard the helicopter. They landed down by a lake to rig a long-line. At this time, a second party showed up at the failed rap station. The helicopter came and a rescuer dropped onto my ledge. The rescuer got a three-point seat harness under me. We clipped into the long- line, and the helicopter lifted us off the mountain.

“At the flat landing area near the lake, the SAR team transferred me into a soft litter and loaded me in the helicopter. Five minutes later, I was at the Pinedale clinic. A day and a half later I woke up in Idaho Falls. I had broken my tibia and fibula in both legs, my right arm, right thumb, two vertebrae, the orbital bone over my left eye, and the bridge of my nose. I was in the hospital just short of a month. The doctors were confident that I would be able to walk on my own, although my ankle strength and mobility will be permanently affected.”

ANALYSIS

There are many rappel stations on the Wolfs Head descent. These soft rappel stations in the high country suffer from UV degradation and, in this case, abrasion and cutting due to the expansion and contraction of anchor blocks.

Satonik wrote, "I remember there were double aluminum rings on two pieces of 5mm or 6mm cord, one green and one orange. My suspicion is that on the backside of the block, the cord must have been damaged from being run over an edge. But since the loop was wedged firmly into a crack, I couldn't slide it around to investigate the hidden material. But it is also on me that I chose to use it as is [instead of backing it up]." Satonik adds, "Based on the damage to my helmet and other facial trauma, I would have died without a helmet." [Editor's Note: It is prudent to bring and use extra cordage to back up anchors. Bring a knife to cut and clean old, weathered webbing. In 2022, there were three reported rappel accidents caused by aging slings/cords, causing three deaths. Satonik was fortunate to avoid being the fourth fatality.]

In the image above and in Satonik's description, aluminum rappel rings are used in the anchors. These rings vary in manufacture and can range from very strong (25 kN) to very weak (1.5 kN). Beware of rappel rings with visible wear, especially in the old rolled aluminum variety. These can be recognized by a seam that runs along the entire circumference of the ring. Best practice is to leave a locking carabiner in place of the ring, or, at the minimum, back up the ring with a carabiner clipped through all the available slings. Please do not pilfer fixed carabiners. (Sources: Alex Satonik and the Editors.)

Images



This Wolfs Head rappel station suffers the same issues as Satonik's failed anchor: UV degradation, rolled aluminum rappel rings, and sling material hidden from view or pinched in blocks. Says photographer Thomas Gilmore: "This rappel route really needs some love."

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