



AAC Publications

Fall on Rock, Carabiner Unclipped From Bolt

New Hampshire, Rumney, Bonehead Roof

Bonehead Roof is a 5.10d climb with a classic “Rumney Runout”: five bolts protect the route. The first bolt is about 20 feet off of the ground. The initial two-thirds of the climb are approximately 5.8, containing three bolts. A slope of about 20 or 30 degrees (not totally flat, but not very steep) for maybe 20 feet leads to the final leg of the climb, which is vertical, ending with an overhang that requires a mantel to finish (the crux).

On October 5, Eric (26) led this climb and only had difficulty with the crux. He tried and fell at least three times before finishing by an alternate route (the end of a different climb). After he finished I decided to try leading the climb. I had no trouble reaching the bottom of the overhang, where I clipped the fourth bolt before continuing up to clip the final bolt. I then went back and cleaned the fourth bolt to reduce rope drag.

I was able to mantel up over the overhang, but was unable to find a grip to clip into the chains. This caused me to fall backward, and I was caught by the rope clipped to the fifth bolt. I attempted the crux four times and was caught each time. I thought I would give the mantel one last try before completing the climb by another route. When I reached the top, I was again unable to maintain my balance and I fell backward, but this time, as I passed the fifth bolt, I watched my carabiner come unclipped from it. (No, I was not back-clipped, as that would have made my rope come unclipped from the quickdraw, not the quickdraw from the bolt.)

Because of the long run-out between bolts and my back-cleaning, the next piece was the quickdraw on the third bolt, only two-thirds of the way up the climb. I fell roughly 60 feet before the rope caught me about 15 or 20 feet from the ground.

I fell in a backward/ horizontal position with my left hand in front of my face. Just before the rope stopped me, my left hand smacked the wall. This shattered my hand. I broke nine bones in total: my pinkie just above the knuckle, the knuckles on my ring and middle finger, a chip on my index finger near the base of the metacarpal, all of the metacarpals where they attach to the wrist, and a chip on my hamate. I also had a two-foot-long rope burn on my ribs and a healthy scrape on my left ankle. Overall, I am lucky I only broke my hand. I will say that that, although I did not hit my head, I was glad I was wearing my helmet.

Analysis

Carabiners can come unclipped from bolt hangers, rare though this may be. I believe in my instance the rope somehow pushed up and twisted the draw, and unclipped the carabiner. To make this climb safer I could have clipped a locking carabiner to the bolt or finished the climb by the other route and worked the crux on top-rope (probably the safest way). (Source: Walter Scott, 23.)

(Editor's note: There are several things you can do to minimize the chances of carabiners levering against bolt hangers and unclipping. The top (bolt-end) carabiner should be “loose” in the dogbone or sling, never held tight by a rubber keeper. Quickdraws should be assembled with both carabiner gates oriented in the same direction, and draws should be clipped so the gates are oriented away from the direction of travel. Despite these precautions, a quickdraw may come unclipped from a bolt hanger. For that reason, it's

never wise to skip bolts or other protection. If rope drag is an issue, use longer quickdraws or shoulder-length slings to reduce the drag.

Another comment from Joe Forrester, one of our editors: "Smart leaders, whether on sport or trad lines, always carry one or two draws or slings with locking carabiners for exactly this scenario. It can be challenging to predict fall lines when going over roofs, and having lockers on the bolts helps prevent odd cross-loading or unclipping incidents.")

Images



The lower carabiner on this quickdraw is oriented correctly, gate facing away from the direction of travel. But the upper 'biner should be oriented the same way on the draw. If the lead rope tugs the draw out of position, it can lever the gate against the bolt hanger, possibly unclipping.

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