



RAPPEL FAILURE – Rope unclipped from Anchor

Utah, Provo, Rock Canyon

On September 3, Kyra Harames (female, 24) was climbing with a group of friends at The Kitchen in Rock Canyon. After setting up a top-rope, she fell to the ground while attempting to rappel from the two-bolt anchor.

Harames reported to ANAC, “I remember everything leading up to my actual fall, and the rest of the details my friends filled in. At about 8 a.m., I successfully led Panic City (5.11a). After I set up that route with a top-rope, a couple of my friends started climbing it. I then hiked back to the top to set up another route called Left Corner (5.9). I clipped in my daisy chain as a safety with a locking carabiner. I set up the top-rope using two wire-gate quickdraws on the same bolt. I put both strands of rope through my belay device to rappel and used a locking carabiner. I checked the rappel and put my weight on the belay device/rope before taking off my safety. Everything seemed good, so I proceeded to rappel. The last thing I remember is lowering myself a couple of feet, and that is when I fell.

“The rope came out of the quickdraws, and I fell about 35 feet. My friends said when I hit the ground, they could hear the air leave my lungs as I moaned. I briefly landed on my feet at an angle, and then landed on my back. One of my friends called 911. Shortly after that, I lost consciousness. A nearby climber came over and couldn’t find a pulse. My close friend Alivia did CPR, and less than a minute later, I regained consciousness. A friend ran down to make sure the gate was open for the ambulance, and it was able to drive up all the way to me.

My first solid post-fall memory was when I woke up in the trauma room. The nurses filled me in on what happened. I got stitches in my foot and elbow, as well as staples in my head. I had a compression fracture on my T11 [vertebra], a mild concussion, bruised ribs, and a fractured talus bone in my ankle. The reason I went into cardiac arrest after my fall is believed to be caused by a phenomenon called commotio cordis. This is when an impact to the chest occurs during a short vulnerable window in the cardiac electrical cycle. A week later, I received surgery to repair my talus and they put two screws in my ankle. I took a leave of absence from medical school to recover from my concussion and other injuries.

ANALYSIS

Two strands of rope were running through Harames’ rappel device. The device was attached to her harness with a locking carabiner. The entire rope was on the ground after the fall. The quickdraws were still attached to the anchor.

Harames writes, “Looking back, my friends and I have tried to figure out why the rope came out of the quickdraws. It is possible that they were facing the same way, which may have contributed to the rope unclipping itself. I believe this could’ve been prevented by using locking carabiners.”

In principle, Harames did the right thing by using two draws at a bolt belay. However, she made a fundamental error in using only one of the available bolts. Sport belay stations almost always have a minimum of two bolts. Always incorporate both in any anchor system.

Why did Harames not do so? One clue might lie in the positioning of the belay bolts and the style of

hanger used. The bolts here are on either side of a small are te, positioned in such a way as to allow top-roping on both Left Corner and Mark's Corner (5.7) to the right. Harames later wrote, "I might not have seen the other bolt around the corner a little bit."

Setting up a top-rope with the rope through at least one locking carabiner is always a good idea. (Many climbers always carry an "anchor draw" constructed with locking carabiners for exactly this purpose.) If you don't have a locker, it's important to oppose the gates on the carabiners through which the rope is running. (Sources: Kyra Harames, John Ross, and Patrick Begley.)

Editor's Note: See more photos and analysis of this incident in the April 2023 edition of ANAC's Prescription newsletter.

Images



The Kitchen in Rock Canyon with a rappel/belay anchor circled in red. This was the site of a serious rappel accident in September 2022.

Article Details

Author	Kyra Harames, John Ross and Patrick Begley
Publication	ANAM
Volume	13
Issue	76
Page	82
Copyright Date	2023
Article Type	Accident reports