

FALL ON ROCK—RAPPEL ERROR

California, Yosemite Valley, Royal Arches

On November 20, Meghan (30) and Matt (40), a husband and wife team, had spent a relaxed day climbing Royal Arches (17 pitches, 5.7 A1 or 5.9). Their friends, Greg and Rick, were climbing below them as an independent party. Meghan and Matt reached the top at about 1430 and started down the standard rappel route using two 60-meter ropes around 1500. Greg and Rick followed them down 15 minutes later. This was the first time on the Arches for all four, but they knew from the guidebooks that the descent required some route finding as it wandered down ledge systems. They also knew that it was well traveled and expected it to be equipped with newly bolted anchors.

After several rappels, Meghan and Matt came to a large tree on a ledge rigged with slings and aluminum rappel rings. They were no more than three rappels from the ground with a couple of hours of daylight left, but the way down from this point was not obvious and no bolted anchors were in sight. Was the next anchor directly below, they wondered, or was it off to one side? In Meghan's own words:

"Matt had arrived first and said he looked and didn't see any other anchors and the position of the rappel rings suggested that the last party to use them had continued straight down. He suggested we go the way the anchor seemed to show. The plan didn't feel quite right to me, but it was the end of a long day and I was tired, as I was still recovering from a chronic illness that was limiting oxygen flow in my body. We had a photo of the topo map in our digital camera and we were using the LCD screen to zoom in on the image. If I had been carrying it, I would have looked at it, but since Matt was, and he had already looked around and made his decision, I uncharacteristically did not insist on seeing the topo even though I silently wished to. I decided to just be agreeable, especially since his experience exceeds my own.

"We threaded into the rings. I got on rappel and looked over the edge. Immediately below was a low-angle slab that limited my view to less than 20 feet. Shortly after transitioning over the slab I spotted bolts about a rope-length below. As I rappelled closer, it became clear that they were old button-heads with colored webbing and rap rings interlacing them.

"My ropes had become tangled together [because] the friction from the less-than-vertical granite kept them from naturally straightening. I kept tossing them ahead to determine their reach, but by the time I had them straight, I was further down than I would have liked. The red rope was about ten feet longer than the blue one, right out of the package, and it came within a foot of the anchor, leaving the blue line about ten feet short.

"As I realized all of this, I was within several feet of the end of the shorter blue rope, making it impossible to even do leg wraps with the rope ends to create a friction brake. My options became limited. I was so focused on

DOWN that when I saw a way to reach that anchor my mind didn't deeply explore an alternative—going back up the ropes—that took more time and energy. I thought that Matt could Prusik both ropes off at the tree anchor above so they couldn't run through, and then I could go onto just the red rope and barely make it. I called up to him, but quickly realized the 60-meter distance put me out of sight and communication. I was on my own.

"I was using a Reversino as my descent device, which is slippery for being so near the end of the rope. I tried to tie off my rappel, but could not manage, which is a hint to my diminished motor skills and brainpower. I did not stop and wait for help when I failed at this simple task. I felt I had to do something, and fast. I had a few full-length runners from which to make Prusiks, but I was so tired I couldn't manage to hold my rappel position and tie a Prusik at the same time. However, with one hand I was able to tie a Bachmann knot on the shorter blue rope and clip the sling of the Bachmann to the power point of my harness with a locker. I then deliberately let the blue rope run completely through my belay device so I was just on the longer red line, with the Bachmann holding the blue rope from running away. Still not enough, so I fully extended my Purcell Prusik, which was already attached to my harness power point, and managed to attach it between my harness and the Bachmann to get even lower. After inching the Bachmann a little lower, I managed to reach the slings with my toes.

"I looked up at the Bachmann and saw how close it was to the end of the blue rope and desperately wished that I had put a knot in the end of that rope. I realized it could slip off, but I wasn't panicked. I remember thinking I wouldn't fall beyond the small indentation in the slab six or so feet below the rap station. It wasn't even a ledge. I just imagined myself standing on it while holding the anchor slings. Of course now that my brain is again working with a full oxygen supply, I can see how absurd this thought was. But because it made sense at the time, I continued to operate calmly, although all I wanted was to get my hand on the anchor. So I'm holding the rappel on red with one hand and reaching down precariously toward my foot as it pulls the anchor slings up, trying to get my other hand around the slings. While I was making the big reach down to the slings, the Bachmann must have slipped off the end of the blue rope. I think I instinctively grabbed for it with my brake-hand, allowing the red rope to run through the Reversino. The rope never moved at the top anchor. I just fell off it.

"Months later I still do not remember actually falling, nor do I expect I ever will. My fingertips were ground down to meat, one of my harness leg-loops had melted webbing where it was positioned on the front of my thigh, and the sleeves of my shirt had holes where they fell over my hands. My helmet was unscratched. I recall waking and trying to push myself up, moaning, and then again succumbing to unconsciousness."

Matt knew Meghan was having some sort of trouble. “We were having a hard time communicating over the valley hum,” he said, “so I Prusiked my cordalette around both ropes to descend the low angle section in hopes of gaining better [friction.] Just as I got to the transition to steeper terrain, the ropes went slack below me. I heard a scream and the most horrible crash, then silence.” The time was about 1600, an hour or so before dark.

Grasping that Meghan must have fallen completely free of the ropes, Matt pulled them up and rappelled from the same tree, but this time angling down a 5th-class gully to climber’s right. Matt was constantly calling Meghan’s name in hopes of a response. He came upon bolted anchors and from there he was able to rappel another 50 meters to where Meghan lay. It was during this second rappel that he heard moaning from Meghan, confirming that she was still alive.

Meghan had fallen approximately 25 meters to a ledge system less than 60 meters above the ground. “She was on her side in a semi-fetal position with her hands covering her head,” said Matt. “I immediately worked to stabilize Meghan’s neck, knowing that the fall could have compromised the integrity of her spine. Greg arrived about 20 minutes later and assisted me in moving Meghan onto her back. Greg held Meghan’s cervical spine in the proper alignment while I assessed her for injuries. She was conscious but only knew her name. It took about 45 minutes for Meghan to become conscious enough to start piecing together the situation and the events leading up to her fall.” (Matt is a Wilderness First Responder and was a past certified Emergency Medical Technician.)

Rick arrived last, rigged a line, and descended to the base of the route. Once on the ground, he ran a short distance to the Ahwahnee Hotel to call for help. The dispatcher at Yosemite’s ECC received Rick’s call at 1755. She immediately notified the Valley Shift Supervisor and at his request paged additional YOSAR team members. An initial “blitz team” was en route within ten minutes of the alert. They ascended Rick’s fixed line in the dark, trailing more ropes behind them so that additional rescuers could quickly bring more medical and rescue gear. Spotlights were positioned on the ground behind the Ahwahnee Hotel to illuminate the scene.

Meghan knew where she was by the time the first rescuers reached her. She complained of significant neck pain, though she did not exhibit any motor or sensory deficits. She also complained of chest pain and shortness of breath and presented with diminished left lung sounds. Her blood-oxygen level was low—90 percent. Finally, though minor considering everything else, one ankle appeared to be injured.

Working simultaneously, Paramedics and EMT-Basics put Meghan on medical oxygen (elevating her blood-oxygen level to 98 percent), established an IV line, and stabilized her spine with a cervical collar and a vacuum body

splint. She was given morphine for the pain and was packaged in a litter. At 1955, Meghan was lowered 60 meters to the base of the cliff while attended by a medic, then transported by ground ambulance to Yosemite's heli-base, 18 miles and 45 minutes away, the closest night-time helicopter landing zone. In the meantime the ECC had arranged for an air ambulance to be waiting at the heli-base. By 2145, Meghan was in the ER at Memorial Medical Center in Modesto, approximately 100 ground-miles from the accident scene.

Meghan was diagnosed with a fractured C2 vertebra and a dislocated C3. She had several broken ribs that had punctured her left lung and a fracture of the right foot. However, she suffered no spinal cord damage. It took nine hours for surgeons to repair the cervical vertebrae by fusing C1, C2, and C3. They are hopeful that, following a recovery period of three months or more, she will have little or no long-term disabilities.

Analysis

The Topo: The topo in the camera was a clever idea, but if you're relying on a route map, each climber in the party should have a hard copy. It provides redundancy and lets you to take a quick peek whenever you want.

Meghan concluded, "We were too hasty following the direction the rap rings on the slings seemed to be aimed rather than checking with the topo." It's true that not consulting the topo was a mistake but that should have not played a critical role in the accident. Following the rap rings straight down was actually a logical way to go. One of the more important lessons is that you should not rely solely on a topo. You also need to rely on yourself to be able to recognize and correct a wrong move. In this case that would have meant recognizing the problem and then ascending the rope and starting over. Meghan and Matt had ample time, plenty of optional anchors, headlamps if they ran out of daylight, and two friends behind them with additional ropes.

Fixed Rappel Routes: Why did Meghan let herself get so close to the ends of the ropes? Haste may have been one ingredient, but she hints that complacency was another. "We assumed that on a climb with so much traffic, if there was another anchor it was the right one and that the ropes would reach," she said, "and it wasn't until I was quite close that I saw that the ropes were a few feet short."

In fact, many fixed rappel routes in the park are sprinkled with old anchors and they are often off-route. The right ones may not be obvious and they may not be shiny new bolts. There is no official maintenance of rappel routes in Yosemite, so be sure to have the gear, skill, and confidence to explore and to go back up the rope if you don't find the next anchor.

Why did Meghan keep going at that point? "I thought of it [going back up] briefly, felt ill equipped, and just decided it wouldn't be that hard to go down.

I also had this feeling that I'm an experienced climber, so I should be able to handle the situation. I felt like I HAD to figure it out. I had not thought ahead enough, as I was just thinking one step at a time at this point."

Why did she fall? Meghan again: "As we often do when we are comfortable with things, I had let a couple of key safeties go by the wayside for the speed of multiple rappels. No knots in the ends, which I always used to do! No Prusik on the brake-hand or any sort of rappel safety that would allow me to be hands free. No Prusik cords on my harness like I always used to have." (Ranger John Dill: "With her Purcell and at least one sling, Meghan did have enough gear to re-ascend in our opinion.")

After the fall: It's a big plus that Matt and Greg had medical training. The care they gave Meghan—particularly in stabilizing her spine—may have saved her life.

"It is a bit embarrassing to admit one's mistakes," Meghan confesses, "but also something for everyone to learn from." (Source: Meghan and Matt; David Pope, Yosemite SAR. We are grateful to Meghan and Matt for selflessly sharing their account.)

(Editor's Note: As the rangers stated, "We deeply appreciate their honesty and time in assisting with the re-creation and analysis of their accident. It is our collective hope that all can learn from what they have shared.")

FALL ON ICE, NO PROTECTION, NOT WEARING CRAMPONS

Colorado, North Cheyenne Canyon, Hully Gully

On January 30, moments before falling 170 feet to his death, experienced climber Reid Judson Hunt (32) asked two climbers at a popular ice wall in southwest Colorado Springs if they were done on the "upper pitch," or top part. Pete Elliott told Hunt he and his partner would be finished in about 30 minutes, and Hunt asked if they'd mind if he and his friend rappelled down to climb the lower pitch. They didn't mind, Elliott told him.

Hunt walked to the edge of Hully Gully in North Cheyenne Canyon while Elliott and his friend turned uphill to speak to Hunt's friend, Elliott said. "We turned around a couple of minutes later and Reid had disappeared," Elliott said. "It wasn't clear at first what had happened."

Analysis

Hunt, who was wearing a helmet, wasn't secured to the wall with a rope or wearing crampons, witnesses and authorities said.

Additional Note: Hunt was supervisor of student life at The Colorado School for the Deaf and the Blind near downtown and oversaw athletics, dormitories, and the transition program, said school spokeswoman Diane Covington. He had worked there for three years. Hunt and his climbing partner, whose name wasn't released, are deaf. (Source: From an article by Anslee Willett, in *The Gazette*, Colorado Springs—posted on line)