

Rappel Error – Device Installed Incorrectly

Wyoming, Grand Teton National Park, Cascade Canyon, Storm Point

At approximately 10:30 p.m. on July 22, Teton Interagency Dispatch Center received a call from a hiker who stated he was hiking east on the Cascade Canyon Trail when he heard calls for help and saw lights flashing on the cliffs above the trail. Rangers Fletcher and Edmonds headed up Cascade Canyon to attempt to make contact with the party in distress. They were able to observe light flashing about three pitches up the Guide's Wall climbing route (5.8 to 5.10c, depending on variations).

Edmonds and Fletcher were unable to access the subject due to the darkness and lack of technical climbing equipment on hand, but were able to confirm that a female climber was alone, uninjured, and without a rope partway up the route. At 4 a.m., rangers Kreis and Ronczkowski departed the rescue cache with climbing equipment, arriving at the base of Guide's Wall at approximately 5:15 a.m. Kreis and Ronczkowski then proceeded to climb several pitches to reach the stranded climber.

The rangers made contact with the subject at 6:30 a.m. She stated that her climbing partner had fallen while rappelling, along with their only rope, the previous evening. The rangers could see the partner, motionless, approximately 300 feet below their location. They assisted the stranded climber down the wall.

The fallen partner (male, age 33) was deceased. A long-line helicopter recovery mission was conducted later that day.

ANALYSIS

The two climbers were attempting to descend from Guide's Wall by rappelling using a single 70-meter rope, although rappelling with two ropes is standard on this route. The two arrived at an intermediate rappel station on a small ledge about 20 to 30 feet above a large ledge at the bottom of what is usually the first rappel.

The first climber, according to his partner, then set up a short rappel, only feeding about 30 to 40 feet of rope through the anchor, judging this to be sufficient to reach the ledge just below. He put on a puffy jacket immediately before setting up his rappel device. The partner states that she was looking away when she heard him say "Whoops" in a distinctly casual manner, at which she looked in his direction and saw him falling. After realizing her partner had fallen with the rope, she was able to use a series of shoulder-length slings to down-aid to the ledge, where she yelled for help and attracted the attention of passing hikers.

Rangers were able to inspect the anchor from which the climber had fallen and rule out anchor failure as a cause of the accident.

The climber was found rigged for rappel with a Black Diamond ATC Guide and an autoblock (i.e., a "third hand") backup, each clipped to his harness with independent locking carabiners. A single strand of the climbing rope passed through the ATC and locking carabiner, which was attached to the harness belay loop. The autoblock, clipped to a harness leg loop, was wrapped around the single strand of rope as it exited the ATC with approximately 190 to 200 feet of rope beyond it. The autoblock was not wrapped around the 30 to 40 feet of climbing rope leading out of the ATC in the

opposite direction.

Based on interviews with the partner and the evidence found at the scene, investigators concluded the primary cause of this accident appeared to be a rappel rigging error. The climber appears to have only clipped one of the two strands of rappel rope when attaching his ATC. He was an experienced climber and would not have committed this error out of ignorance. The partner's statement that she had just given him a puffy coat, which he subsequently put on, suggests that perhaps this coat concealed this error. It is likely that a bight of rope was pushed into the ATC but was not captured with the locking carabiner, yet gave the appearance of being properly clipped. Once he committed his body weight over the edge, the bight of rope would have instantly popped out of the ATC.

It may be in this moment that the subject uttered "Whoops," as he would have expected the autoblock backup that he had installed on both ropes to hold him. However, repeated tests during the investigation showed that an autoblock does not hold in this scenario. When only one of the strands of the rappel rope is correctly inserted into the device and clipped to the climber's harness, the climber's weight on that strand will cause the other strand (not clipped correctly) to move upward, toward the anchor. The autoblock will not hold when only one strand is through the rappel device and the two strands are moving in opposite directions. (Source: National Park Service Search and Rescue Report.)

Editor's note: No climbing system, including a friction-hitch backup, is completely foolproof. Once your rappel setup is completed, weight-testing the system **before** unclipping your tether from the anchor will verify that your setup is correct.

Images



Reconstruction of the rappel setup found on a climber who fell at Guide's Wall. It is believed the climber wrapped the autoblock around both strands of his rappel rope, but he failed to insert one strand of rope through the rappel device and clip it into his carabiner. As soon as he weighted the system, the unclipped strand pulled through the autoblock backup.

Article Details

Author	NPS Search and Rescue Report
Publication	ANAM
Volume	11
Issue	72
Page	105
Copyright Date	2019
Article Type	Accident reports