



AAC Publications

Rappel Error – Uneven Ropes

Wyoming, Grand Teton National Park, Cathedral Traverse, Peak 11,840'

On August 25, at 10:15 a.m., Grand Teton SAR coordinator Drew Hardesty was contacted by Exum guide Joe Stern, who reported that he had found a deceased solo climber at the base of the rappels on the southwest side of Peak 11,840', a summit between Teewinot and Mt. Owen, often traversed as part of the Cathedral Traverse or Grand Traverse. At 12:15 p.m., rangers were flown to Peak 11,840', rappelled to the deceased climber, and arranged to have his body flown off the mountain. The climber was later identified as Alexander Kenan (24) from North Carolina.

From photos and social media posts by the deceased, it was determined that he had fallen on the morning of August 22, likely between 7:30 and 9 a.m. In their investigation, rangers determined he had fallen approximately 65 feet from the final rappel on the southwest face of Peak 11,840', after rappelling off the end of his rope. A locking carabiner was found attached to the belay loop on the climber's harness and clipped to a tube-style rappel device, with the screw gate locked. A 60-meter rope (estimated to be 8mm to 9mm in diameter, with a faded middle mark) was properly loaded in the rappel device's right slot. The left slot was empty. Both the carabiner and rappel device were structurally intact, the rope showed no signs of damage or wear, and a prusik was on the subject's harness but not rigged to be used as a backup.

One end of the rope had a barrel knot tied in it approximately seven inches from the end, while the other end of the rope was unknotted. The knotted end of the rope came out of the brake-hand side of the rappel device and extended 46 feet below. This information (combined with burns on the decedent's left hand, which was likely his upper stabilization hand during the rappel) suggests that the ends of the rope were uneven during the rappel and that he rappelled off one end of the rope.

(Source: National Park Service Search and Rescue Report.)

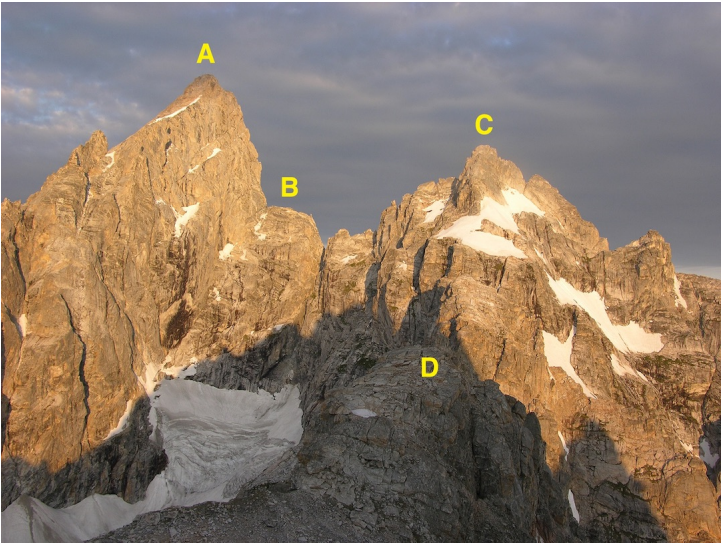
ANALYSIS

This particular rappel transitions from blockier terrain to a final bulge that would have made the ends of the rope difficult to see from above. The climber likely would not have been able to observe the disparity in rope lengths until very shortly before his fall.

One of two scenarios likely occurred. One, the victim tied stopper knots in both ends of the rope, but one knot perhaps came undone during the rappel. The other scenario is that, while stationed at his last rappel anchor, he fed rope through the anchor, tied a stopper knot in that end of the rope, and fed it down the cliff as he pulled the rope from the previous rappel. In this scenario, he did not put a knot in the end that fell from above and did not pull the rope ends up to ensure they were even. Either way, when he reached the unknotted end, approximately 75 feet below the anchor, the rope end would have pulled through his device and he would have fallen about 25 feet and then tumbled another 40 feet down ledge-filled terrain.

When rigging rappels where the rope ends are not visible below, be sure the rope's middle mark is centered at the anchor. If the rope is not marked (or if there is any chance the rope has been cut so the middle mark is incorrect), lower the two ends together to ensure they remain even. Either way, place stopper knots in both ends and use a friction-hitch backup. (Source: National Park Service Search and Rescue Report and the Editors.)

Images



The Cathedral Traverse from near the top of Teewinot. (A) Grand Teton. (B) The Grandstand. (C) Mt. Owen. (D) Peak 11,840'.



Three 100-foot rappels descend Peak 11,840'.

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