Fatal Alert

On July 23, 2016, a mountain guide was leading a climbing party consisting of one adult and three minors down the Grand Teton Mountain in Grand Teton National Park. The climbing guide supplied each climber with a rappel device. On the way up the mountain one of the youth, climbers lost their rappel device. The guide belayed the adult of the group down the Owen-Spalding rappel, to receive the students at the rappel-landing site. After a successful rappel of the adult and one youth of the climbing party, the guide was in the process of pulling a rappel device back up to the rappel point so one of the other youth climbers could use it. The rappel device became stuck in the face of the rappel. The guide tried unsuccessfully to unstick the device by whipping the climbing rope. The guide then tied a runner with flat web strap, using a water knot attaching it through the waistband of his climbing harness and unclipped his carabineer from the rappel point. The guide leaned out over the edge of the rappel point to gain advantage on the rope, the knot failed on one side and pulled through and the guide fell 120 feet to his death.

Significant Factors

• The guide was an accomplished well-trained and certified climber in multiple climbing disciplines.
• The guide was experienced in the knots associated with the climbing industry.
• The guide had made many successful descent’s off of the Grand Teton.
• The guide may have been rushing as other climbers were beginning to stack up behind the guides party at the rappel point.

Recommendations

• The Climbing industry as a whole uses water knots to tie two ends of a flat strap together. The employer as well as the Climbing industry should evaluate adding a half hitch addition to the water knot tail to ensure that the knot will not pull through.
• The employer shall evaluate the need to use water knots. If it is found that water knots can be safely used in their operation, the employer shall develop a written policy on the use of water knots and how to use them correctly and safely in their operations.