stressing the patient. Most importantly the weather and time of day meant that a National Park helicopter could respond and rapidly evacuate him. (Source: Edited from a post on oldragpatrolsbyrsl-blook.blogspot.com/) *(Editor's Note: One of several this year.)*

FALL ON ROCK, ANCHOR FAILURE – UNFINISHED KNOT

Virginia, Blue Ridge Parkway, Ravens Roost,

During the mid-afternoon on June 15, Jonathan Sullivan (20) fell approximately 100 feet to his death at Ravens Roost Overlook along the Blue Ridge Parkway.

He and two partners had been top-rope climbing since 11:30 a.m. The group was top-roping. Sullivan made it about 100 feet when he paused to rest before the fall. Each had taken falls throughout the day and the top-rope system had functioned properly.

Analysis

According to reports, it was Sullivan's first day climbing outdoors. Investigators said the probable cause of the fall was the failure of a knot securing the one-inch tubular webbing anchor sling. The single sling anchor (non-redundant) extended from a large tree to the cliff edge. Evidence suggested that the person constructing the top rope anchor placed a "temporary" knot or hitch in the webbing to hold it in place but became distracted and never finished tying the knot to complete the anchor. Amazingly, others climbed and were lowered on the route without incident throughout the day. This incident illustrates the importance of a redundant anchor system and the need to check the anchor prior to climbing. (Source: Tony Gonzalez – on www2.wsls.com/news and Kurt Speers – Blue Ridge Parkway)

FALL INTO CREVASSE, CLIMBING UNROPED, UNFAMILIAR WITH ROUTE, PARTY SEPARATED, INEXPERIENCE

Washington, Mount Rainier, Fuerer Finger

On the morning of May 10, Tucker Taffe (34), Adam Fabrikant (24), Bill Haas (24), and Nate Goodman (23) left their camp on the Wilson Glacier at approximately 02:45 to climb the Fuhrer Finger Route of Mount Rainier. About 0830, while ascending the route using skins and skis, unroped, and at 13,200 feet, Tucker Taffe fell into a crevasse and dropped approximately 75 feet. Immediately after the fall, the party established anchors and tried to communicate with their fallen partner. They did not, however, try to execute a self-rescue or access Taffe.

One climber left the scene to get help, and traversed, alone and unprotected, across the top of the Nisqually Icefall and down the Ingraham Direct route. Meanwhile, the remaining two members continued trying to establish communication, but again, did not attempt to reach the fallen climber.

At 0955, a team of 12 Alpine Ascents International guides encountered the reporting party near Ingraham Flats. The AAI team notified the NPS with the information they had just received. The guides and the Incident Commander agreed (as per a pre-existing contractual component that requires guide services operating in the park to respond/assist with incidents) that due to their proximity, it would be of great benefit for the party of guides to climb to the location of the fallen climber and provide what assistance they could.

Attempts to acquire a suitable helicopter from civilian vendors around the state proved a great challenge, because certified pilot/ship combinations were scarce on this morning. A Bell-210 type-2 helicopter from Worldwind Helicopters was eventually ordered, as it was available with an ETA of less than one hour.

At 1055, a ground team of four climbing rangers was dispatched from Paradise to Camp Muir as a contingency team should aviation operations not be feasible.

At 1103 the guides reached the location of the crevasse into which Taffe had fallen. At 1130, a guide descended into the crevasse and at 1211 reported hearing "moaning". However the fallen climber could not be seen, as he was buried under about 1.5 meters of snow. Another guide (a paramedic) descended to assist and the two guides used an avalanche beacon to determine the Taffe's precise location under the snow and began to excavate the snow to uncover him. At 1220 they exposed Taffe's head but found him unresponsive and "exhibiting agonal breathing" (gasping, labored breathing, accompanied by strange vocalizations). They cleared the snow from in front of his head and almost immediately after, Taffe ceased breathing and became pulseless. Despite the fact that they were working within the tight confines of the crevasse and that much of Taffe's body was still buried under snow, the two guides attempted to get him breathing again. At 1248 the guides reported that Taffe still wasn't breathing and was wedged tightly into the crevasse.

The two guides climbed out of the crevasse and after another attempt to haul the body from the surface, the guide team was directed by the NPS at 1418 to cease their efforts as it seemed apparent that alternate extrication means would be necessary.

Following extrication by four rangers, the deceased was flown to Kautz Heli-base at 1645 and released to the Pierce County Coroner later that night.

Analysis

While the decision to go unroped may appear foolhardy, the decision was not altogether without reason, as the terrain below the fall site dictated the party's initial decision to travel unroped. There is about 1000 feet of climbing below the site of the incident, which is steep, uncrevassed terrain in a couloir, and many parties choose to travel this section un-roped. Above the couloir, many climbers follow a steep, broken ridgeline; however, a lack of familiarity with

the route led to this party to traverse towards the top of the Nisqually Cleaver, which is a large, obvious terrain feature toward which the party may have gravitated. The traverse, as well as the terrain above it, is heavily crevassed. Interviews with the surviving members of the party revealed that the party failed to recognize the imminent crevasse hazard, as the party did not re-rope and continued to ascend. This decision may have been compounded by the fact that the party had separated, somewhat due to differences in fitness and speed of travel (they were utilizing different climbing techniques - Taffe had skis/skins on, while the others had not yet put their approach skis back on). Note that while Taffe was using skis as an approach tool, he was not, by definition, "skiing" when the incident occurred.

The party's relative inexperience and lack of training (to respond to a crevasse fall) left them unable to descend to their partner - despite the fact that they had the appropriate equipment to do so. While Taffe had fallen approximately 75 feet, he had suffered no significant trauma (per the coroner's report). However, he had been buried under approximately 1.5 meters of snow and ice from the collapsed "roof" of the crevasse. Unable to extract/unbury himself or clear the snow in front of his face, Taffe spent approximately four hours buried under the snow.

Being prepared for a crevasse fall includes not only carrying the proper equipment, but also having the practiced skills to execute a self-rescue. Unfortunately, many aspiring climbers don't take the opportunity to train themselves in real-life conditions (overhanging edges, etc.) and find they need to seek outside help. In this incident, qualified help was "only" four hours away. In most circumstances, even in a National Park, where rescue services are more readily available, it will take hours for responders to arrive due to the logistics associated with access, helicopter availability, personnel numbers, etc. In a situation where minutes count, it is imperative that climbers be able to execute a self-rescue. Even if substantial injuries exist, being able to provide patient care (such as maintaining a patient's airway, providing warmth, etc.) is critical to a patient's wellbeing in the hours to follow. Clearly, doing so may pose some risk to the self-rescuers, especially if they are operating beyond their experience level. In this case, rescuing their fallen partner may have posed significant risk due to their inexperience, much as the climber who descended alone to seek help through heavily crevassed, unfamiliar terrain, exposed himself to significant risk. Self-rescue requires having a practiced action plan, good communication, and foresight to avoid an "incident within an incident". (Source: Brian Hasebe – Park Ranger, The News Tribune, Tacoma, WA, and Mount Rainier News Releases)

EXHAUSTION – POSSIBLE AMS OR HACE, FALL ON ICE/SNOW, WEATHER

Washington, Mount Rainier, Liberty Ridge

On June 12, Rob Plankers (50), Brad Clement (40), and Tanya Clement (48) departed White River for a summit attempt via the Liberty Ridge