believed that the force of the top stopper failing and the bottom catching created a shock-load that caused the second stopper to fail. At this point, Jane stated that she heard John scream. She looked to see John falling from 100 feet above! John hit a ledge about 30 feet below the crux and tumbled down the slab below.

Brevard Rescue Squad responded to Jane's 911 call and evacuated John via litter and backboard. He sustained lacerations to the top of his head, a broken shoulder blade, a severe contusion on his elbow, a broken wrist (requiring surgery), and a bruised hip. John was not wearing a helmet. He was transported to Mission Hospitals in Asheville, NC.

Analysis

A couple of potentially dangerous scenarios were evident in this event. First, John was lowered through a single nut placement, then Jane chose to toprope through that same single nut rather than pull the rope and re-lead the pitch. These actions are a high-risk maneuver given that a single stopper protects the climbing 100 feet off the deck! While it didn't contribute at all to the accident, it in itself could be considered a near miss.

Second, by placing all of the anchor points behind a flake they were literally "placing all of their eggs in one basket." A common test to determine the integrity of a flake is to strike it. If it sounds hollow avoid it. Flakes are known to expand. This is especially true when using passive protection like stoppers. The wedging action of the stoppers more than likely caused the flake to expand, causing the anchor to fail. Safer options may have included abandoning the climb once John was on the ground, rappel off an *equalized anchor*, or to continue up easier terrain to the Gemini Cracks rappel anchors. As always a helmet is recommended! (Source: Edited from a post on carolinaclimbers.org and Aram Attarian.)

FALL ON SNOW, CLIMBING UNROPED

Oregon, Mount Hood, Southside

On July 5, Erik Heerlein (35), a climber from South Carolina, fell approximately 200 feet while descending the Mazama Chute variation (10,500-foot elevation) of the Southside Route. His unroped team members included an M.D. and a paramedic. They were able to report the accident via cellphone and provide emergency medical aid. Heerlein struck his head (some protection was provided by a bicycle helmet) and lost consciousness during the fall. He was transported to a local hospital by a Blackhawk helicopter.

Analysis

Although this route is often climbed unroped during normal conditions, the exposure provides ample opportunity for injury during a fall. The security provided by the rope should always be considered. The helmet likely minimized the head injury. Having an M.D. and paramedic in one's party is always good fortune. (Source: Jeff Sheetz, Portland Mountain Rescue)

FALLING ROCK, WEATHER, LATE START Oregon, Mount Hood, Cooper Spur

On July 27, Dr. Gary Lee (55), an experienced climber, and his son Devin (20) finished the ascent of the Sunshine route in the early afternoon. They descended by the Cooper Spur route, stopping at a snowfield at the 10,000-foot level to unrope and don crampons. Believing that the worst part of the climb was behind them, they continued down the snowfield until a watermelon-sized rock struck Dr. Lee in the back and sent him tumbling down the fall line. He fell about 1000 feet out of sight and became wedged between boulders on the steep north face. Devon continued descending, calling after his father, but was unable to make contact. He was met by two hikers who placed a 911-cell phone call notifying authorities of the accident.

The body recovery by ground teams involved hazards associated with loose rock on the exposed north face and included an airdrop of a 600-foot rope.

Analysis

Nearby climbers observed the pair during their ascent and noted their lateness on route. Also, the previous night remained warm, so the snow surface did not freeze/stabilize. Climbers must adjust their schedules for early starts to beat the diurnal heating cycle and be well clear of rockfall hazards by mid-morning. Rescuers experienced late season conditions (thin snowcover, icy surfaces, and excessive rockfall). The party's upper descent route was completely free of snow/ice, thereby exposing a bed of unstable rock. Though the party did not wear helmets, this choice would probably not have affected the outcome of such a long fall. However, this might be an indicator of their unawareness of the climbing conditions. (Source: Jeff Sheetz, Portland Mountain Rescue)

FALL ON SNOW, UNABLE TO SELF-ARREST, CLIMBING ALONE, EXCEEDING ABILITIES

Oregon, Mount Hood, Southside

On October 19, Chris Biddle (30), a novice climber, lost his footing at 10,900-foot elevation while descending the Southside Route. Unable to self-arrest he slid about 300 feet. A nearby climber who witnessed the fall reported his accident via cell phone. The witness and another climber were able to stabilize Biddle until a PMR ground team (supplemented by AMR Reach-and-Treat medics) climbed to the accident sites. The subject was air-evacuated by a Blackhawk helicopter to a local hospital.