make brake devices and backup knots coaxial. While this scenario is not definitive in Jim's case, the increasing incidences of near misses are clear predictors that we should pay attention to.

An alternative rig that avoids this problem is attaching your friction device to your harness with a single sling to put the device further from your harness. Then attach the backup knot on the belay loop on the harness in a way that it backs up your brake hand. This makes both devices co-axial. By attaching the device and backup knot at similar places on your harness, it becomes very difficult, if not impossible, to bump your backup knot into your friction device. (See the diagram of this published in the Petzl catalog at Petzl_122_123.jpg, which shows this coaxial arrangement.)

It can be said that tying the ends of the rappel ropes together would have prevented rappelling off the end. However, this climbing area has many vertical cracks left and right of the route (see photograph of the climb) and experienced climbers here have expressed great concern with having a knotted end caught in a crack. The result of this could prevent one from moving up or down, especially when doing roped solo climbing laps (an accepted form of climbing that has been done with very few incidents over the years), because minimal gear would be available for self-rescue. But this case clearly illuminates the fact that choosing to not use a backup knot in the end of a rope should not be taken lightly.

We recommend that the National Institute of Justice develop a national level coroner's form for recreational climbing fatalities. This is specifically because recreational climbing fatalities are so infrequent that local coroners need more guidance in preserving evidence at the scene. (Sources: Lead Investigator, John Gookin, Wyoming Deputy Coroner, SAR Commander with the Fremont County Sheriff's Office and the Curriculum Manager at the National Outdoor Leadership School [NOLS]; Tom Hargis, an AMGA certified guide for Exum Guide Service in other locations, a frequent climbing partner of Jim's who knew his habits and who bolted Honeycomb, so has knowledge of both the climb and the climber intimately; Jed Williamson, Managing Editor of this journal since 1974, and frequent investigator of accidents in a range of outdoor pursuits. John Gookin visited the site six times post-accident, Tom Hargis visited the site three times, and Jed Williamson visited the site once, with Gookin and Hargis. Williamson had numerous follow-up conversations and other exchanges with both.)

FALLING ROCK—DISLODGED BY PARTY ABOVE

Wyoming, Devil's Tower National Monument, Pseudo Weissner

On May 29, Rita Sanders (46) of Bellview, Nebraska, was injured by a falling rock while climbing on Devils Tower. Sanders was climbing the Pseudo

Weissner route with a friend and a professional guide when the accident occurred. She was preparing to climb the third pitch of the route and was attached to a set of anchor bolts when a 10- to 12-inch diameter rock was dislodged by a party climbing approximately 300 feet above her. The rock struck her in the helmet, left arm and left ankle, causing multiple injuries, including several broken bones. Sander's guide provided initial care and was lowered with Sanders 200 feet to the base of the route by another climbing party. Rangers and other climbers then packaged and lowered her in a litter through another 100 feet of vertical terrain. Sanders was then flown by the Rapid City Regional Lifeflight helicopter to Rapid City, South Dakota. (Source: Scott Brown, Chief Ranger)

Analysis

Climbing on the Devil's Tower brings with it an inherent risk these days. It would have been easy to add "poor position" as one of the contributory causes here, but that's the point. It's hard NOT to be in the fall-line here. Nevertheless, climbers must take even greater care to avoid causing rocks to fall. This is as important a skill to learn as all other climbing techniques. (Source: Jed Williamson)

FALL ON ROCK

Wyoming, Grand Tetons, Cloudveil Dome

On July 1, about 0630, Heather Paul (34) and Susie Schenk (38) departed from Lupine Meadows with plans to complete a traverse of Cloudveil Dome from the South Fork of Garnet Canyon. When they arrived at the Meadows of Garnet Canyon, because of ambient conditions they re-considered their plans to traverse Cloudveil Dome and instead decided that they would climb the South Teton. Since the ascent of the South Teton was essentially non-technical, they decided to stash their gear (rope and technical climbing equipment) at Garnet Meadows. They put on their mountaineering boots and then proceeded into the South Fork of Garnet Canyon.

When they arrived at a location below Cloudveil Dome in the South Fork of Garnet Canyon, they decided to complete the traverse of Cloudveil Dome after all, and ascended the Zorro Couloir route (which is actually on Spalding Peak to the west of Cloudveil Dome) to gain access to a col to the west of Cloudveil Dome. The ascent was essentially a snow climb and the condition of the snow was "soft, but not too soft—great for kicking steps." They arrived at the summit of Cloudveil Dome around 1230.

They then proceeded to scope out and down-climb the East Ridge Route of Cloudveil Dome in order to complete the traverse and return to the South Fork of Garnet Canyon. On a previous occasion, Heather had descended the East Ridge Route, which involved low 5th-class climbing,