

the Mercy Air helicopter flew him straight to Mercy Hospital. He died from his injuries one week later.

Analysis

The Hotlum/Bolam Ridge is non-technical during most of the climbing season. However, it becomes more difficult and hazardous each season by August or September with the formation of hard snow and water ice. Climbers have frequently been drawn to the rocks when they become uncomfortable on the route. Unfortunately, this is the first place water ice forms. Although few people use ropes or protection on this route during the main climbing season, roping up *and* using protection may be a good idea in the late season.

Wieken was wearing a helmet, but as it came off during the fall, it may have been loosely fastened. (Source: Eric White and Matt Hill, USFS Climbing Rangers)

(Editor's Note: Two other climbers fell on this route a week later, one suffering a broken leg. A total of 33 accidents were reported from Mount Shasta this year, of which 17 are "eligible" for the data—even though several of them involved rank beginners who were either stranded [total of 12 people] or who lost it glissading [seven]. The rangers have a website that reports conditions and summarizes incidents: www.r5.fs.fed.us/shastatrinity/mtshasta/accident.htm)

NEARLY STRANDED—RIGGING PROBLEMS, DARKNESS, FATIGUE

California, Yosemite Valley, Lost Arrow Tip

Sasha Binford and I, Charles Zilm (32), set out to climb the Lost Arrow Tip (three pitches, 5.8 A2) on October 6. We had hoped to be off by early afternoon, but when we got to the climb at 8:00 a.m. there were already two parties ahead of us rappelling into the notch. We were looking at a long day, but I still figured we would be off before sunset. It warmed up quickly in the sun, but I threw a warm shirt and pile jacket into Sasha's pack anyway. I had climbed the Tip four years ago, finishing in the dark, and remembered being really cold.

The Arrow Tip is a pinnacle that attaches to the main wall 250 feet below the rim of the Valley and rises to a finger-tip summit a little below the rim. The climb starts in the notch where the Arrow joins the wall; to get there we made one long rappel from the rim on two single lines tied together. Then we waited an hour or two for the party ahead of us to clear the first pitch. I led the climb on a third rope. I dragged the bottom end of the rappel lines with me, leaving the other end fixed to the anchor tree on the rim. The two rappel ropes would become a Tyrolean traverse from the top of the Arrow back to the rim, a gap of about 75 feet plus the climb up to the anchor.

The climb went fine, and I reached the top about an hour before dark, as the party ahead crossed to the rim and pulled their lines. I pulled most of the slack out of our rappel line and tied it off, giving us one Tyrolean line across the gap. When Sasha finished cleaning the pitch, I put her on belay with our lead rope; she clipped a locking carabiner over the Tyrolean line, to hang from while she traversed, and clipped the end of the second rappel line to her harness, to take it across. I lowered her out until she had descended to the low point in the traverse, then she jugged up the other side to the rim.

Sasha tied off the end of the second rope, and I rigged the ropes through the anchor on the summit so that we could pull them after I got across. It was too dark to see anything clearly now. I had not brought a headlamp, so I had to double- and triple-check everything. The knot joining the two ropes was probably two-thirds of the way across the gap, although I could not see it in the gloom.

Four years ago I had crossed the Tyrolean by using a single Prusik around both lines to let myself down to the low point; it was not very efficient, but it had worked. (*Ed. Note: Two Prusiks would be better.*) I had read somewhere about rappelling the descending side and thought this might be more efficient, so this time I rigged both lines through my ATC. Like Sasha, I clipped a second locking carabiner from my harness to the ropes, to support myself.

Rappelling was easy as long as there was no tension in the ropes below me, but as the lines to the rim became snug from my weight, the friction in the ATC brought me to a halt. I was still short of the low point. I started pulling myself along with my ascenders, but the friction limited me to an inch or so at a time. It was exhausting and I had to stop many times to rest. I found that I could not unclip the ATC and take it off the ropes. I thought of going back to the summit and starting over without it, but it would be cold and windy up there and I could not see to re-rig. Besides, I thought it would be a waste of time—I should be able to resolve any problems right here, and it would take longer to go back up than to keep going.

I knew that I could remove the ATC when the tension diminished as I started up the other side. I still could not see the knot, and I knew I would not be able to pass it with the ATC still on the ropes. I hoped it was close enough to the wall to relieve the tension, but when I reached the knot after at least an hour, the ropes were still too tight. In hindsight, I wonder why I was so stubborn, but I still did not want to spend the time to go back.

By this time it was cold and blowing pretty hard, and I was stuck there in shorts and a T-shirt. Thinking I would be across in no time, I had forgotten to take my clothes from Sasha's pack. She had brought along a pair of FRS (family band) radios so I was able to ask her to send down my shirt and headlamp. I was so cold I was slurring my words, and without the radios we could not have heard each other against the wind.

The shirt and headlamp got stuck on the rope several times, finally just out of reach on the other side of the knot, but I was able to shake the ropes enough to get them to me. The tips of my fingers were now so numb from the cold that I was afraid I would drop my shirt. My speech became so slurred that it was an effort to say anything to Sasha. There was chatter on the radio from the Valley, and I was upset that they would talk when they knew we were using it. One guy was trying to pick up girls on our channel. The contrast between his situation and mine annoyed me.

All this time I had been trying various ways to free my ATC; e.g., by rotating the nose of the carabiner up and trying to roll the ropes out. But there was too much tension in the line and I was too tired.

I told Sasha a couple of times, "I don't know what to do." Someone in the Valley heard this and asked if they should contact Search and Rescue. I did not

answer. I did not want to be rescued off a climb—but Sasha answered, “Yes, contact Search and Rescue.” SAR was on the radio quickly, asking us questions about my situation and making suggestions. I was pretty punchy by then and probably did not answer very intelligently. I was getting colder so I had Sasha send down another layer of clothes.

Then the Rangers turned two spotlights on me. I felt like the high-wire act for the evening, imagining crowds gathering in the village below to watch the idiot die above them.

I lost radio contact with everyone—Sasha, the Park Service, and the guy picking up girls. I thought the batteries had died, but the radio worked fine afterward so I must have just bumped the volume knob. I was too punchy or distracted to figure it out.

Now both hands were numb and my arm muscles cramped. The wind blew very hard and I knew I could not stay there in those conditions. I finally decided to go back to the Arrow summit and try again. I put one ascender on each line, worrying that, since the ropes were rigged through the anchor on the Arrow, the ascenders would see-saw. But there was enough friction in the system that I could push both simultaneously. Jugging back was much easier than going toward the main wall. I was only partway back when I noticed that the ATC was now loose. I de-rigged it, so relieved.

I down-climbed with my ascenders, holding both ropes together above them to keep the see-sawing under control. Prusiks around both ropes were an option but too much trouble at the time, being so close to the low point. When I got there I turned the ascenders around and climbed to the rim. My fingers were almost useless—I could not feel the ascenders and it was a challenge to work the cams. I found out later that, when the NPS learned I had solved my problem, they turned around their SAR team, halfway up the trail to the Arrow.

I thought I had been on the line for an hour or two, but Sasha stunned me—six hours! I was pretty hard on myself for a while. My fingers, numb for three weeks, reminded me. Would anyone want to do a serious climb with me again? But everyone was very supportive. I screwed up big, but it was an incredibly valuable learning experience.

Analysis

How many things can you find wrong with my picture? I had not actually practiced my “new” way of starting the Tyrolean, because I had done the climb previously, and I also had not thought through the possible problems—not that I could anticipate them all, anyway. They say that in a crisis you revert to your training, and my training did not include this predicament. When I got out there, I could not see solutions that someone standing next to me might have spotted immediately.

Also, I had assumed I would be off before it got dark and cold. With my headlamp, I might have retreated to the Arrow immediately. I became dependent on Sasha, sitting on the rim with headlamp and clothing, and dependent on the radios that she had thought to bring. What if she had not brought them? What if the clothing and headlamp had become stuck on the line, out of reach? Nevertheless, radios and headlamp should not be a substitute for experience.

Park Service comments: It may seem obvious now, but if you decide to rappel the descending portion of the Tyrolean lines, de-rig your brake before the ropes below you become tight. Second, if you do need to escape from this type of brake while the rope is under tension, remember that you can take your weight off the carabiner, but not off the rope, as the tension continues to trap the carabiner against the brake, making it extremely difficult to unclip, as Charles found out. However, the link between the carabiner and the harness is *not* under tension, so unclipping from the belay loop on your harness is a five-second, one-handed manoeuvre. But Charles had rigged the carabiner around his leg loops, his waist belt, and a back-up webbing swami, thus making a complicated jumble of stuff to manipulate with numb fingers while hanging there in the dark. By the time he got his headlamp, he was too tired to deal with it.

Regardless of the technique you choose for crossing, you can eliminate the need to pass the knot by just positioning it at the anchor you start from, and have the first person across adjust the slack in both lines as needed. One final comment: This report is not an instruction text on how to rig or cross a horizontal line. (Source: Charles Zilm and John Dill, NPS Ranger, Yosemite National Park)

FALL ON ROCK, INADEQUATE ANCHOR SYSTEM

California, Yosemite Valley, Washington Column

On December 3, Andrew Morrison died when he fell several hundred feet from the South Face of Washington Column (Grade V, 11 pitches, 5.10a A2) in Yosemite Valley. On December 1, they climbed the three pitches to Dinner Ledge and slept on the ledge at the top of pitch 1. They admitted to being awed by the exposure. The climb starts from 3rd class ledges, yielding a few hundred feet of exposure on the first pitch—but they were all enthusiastic, enjoying the climb, and they felt the whole team was climbing competently and safely. Andy had done well leading the second pitch.

On December 2, they hauled their gear to Dinner Ledge, where they planned to bivvy until they finished the route. They had lots of trouble with the haulbags snagging on the way up, and they had worked hard getting them free. Pitch 4, the Kor Roof, was Andy's lead, but he was tired from dealing with the bags, so Matt led and Nick followed. It was dark by the time they finished the pitch.

On the third, Andy started up the ropes to lead pitch 5, but had to go to the bathroom, so he returned to Dinner Ledge after jugging halfway. He was still feeling tired, so Matt took the lead with Nick belaying. Andy started up again but then changed his mind. He also mentioned that he had found his ascenders inefficient the first time up, so he had switched to Prusiks.

After a discussion with Matt, Andy decided he would take two ropes and go down to the Valley to get Craig, another member of their group who was hoping to join them. Andy said he planned to rappel pitch 3, pull his rappel ropes, fix one rope as he descended pitch 2, and fix the other on pitch 1. This way, he and Craig would have to re-lead only pitch 3 to rejoin the team. Andy started down from Dinner Ledge and was soon out of sight, while Matt and Nick began pitch 5.