administered what first aid I could, got her partially into her sleeping bag, said good bye and set off for help. In my confused state I got lost and fell again, ten feet to a rock ledge, and found my way back to her. I left again pointed in the right direction. I slipped into the moat getting onto the Cache Glacier. After extricating myself, I fell down the chute to the glacier where I managed to self-arrest. I found some ropes frozen into the glacier which helped me cross it, and eventually made it to the trail. At 0100 I reached the parking lot. There were two people there. I asked them for help. They said no. I drove 25 miles to the nearest phone and reached the rangers. The sun rose at 0615, and with it the ranger helicopter found Lindsay. A Navy helicopter rescued her shortly thereafter. Her body temperature was below 90 degrees and she was going into shock. By 0830 she was at St. Joseph's Hospital in Bellingham, WA. Through intense physical therapy Lindsay has miraculously recovered almost completely. She hasn't yet decided whether or not she'll ever climb again. I did my first lead since the accident last week. In retrospect I see that if we had bivouacked on the face and approached the problem of questionable anchors in the light of day with a full stomach, we may have been able to find a way to prevent the accident. My advice is: stop when you get tired, eat, and reevaluate if possible. Remember that fourth class rock can mean anything, especially if it's loose and unprotectable. Wear a helmet, and no matter how many horns, blocks, flakes, nuts, bolts, etc., you've safely roped off, always find a way to check your anchor before you risk your life. (Source: Andy Gzesh—21)

Additional Analysis

Gauging one's physical ability and backing up anchors are important. Fatigue and a failure to test the anchor resulted in this fall. In this case, it may have been necessary for Lindsay to clip into the same block anchor, since there was no protection at the horn. If both climbers had reason to doubt the strength of the horn, Lindsay might not have clipped into the anchor while Andrew was rappelling. Then, regardless of anchor failure, she may have been able to help Andrew after the fall. (Source: Dean Engle)

RAPPEL OFF UNEQUAL ROPES

Washington, Index Town Wall

In early August, Greg Child had one of the more exciting rappelling experiences possible. He reported it as follows:

If I had a penny for every rappel I'd done, I'd be a rich man. After 22 years of climbing, my rappel odometer has rolled over a few times. And every descent of that nylon spider-line—be it at night, in rain or blizzard, at 8000 meters when you can't think straight, on tatty 6 mm bootlace, down all kinds of rock and ice and snow, often for thousands of consecutive feet—has been uneventful. Until this summer, when percentages caught up with me...

I was alone, rappelling down the Upper Town Wall of Index, having just completed a multi-pitch, multi-day orgy of rappel bolting and moss scrubbing. At the last rappel (which I'd made a dozen times in recent weeks), I threaded the rope through the anchors, tossed the ends off, clipped a rappel device to the rope and set off. My mental checklist for any rappel includes making sure that the rope ends are equalized and reach the ground or the next anchors, as well as examining my harness buckle, anchor and rappel

device. If I can't see whether the rope reaches, I always tie the ends on the rope together.

But not this time. I was tired, weighed down with gear and preoccupation. I failed to look down this familiar rappel and didn't notice that one end of the rope was 40 feet shorter than the other. But when I felt the rope slip through my rappel device and felt the rush of acceleration, I knew what had happened—and that the next few moments could dramatically affect my life.

Falling happens quickly, but the release of those fear-triggered chemicals—adrenalin, endorphins, etc.—slows the experience so that you have time to think, though seldom to react. Primarily, I thought about the bony crunch I knew was fast approaching. I anticipated it as an ugly, jarring sensation that would explode through the top of my skull like a starburst. I was right. My ankle buckled on a ledge and my knees folded into my face, splitting my upper lip. Then I catapulted backwards into the air and began ripping through trees, over boulders and down a steep gully. The karma of rappel bolting had caught up with me.

(Editor's Note: Child figured out that he has done about 410,000 feet of rappelling in the last decade, and has therefore set up 3,733 rappels. He estimates his casualty rate at .036%. He calls this "food for thought.")

ICE FALL

Washington, Mount Shuksan, Hanging Glacier

On August 21, 1991, two experienced climbers—Curt Veldhuisen (29) and Gary Gray (33)—signed out at the USFS Ranger Station and proceeded to their base camp in the White Salmon drainage below Mount Shuksan. The next morning they were climbing the NW arret and stopped where the rock route meets the hanging glacier. While they were stopped to put on crampons at 1330, they noticed some small avalanche activity. Without warning, a large section of iced up glacier broke off and swept down upon the two climbers, trapped in the moat between the wall and the glacier. Curt was knocked unconscious and Gary was immediately buried in an ice fall under chunks the size of wood stoves. When Curt regained consciousness, he determined his injuries and searched for Gary. He set up some bright gear to try to attract help. He attempted to descend by himself, but returned due to crevasse problems and the extent of his injuries.

As the victims were overdue, a search was initiated. A North Cascade National Park helicopter flew the route and located Curt. A radio was lowered to him and the extent of the situation determined. Curt was later that day flown off in a basket by the NCNP helicopter. Rescue teams returned at first light the following day to the scene to attempt to recover Gary's body. An anchor station above the avalanche area was established and two rescuers were lowered to the scene. It was determined to be a very hazardous area to continue search activities. No trace of Gary was evident within the jumble of ice blocks. The search was suspended

Analysis

Possible judgment error in route selection due to warm temperatures and lateness in day (1330). An approach between an icefall could more safely be made in colder conditions. (Source: Harte Bressler, Base Operations Leader, Bellingham Mountain Rescue)