

There were obvious signs of instability. The terrain is characterized as a large, open, unsupported slope with a small convex roll, and because of the elevation and wind, a high degree of spatial variability. All of these are red flags that when the team members were asked later, each recognized them at some point. So why did they over look these obvious clues? All members of the team were highly motivated expert skiers and wanted to ski. The snow conditions up until this storm cycle had not been good and now it was excellent. A few days before, a team of skiers had successfully skied the Rescue Gulley early on in the storm. But for this team, it was the last day of their trip and they had not skied any of their big objectives yet. The schedule, therefore, dictated their attempt.

*(Editor's Note: While the objective for this team was to ski on a big mountain, this incident fits the category of ski mountaineering because of the techniques and equipment required to get to and from the objective. We will decide on a case by case basis as to which incidents resulting from skiing the big and steep will qualify for this category.)*

## **VARIOUS MEDICAL PROBLEMS**

### **Alaska, Mount McKinley**

During the 2009 season, there were several medical incidents (including the HAPE report above). These included a guided client (41) with significant enough chest pain to be evacuated by helicopter; a guided client (31) with extreme fatigue and very low O<sub>2</sub> saturation at the 17,200-foot camp who descended under his own power to basecamp; a guided client (49) who collapsed upon arrival at the 9,500-foot camp after experiencing "extreme" pain in his chest (sledded back to basecamp, evacuated, and diagnosed with two "major heart blockages"); and a guided client, William Hearne (61) from New York, who collapsed and died at 13,500 feet.

### **Analysis**

The expedition on which Mr. Hearne died took three days to move from Base Camp at 7,200 feet to the 11,200-foot camp. They did this making single carries. The expedition took one rest day at the 11,200-foot camp and then the following day made a carry of gear to 13,500 feet. When the team moved from their 9,500-foot camp to the 11,200-foot camp, Mr. Hearne needed the assistance of his guide to carry his gear sled. He had also exhibited fatigue on the day of his collapse and needed assistance with his backpack on the last hill that leads up toward Windy Corner.

Fatigue is common during these early carries. The distances are not great, but the amount of food and gear that are required for 21 days on the mountain make the loads heavy. Elevation also begins to be a significant factor contributing to many individuals experiencing fatigue above the 11,200-foot camp.

From the people interviewed after the incident, it appears that Mr. Hearne was not subjected to any abnormal ascent regime or excessive physical stress. Friends and family also indicated that he was in excellent physical condition.

From 1995-2008, there have been 282 climbers 60 or over who have completed climbs on Denali safely. There have been 1,508 over the age of 50. Of the five heart-related deaths since 1932 to present, only one has been over the age of 59. With only one exception, an interesting note is that all of these have been since 2006.

*(Editor's Note: It is not unusual to have a variety of medical incidents in this extreme environment. The analysis provided for the last incident mentioned covers many of the important factors.*

*Another piece information for 2009 is that 1,052 climbers registered to attempt the mountain.)*

## **LOOSE ROCKS (SEDIMENTARY) CAME OFF, FALL ON ROCK**

### **Arizona, Mount Lemmon, Chimney Rock**

On April 15 I (Tom Thrall, 58) was on the fourth day of a week-long climbing trip with my friend WG (69) on Mount Lemmon near Tucson. It was very windy that day, so we decided to stay low on the mountain. Two other climbers we had met at the campground that morning offered to join us and we headed down the highway to Chimney Rock. WG did a fine job negotiating the unusual climbing on the first pitch of the Standard Route (5.6), which I seconded and then traversed far left over to the anchors on the arête below the second pitch. Meanwhile, GP and SR climbed the first pitch behind us on a separate rope.

When I arrived at the arête, the wind velocity was extreme, and I found it difficult to even stand without holding on to the anchors. The guidebook had mentioned a "5.8 variation" to the second pitch, which looked a bit more wind protected, so I decided to give it a try instead. After scrambling up into an alcove, I found myself at the bottom of a somewhat rotten appearing face that rose steeply for about twenty five feet before the angle backed off a bit. There was a discontinuous crack in the face with what looked like several reasonable placements for protection. The first moves went well, and I got in a TCU about seven feet up and then a bomber Camelot about five feet above that. Moving past the Camelot, I found that the rock deteriorated significantly. I was about three feet below my next pro placement on small ledges that were literally crumbling beneath my fingers and toes. I considered down-climbing, but that felt very insecure. There was a larger hold tempting me a couple of moves away that would allow me to rest and place protection, so I decided to go for it.

As I pulled up into my next stance, my left handhold came loose and I was suddenly airborne. I hit the ledge at the base of the face with consider-