have paid for the cost of his dog-sled "rescue" or whether the costs should have been borne by the National Park Service. The main reason for this misunderstanding was the lack of direct radio communication between the 4400-meter High Latitude Medical Research camp and the NPS Ranger Station in Talkeetna. Better radio communication could have prevented this.

Hesse is a talented, seasoned climber. His solo ascent of the South Face was a remarkable achievement. (Source: Jon Waterman, Mountaineering Ranger, Denali National Park)

ALTITUDE SICKNESS, FALL ON SNOW, FROSTBITE, INEXPERIENCE Alaska, Mount McKinley

On April 26, 1982, the ten-member Denali 101 Expedition flew from Talkeetna to the Kahiltna Base Camp to climb the West Buttress route on Mount McKinley. The expedition was comprised of participants in a mountaineering class that was given in Anchorage; and most of the members were inexperienced. The group traveled slowly up the glacier and two members left during the first week due to personality conflicts. On May 16, at 1000, the remaining eight members left for the summit from the 5300-meter camp in cold, clear weather with little wind. As the group slowly made their ascent, a rope team of three (Doug Burger, Jay Hornberger and Leslie McDaniel (28)) separated and went ahead due to cold feet and the slowness of the rest of the party.

At 1945, when the other five (Bill Ennis (32), Robert Hoffman, Bo Fuaco, Ray Commisa and Niles Wood (28)) reached the 5900-meter level, the first three were out ahead. At this elevation, Wood started suffering severely from the altitude. His symptoms were disorientation, exhaustion and slight hallucination; he was also collapsing regularly. At 2010, Commisa called Denali National Park via a Radio Anchorage unit. He talked with Chief Ranger Tom Griffiths and informed him of the situation and asked about the feasibility of a helicopter evacuation. Griffiths told Commisa to start descending with Wood immediately and to call back in one hour with a progress report.

After the initial contact, there was no further transmission as Commisa had called from a blind spot where the Radio Anchorage unit didn't work. Ranger Bob Gerhard contacted the Rescue Coordination Center (RCC) and notified them of the situation at 5900 meters. RCC decided to send two U.S. Army Chinook helicopters to Talkeetna in order to be ready for a possible rescue. The helicopter arrived in Talkeetna at 0100 on May 17. Ranger Scott Gill in Talkeetna was informed of the situation at 2030 on May 16 and made arrangements for an 0400 surveillance flight with Talkeetna Air Taxi.

As Commisa's group started down, Wood's condition began to improve and they were able to descend to 5300 meters without much difficulty. At the 5300-meter camp, Wood was feeling much better. The group of three climbers spent that evening totally unaware of the problems that the rest of the group was having in trying to get Wood down. At 0100 on May 17, the three were descending from Denali Pass at the 5400-meter level, just above the 5300-meter camp. Burger was in front, Hornberger in the middle and McDaniel in the rear. As they descended,

Hornberger lost her footing and fell. The fall pulled McDaniel off her feet and both started sliding down, unable to stop themselves. Burger quickly self-arrested and was able to stop the remainder of the fall. McDaniel injured her ankle in the fall and had to be helped down to the 5300-meter camp.

At the 5300-meter camp, the group cooked a meal and went to bed. At 0300, a U.S. Army C-130 flew over on a surveillance flight. Burger was able to contact RCC in Anchorage, using the Radio Anchorage unit; he told them that they were the expedition who had requested help and gave them their location. The C-130 got the message from RCC and dropped a PRC-90 radio to the expedition at 5300 meters in order to establish direct communication. Burger requested an air evacuation for possibly two people, McDaniel and Wood. The C-130 contacted RCC and the Chinooks were dispatched from Talkeetna to make a pickup at the 5300-meter camp.

At 0430, Gill and Doug Geeting of Talkeetna Air Taxi took off in a Cessna 185 along with the two U.S. Army Chinook helicopters. At 0523, one helicopter landed at 5300 meters and two pararescue personnel disembarked in order to load McDaniel onto the helicopter. When the pararescue team went to get Wood, he refused to go, saying he felt much better. Burger thought Wood was in good shape and able to make it down. As the pararescue team was unable to examine Wood, they accepted

Burger's recommendation.

The helicopter took off from 5300 meters with McDaniel on board and arrived in Talkeetna at 0610. McDaniel was then transferred to another helicopter which took her to Providence Hospital in Anchorage. Upon examination, she was found to have two broken bones in her ankle that required immediate surgery.

During the rescue, Ennis helped assist McDaniel into the helicopter. The temperature was reported as very cold with a 16 kph wind. After the helicopter left, Ennis noticed that his feet were very cold; upon removing his military VB boots, he noticed frostbite on the big and second toes of his right foot and on the big toe of his left foot. The group spent the night at the 5300-meter camp and started down to 4300 meters on the morning of May 18. At 4300 meters, Ennis was examined by Dr. Peter Hackett of the High Latitude Research Program. Hackett recommended that Ennis stay off his feet and either be flown off or taken down by dog sled from 3100 meters. Park Ranger Roger Robinson was at 4300 meters and coordinated the evacuation with Fred Agree, who was operating his dog sled between base camp at 5300 meters and Kahiltna Pass at 3100 meters.

Together with his group and another injured climber, Mark Hesse, Ennis left 4300 meters on May 19. When they reached 3100 meters, Hesse was taken out first via dog sled, which resulted in Ennis' spending the night out. On May 20, Agree took Ennis down to base camp where he was then flown out to Talkeetna. (Source:

Scott Gill, Mountaineering Ranger, Denali National Park)

Analysis

Denali 101 had eight members who should have been prepared to handle this situation. The group was aware of altitude-related problems and should have started to move Wood down immediately instead of calling for assistance. When the group did not make a second radio transmission, there was no other alternative but to assume that they needed help, particularly in view of their inexperience. (Source: Scott Gill, Mountaineering Ranger, Denali National Park)