Pack, but due to the possible severity of his internal bleeding, it was decided to evacuate him by helicopter.

FALL ON SNOW AND HAPE/HACE—ASCENDING TOO FAST Alaska, Mount McKinley, West Buttress

At 1430 on May 17, Frainciso Borja (32), a member of the Blue Skies Expedition, was witnessed by NPS Ranger Scott Metcalfe and VIP Kirk Mauthner falling from just below the balcony at 15,200 feet. Borja caught his right crampon on his left pant leg, falling approximately 30 feet where he self-arrested and came to a stop just above Mauthner and Metcalfe. Borja complained of a broken or sprained right ankle. After a patient assessment, it was determined by Bob Mayer, a VIP nurse, that Borja had point tenderness to his left hip also. At 1630, Borja was packaged and lowered to a sled at around 14,300 feet, where Metcalfe with two tail-ropers skied the patient to the 14,200-foot medical camp. By 2000, Borha's condition deteriorated, and he had lost circulation and sensation in his foot.

Concurrently, around 2130 while walking around the 14,200-foot camp, NPS volunteers Moyer and Sherrington came upon an unresponsive climber. Marc Springer (29) of the Vipers Expedition was carried over to the NPS medical tent because of a severe case of high altitude sickness. He was non-ambulatory and barely conscious when he arrived. VIP medical professionals George Rodway and Bob Mayer administered HACE/HAPE related drugs. After only slight improvement to Springer, NPS personnel determined both climbers required additional medical attention and that air evacuation was necessary.

The NPS Lama helicopter flew Borja and Springer, assisted by Ranger Kevin Moore, an EMT, to the 7,200-foot basecamp by 2200. A Pavehawk medical helicopter was waiting at basecamp for them. By 2323, both patients landed at Providence Hospital in Anchorage. Both Borja and Springer spent the night in the hospital under close supervision and were released the next day. Borja was diagnosed with a bruised left hip and severely sprained right ankle. Springer had signs and symptoms of both HACE and HAPE.

AnalysisBorja did a great job using his ice ax to self-arrest. It was a textbook arrest! His pants were very baggy and loose fitting. Had he and his partner been roped up the fall might have been prevented. He was fortunate that a highly trained NPS team was on the spot with proper personnel and equipment.

Springer, on the other hand, simply ascended too fast. He went from 7,200 feet at basecamp to 14,200 feet in four days! It is common to take many more. He seemed pressured to keep up with his partners who were acclimatizing on the West Buttress in order to climb the Cassin Ridge.

FROSTBITE—DEHYDRATION AND INADEQUATE CLOTHING, POOR PHYSICAL CONDITION

Alaska, Mount McKinley, West Buttress

About 2100 on May 18, climbers at the 14,200-foot camp witnessed Ron Mor-

row (51) take a fall on the fixed lines around 16,000 feet. Morrow made it back to the 14,200-foot basecamp by 2300 cold and tired. His partner Michael Rodriguez reported that Morrow was so exhausted that he fell asleep until around 0700 the next morning. On the morning of May 19 Rodriguez helped Morrow to the NPS medical tent where it was determined by NPS personnel George Rodway and nurse Bob Mayer that Morrow had mild frostbite on his left little finger and full thickness frostbite on the four largest toes of his right foot. Since the foot of Morrow had thawed partially overnight, Rodway and Mayer helped to thaw his foot completely with a warm water lavage. After his foot was thawed, he was unable to walk. Typically an injury of this nature would not warrant immediate transport, but weather forecasts indicated a significant decline until May 24. At 0942 on May 20, Ranger Metcalfe spoke with acting South District Ranger Daryl Miller and other NPS personnel who decided it would be best to do a resupply of essential needs like propane for the 14,200foot camp and most important, to get Ron Morrow off the mountain. About 1100 on May 20, the NPS Lama helicopter flew Morrow to the 7,200-foot basecamp where he was then flown to Talkeetna via a fixed wing provided by Doug Geeting Aviation. In Talkeetna Morrow took a taxi to Anchorage where he was treated by a frostbite specialist.

Analysis

Upon further investigation, it was determined that Morrow had not enough water to drink, nor had he eaten enough. He got his gloves wet digging his cache at 16,200 feet. Morrow admitted he showed up out of shape and said he was guilty of trying to keep up with a 28 year old! In addition, the weather was poor, he had no overboots and had a history of frostbite 23 years ago in the same foot.

FALL ON SNOW—CARRYING TOO MUCH Alaska, Mount McKinley, West Buttress

On May 23 around 0800, Priska Landolt (30) of the Glaronia-Swiss Expedition was descending below the fixed lines around 15,000 feet when she hooked her left ski tip and heard a pop in her left knee. She packed the knee with snow and continued to descend with the three other members of her expedition. Around 1000 Landolt arrived at the NPS medical tent at 14,200 feet. Dr. Christian Bannwest, an orthopedic surgeon from Switzerland, assisted her to the tent where he, with VIP medical professionals Dan Cosgrove and Bob Mayer, examined her. Dr. Bannwest determined that Landolt had suffered a tear of her medial collateral ligament and/or her anterior cruciate ligament. Medical personnel considered an evacuation necessary because of the instability and inflammation in her knee.

Cloudy weather and a low-pressure system delayed an air evacuation until May 26. On May 26 at 2000 the NPS Lama helicopter landed at 14,200 camp to fly Landolt to the 7,200 basecamp. At basecamp Landolt was flown to Talkeetna by air taxi. In Talkeetna she stayed the night at the Swiss Alaska Inn, then departed for Anchorage and eventually Switzerland the next day on May 27. A letter of thanks to all involved was received by Ranger Metcalfe on