The velocity of the winds increased, knocking people down, tearing out the fixed line, and causing the group to fall about 60 meters down the slope. One man was literally airborne from the gusts. Due to the intensity of the wind, the group was forced to dig in and bivouac where they landed. Greg Kemp (44), a member of the second rope team, spent the night with his feet braced in the show, his arm around his anchored ax, and his right hand clutching his rope. Kemp was wearing thinsulate-lined, leather-palmed, Gortex ski gloves. He said that his gloves usually became wet during the day, but that he dried them at night. His gloves were wet when the winds struck so he had no opportunity to change or dry them during the forced bivouac.

The winds had subsided by the next morning and the party regrouped to discover that Greg Kemp had suffered third degree frostbite distal from the second knuckle on the four fingers of his right hand and that two packs had been lost during the winds. (The two packs at the high cache were presumed to have endured the storm.)

The group descended to meet the Chicago Mountaineering Club, who were equipped with a radio-telephone. Billings then called Park Headquarters at 1130 to request an evacuation for Paul and Greg Kemp.

The party was told to move from the reporting elevation on Karsten's Ridge down to 3250 meters on the Muldrow Glacier and prepare for a helicopter evacuation. An Alaska Helicopter Bell 205 with pilot John Hodges and Ranger Dave Litchte left Park Headquarters at at 1430. A K2 Aviation Cessna 1895 piloted by Jim Okonek flew lookout for the mission. The Kemps were picked up at 1630 and returned to Park Headquarters. The rescue was hampered by deteriorating weather conditions and turbulent mountain winds. (Source: Dave Lichte, Ranger, Denali National Park)

## **Analysis**

Frostbite of the hands is nearly always preventable, since the hands can easily be placed in the groin, axilla, or on the abdomen and kept warm in that way. Clothing in this case was inadequate. Mittens should always be available to change into if starting off with gloves. A prusik on the rope would have allowed him to take his hand off the rope and keep it warm. (Terminology for frostbite should be uniform, and described as superficial or deep; and thawed, partially-thawed, or still frozen.) In my opinion, frostbite of the fingertips is a non life-threatening condition and does not warrant an emergency helicopter evacuation. (Source: Dr. Peter Hackett, Denali Medical Research Group)

## SLIP ON SNOW/ICE, INADEQUATE FOOTWEAR, POOR POSITION Alaska, Mount McKinley

On May 3, 1985, the four member party called "The 43rd TFS" flew into the Kahiltna Glacier for an attempt on the West Rib of Mt. McKinley. By May 8, they were camped near the base of the West Rib Couloir on the Northeast Fork of the Kahiltna. On May 10 they ascended the couloir to the ice dome at 3900 meters. On May 11, they continued 4400 meters on the ridge, where everyone felt good and acclimatized. On May 12 they ascended to 4900 meters. Difficulty was encountered on both the ice and rocks, with poor ice slowing down anchor placements. They arrived at a suitable camp site at 2000 where they immediately leveled out a site among the rocks and ice for two tents. All the members were tired but apparently were not affected by the altitude.

At 2030 Marc Williams (26), having taken off his crampons but still wearing his "Minus Forty" overboots, was at the task of placing a picket for a tent anchor among the rocks

below the tent. While kneeling down and driving the picket with an ice hammer, he lost his footing and slipped. Monte Fryt (34) heard Williams call out as he began to slide. Williams slid down the 35 degree ice slope on his left side and it appeared that he attempted to selfarrest with a hammer. About 50 meters down, Williams dropped his hammer and attempted to grab onto a band of rocks. He was observed severely hitting his head on the rocks. He continued to fall another 300 meters to the 4500 meter level on the West Rib. Mitchell Fryt (28) was lowered to the rocks where he thought he could observe the still shape of Williams on the slope below. At that time Fryt felt Williams had fallen over 600 meters. The fourth member, Dan Sullivan (24), made a call out on their CB radio where he reached Kahiltna Base Camp who relayed the accident to the Talkeetna Ranger Station at 2035. At 2040, Doug Geeting of Geeting Aviation was contacted, having just returned from Mt. McKinley with Rangers Roger Robinson and Bob Seibert. At 2105 Rangers Robinson and Seibert flew to the accident site with Geeting in his Cessna 185. At 2230, Robinson and Seibert observed the apparently lifeless form of Williams. The three remaining members of the party were contacted by Ranger Robinson at 2235. They had decided to stay at their camp that night since they were tired, cold and very much in shock from the accident. When asked whether they could descend to the victim, they felt it would endanger their lives to attempt to lower or retrieve the victim.

Ten overflights of the victim caused the rangers to conclude that Williams had not sur-

On May 13 the remaining three members traversed down to the 4350 meter camp on the West Buttress where they reported in with the Medical Research Group. At 1520 they contacted Ranger Robinson in Talkeetna via radio telephone and reported details of the accident.

On May 14 two acclimatized climbers, Mugs Stump and Terry Schmidt, were flown in to the 4100 meter level of the West Rib. They required two and a half hours to climb up to the victim and lower the body back down to a waiting helicopter. (Source: Roger Robinson, Mountaineering Ranger, Denali National Park)

## FROSTBITE AND FATIGUE, WEATHER Alaska, Mount McKinley

Having been discouraged by over two weeks of bad weather, including four days of being pinned down at the 3350 meter level in a blizzard, four members of a Mountain Rescue Council (MRC) expedition from Washington broke camp on May 18, 1985, and began descending the Kahiltna Glacier. They lost wands in a whiteout and had to bivouac. On May 19, the weather was better, and on their descent to Kahiltna pass, they soon found themselves trading leads with two climbers on snowshoes. In the deep, fresh snow the climbers were breaking in to their knees, and sometimes their thighs in spite of the snowshoes. Both these climbers had incredibly large haul bags, a contrast to the sleds that our party was equipped with. As the descent continued, one of the climbers, Jim Raymond, revealed that he had summited and had frozen his toes on the summit day. When he told Dr. Hackett, he was advised not to let them thaw until he could reach hospitalization. The party pushed on to Kahiltna Base on May 19 with Jim Raymond experiencing increasing pain as his toes began to thaw. He would not give up his haul sack. Finally our party cut it off of him.

Rich Williams took Raymond's haul sack, while Tim Bustanogy shared Rich's sled. About three kilometers short of Mt. Francis, Jim Raymond's partner was down, "Flat out of gas." Raymond, frozen toes and all, took his partner's haul bag and muscled it straight