dome 1,000 feet above Daly and then reverse the system and raise both Daly and the attendant back up. Raising Daly seemed safer than lowering the 2,500 feet to the glacier floor, which would have exposed Daly and the attendant to possible falling rock and ice. Also, the two ropes would have run the risk of being cut because of the many edge protection devices required to cover the numerous steps down the couloir. Other options discussed were to climb from the bottom, fixing the couloir up to Daly and lowering Daly back down the couloir. This rescue scenario seemed feasible at first because it was not dependent on aircraft or weather conditions. The dilemma was the 2,500-foot couloir had many objective hazards that would have put the rescuers at an unjustified risk for a substantial period of time. The last option was climbing to the top of Thunder Mountain via a ridge system and lowering an attendant to Daly and attempt to raise both persons back to the top. All these options were discussed and evaluated regarding risk assessment and saving Daly's life.

Without the remarkable flying ability, spotter assistance inside the helicopter, and a courageous short hauler, Daly's chances were dismal. All the rescue personnel, including the incident command system in Talkeetna and medical staff on scene, were key elements contributing to Daly's surviving this accident. Daly's positive attitude and will to live contributed to his survival.

One final note: Several hours after this remarkable short haul rescue, the weather in the Alaska range shut down for almost one week. (Source: Daryl R. Miller, Mountaineering Ranger)

## FATIGUE, DEHYDRATION, FROSTBITE, CLIMBING ALONE Alaska, Mount McKinley, West Buttress

Tomoyasu Ishikawa (30) began his solo ascent of Mount McKinley from the Kahiltna Glacier on May 19. He arrived at the 14,200-foot camp on the 21st where he planned to climb the Messner Couloir. On May 24 at 1100, he started his ascent of the couloir. He reached the top of the couloir at 1500 where he encountered strong winds and whiteout conditions. From the top of the couloir at 19,200 feet, Ishikawa decided to bivouac. With no stove or sleeping bag, he wrapped himself in a tarp, using hand warmers for supplemental heat. He remained at this site until 1330 on the 25th, and then he continued toward the summit.

At 1600 Ishikawa was attempting to photograph on the summit ridge when he noticed that he had frostbitten fingers. The frostbite caused him alarm, so he decided to descend the West Buttress. At 1900 he reached the 17,200-foot camp. At 1915 Toby Grohne of the "Alley Cats" party radioed to the 14,200-foot Ranger Station that they were providing aid to Ishikawa. Ranger Roger Robinson of the 14,200-foot camp had Grohne search out a mountain guide in the 17,200-foot camp. At 1935, guide Weslie Bunch of Mountain Trip Guide Service reported that Ishikawa was exhausted with frostbitten fingers and nose but would not need a rescue. Robinson advised Bunch of the emergency gear in the cache including tent, sleeping bag, and pads. At 2004 Bunch informed Robinson that they had placed Ishikawa with Mike and Norm Johnson of "AK"

UT Mountain Sickness" expedition. The Johnsons began hydrating Ishikawa, as his only fluid consumption had been one liter that he drank on the 24th. By the morning on the 26th, Ishikawa felt stronger. At 1300 the Johnsons reported that Ishikawa would be descending with the five-member "Korean 99" party to 16,200 feet. Robinson arranged for his patrol to assist Ishikawa down the fixed lines. At 1434 patrol members DJ Nechrony and Rod Willard met Ishikawa on the fixed lines and began lowering him. Robinson, VIP Joel Geisendorfer, and PJ John Loomis, along with Nechrony and Willard, assisted Ishikawa back to the 14,200-foot camp, arriving at 1645.

VIP Dr. Bob Desiderio and Willard treated Ishikawa. He had frostbite on the middle three fingers of his right hand and the last three fingers of his left hand. He also suffered frostbite on his nose with minor cold injuries to his toes. Robinson felt that Ishikawa should be evacuated from the 14,200-foot camp due to the limited use of his hands and the fact that he was solo climbing.

Poor weather prevented his evacuation until the 31st. At 1005 the LAMA helicopter was able to land at 14,200 feet. Ishikawa was flown to the Kahiltna basecamp where he was transferred to a Talkeetna Air Taxi fixed wing aircraft and flown out to Talkeetna and transported by a shuttle service to Providence Hospital where he was admitted in the evening of the 31st.

## **Analysis**

Here is a good example of a solo climber relying on the assistance of others. Without this help, Tomoyasu Ishikawa may well have suffered further injury. A solo climber in trouble will add to the burden of private climbers and rescuers where the situation may only be an inconvenience when climbers are climbing in a group. (Source: Roger Robinson, Mountaineering Ranger)

## INADEQUATE FOOD AND WATER, CLIMBING ALONE Alaska, Mount McKinley, West Buttress

Shigeo Tamoi (33) began his solo climb of Mount McKinley's West Buttress on May 28. He ascended to the 14,200-foot camp in three days and then he acclimatized for three more days. On June 3 at 0700 Tamoi attempted a oneday ascent from the 14,200-foot camp carrying no survival gear, minimum clothing, and one liter of water. He was reported to have reached the summit in the evening and then descended to the 19,500-foot level (Football Field) where he collapsed on the trail. The temperature was approximately 25°F and the wind was 10 mph. Michal Krissak of the "Slovak Expedition 99" was also soloing down from the summit when he noticed a group of five climbers standing around Tamoi. As he approached on the trail, the five climbers left Tamoi behind and continued their descent. Krissak encountered Tamoi at 2100 lying face down, semi-conscious. Initially Krissak was unable to arouse Tamoi, but eventually Tamoi said he was thirsty and wanted to sleep. Krissak knew the situation for Tamoi was life threatening in the bitter cold if he didn't try to get him down. Krissak was able to lift Tamoi to his feet and support him under his shoulder. They had walked a short distance when three other descending climbers approached them. The three were unwilling to assist Krissak. He argued