

the person was indeed Ball and that he was conscious but severely hypothermic and had an open fracture of the left tibia and fibula. Parks reported that there was a possible landing zone for the helicopter 40 feet up slope from Ball. At 1351 the LAMA was en route directly to 17,200 feet. At 1407 the ground team received directions to administer a dose of Decadron via injection. Pilot Jim Hood inspected the site at 1450 and determined that there was too much of a slope for a landing, so he passed off a supply of batteries and descended to basecamp to receive a new plan. Over the following two hours the weather was unsettled. The ground team began lowering Ball toward the camp at 17,200 feet. At 1600 the LAMA launched from basecamp with the Bauman bag and a backboard connected to the end of the short haul rope. At 1620 the cargo was delivered to the rescuers at 17,700 feet and the LAMA returned to basecamp. Based on the power checks that Hood made when delivering the Bauman bag it was determined that a short haul would be performed to extract Ball before the weather deteriorated further. At 1645 the LAMA lifted off of basecamp with ranger Billy Shott attached to the short haul rope and ascended to 17,700 feet. On scene Shott attached the Bauman Bag to the short haul rope in a tandem configuration and returned to basecamp at 1717. An Air National Guard Pavhawk transported Ball to Providence Medical Center.

### **Analysis**

This unfortunate accident was a classic example of a party overextending themselves and being caught by the temperamental weather on Mount McKinley. Had they set a turnaround time and adhered to it, the rescue may have been avoided. A stove may have allowed them to rehydrate and revitalize their energy once the situation had become serious. All members carried frozen water bottles; hence, they were unable to utilize their water. Also, because of the dehydration, altitude sickness, and exposure to the high wind this team became dysfunctional, precluding any safe descent. They were forced to bivi at 19,500 feet, which was one of many questionable decisions made regarding their safety. Another note is the unfortunate trend among outdoor enthusiasts to rely more heavily on their technological means of communication to call for help in the event of emergency than to be prepared for such an event and remain self sufficient. The combination of dehydration, fatigue, and cold were nearly lethal for this team. (Source: Joe Reichert, Mountaineering Ranger) *(Editor's Note: Jack Tackle's observation of the ascent indicated that the party was certainly not acclimatized to do a summit bid starting from 15,400 feet. Their ascent rate was about 250 feet per hour, by his calculations.)*

## **FALLING ICE, FALL ON ICE, ICE SCREW FAILED**

### **Alaska, Thunder Mountain**

On May 12 Malcolm Daly (43) and Jim Donini (57) of Boulder, Colorado flew onto the Tokositna Glacier at 7,500 feet to attempt a new route on Mount Hunter (14,573 feet). The Colorado team spotted a potential route on Thunder Mountain (10,970 feet)—a satellite of Mount Hunter—which has a short approach from the airstrip. Daly and Donini started climbing a couloir con-

taining mixed ice, snow, and rock, with a technical difficulty that included some Grade 6 ice steps. The Colorado team spent the next several days climbing up the couloir and returning to their basecamp each night. During the next several days Daly and Donini experienced several problems on the Thunder Mountain route. Donini had crampon points fail, and Daly was hit with a chunk of ice or rock that numbed his arm requiring them to return to basecamp.

On May 21st at 0300, Daly and Donini continued their climb in the couloir reaching the high point at approximately 2,500 feet above the glacier. At 1030, Daly, who was leading the pitch believes he was hit with a chunk of snow or ice that knocked him off the route. Donini was able to hold the fall even though he was struck by Daly's crampons. Daly was knocked unconscious, but regained consciousness shortly thereafter and was able to talk to Donini. The one piece of protection that failed during the fall was a short ice screw 15 feet below Daly. Daly had put several ice screws on a vertical pillar 70 feet below and then climbed a lower-angle snow ramp to the vertical section on which he fell. After the fall Donini rigged an ice ax as a splint and wrapped tape around Daly's boots in an effort to stabilize both his legs. Donini lowered Daly approximately 200 feet, but then decided that without air splints or some other means of stabilizing Daly's open fractures he might bleed to death or go into shock. They both decided the best choice was for Donini to descend to get help. Donini was able to rappel some of the route and down-climbed the lower section. Paul Roderick of Talkeetna Air Taxi who was flying over the site at the time spotted Donini and landed. Donini and Roderick departed the Tokositna Glacier at 1800 and flew to Talkeetna. During the flight Roderick called via his cell phone and reported the incident to the Ranger Station. Donini was treated at the Ranger Station and later was driven to the Sunshine Clinic and treated for his puncture wound.

At 1947, South District staff were notified of the incident and asked to return to the Ranger Station. The Chief Ranger, RCC, Air National Guard, Hudson Air Service, and the NPS LAMA were also called and briefed of the incident. The NPS LAMA helicopter attempted to fly with mountaineering rangers Billy Shott, George Beilstein, and Daryl Miller to Thunder Mountain incident site. Minutes before lift off, Talkeetna Air Taxi owner Paul Roderick arrived at the NPS Helicopter pad advising the LAMA pilot Karl Cotton that the weather had shut down in the range.

On May 22 at 0820, the NPS LAMA lifted off with mountaineering rangers Miller, Shott, and Beilstein aboard en route to the Thunder Mountain accident site. The Rescue Coordination Center launched an Air National Guard Pavhawk helicopter with three PJs aboard and a C 130 for weather and communication support. The Denali South District Incident Command Center also used a Cessna 206 from Hudson Air Service for a weather observation aircraft.

The LAMA landed at 0905 on the Tokositna Glacier at the base of Thunder Mountain. Rescue gear was unloaded and the LAMA flew to the accident site and attempted a power check above Daly. The clouds moved in and out, ob-

scuring the view around the site and cliffs above. After several minutes, LAMA pilot Jim Hood stated that a short haul would not be possible due to the present weather conditions, as well as the possibility of falling debris and the extreme danger of the LAMA's rotors being too close to the mountain. Another site approximately 1,000 feet above Daly was considered for a lowering/raising possibility. The snow dome was not large enough to safely land the LAMA, but the site did offer short haul possibilities. The dome appeared sufficient in size to short haul two persons at a time and large enough for eight rescuers total to work. The team would bring rescue gear, ropes, and bivy gear, along with food for four to five days in case inclement weather prevented the LAMA from flying.

At 0950, the Air National Guard Pavhawk landed at the Tokositna Glacier site with three PJs. The PJs unloaded medical supplies and rescue gear and set up a basecamp including a large tent that could be used to treat Daly's injuries. Clouds had obscured the accident site, and only part of Thunder Mountain was visible. Daryl Miller and LAMA pilot Karl Cotton departed the Tokositna Glacier for Talkeetna at 1100. Present weather conditions prevented any SAR activities requiring aviation support at the accident site. Miller debriefed Donini regarding the accident including route conditions and Daly's mental/physical condition. Donini stated that Daly was in a "positive" mental state when he left him. Donini stated that he felt both ankles were broken with some bleeding occurring and had cut the boot strings because of the feet swelling. Donini had given Daly extra clothing layers and left him with some food and water. Donini reported that the route was extremely technical in places and had objective hazards with potential rock/ice coming down the couloir at different times. He also had used some of the fixed line left in place to rappel the more technical sections.

Miller and Cotton departed in the LAMA to the Thunder Mountain accident site at 1700 to attempt a site evaluation and power check for the lowering from the dome 1,000 feet above Daly. The weather was extremely cloudy and forced the LAMA to land at the 7,200-foot Kahiltina basecamp. After repeated attempts to fly to the accident site, the LAMA returned to Talkeetna.

On May 23 at 0750, Miller and Cotton flew from Talkeetna to the Thunder Mountain accident site. Weather was clear and stable in the range. En route, Miller and Cotton discussed the possibility of short hauling Daly using a longer rope, doubling the distance to 200 feet. One of the key problems on May 22 in addition to the weather was the 400–500-foot V-shaped cliff side of the couloir, which impaired rotor clearance for the LAMA. The plan was to lower a Ranger below Daly on the snow ramp, then climb to Daly and clip him into the "God Ring." The LAMA had 30 feet or more of rotor clearance from the cliff sides and good light conditions. Cotton felt he could do the mission if he had a spotter aboard to watch for rotor clearance and also to observe the short hauler.

At 0810 the LAMA landed and Cotton talked via radio with the incident command center in Talkeetna to get an OK for the short haul. After the per-

mission was granted, a 100-foot doubled section of short haul rope was cut and tied into the main line. Ranger Billy Shott was selected for the short haul position and Ranger Meg Perdue was selected as the observer inside the LAMA. Cotton, Shott, Perdue, and Miller discussed the mission and agreed that Shott would not unclip at the accident site.

The LAMA lifted off the glacier with Meg Perdue and Shott at the end of the short haul rope. Perdue's mission was to watch Shott, give Cotton information on the area weather and distances from the right cliff sides. On the first attempt to place Shott on the snowfield below Daly, a cloud moved in and Cotton aborted the mission. The cloud moved through the couloir and the LAMA repositioned placing Shott 75 feet below Daly on the 50–60-degree snowfield. Shott lost all radio communication after he landed on the snowfield and had to rely on hand signals. Shott used the LAMA for a belay and climbed to Daly in several minutes. Shott clipped Daly's harness into the "God Ring" with daisy chain and locking carabiner. Shott also put a chest harness on Daly and checked to make sure all the anchors were cut. Shott then gave the LAMA a hand signal indicating they were ready to lift off.

At 0927 the LAMA landed Daly at the LZ on the glacier airstrip, and personnel lowered him into a stretcher. Daly was immediately transferred into a medical tent where his fractures were splinted and a secondary survey completed. A Life Flight helicopter landed at the site, and Daly was loaded and transported to Providence Hospital in Anchorage.

### **Analysis**

This was a complicated high-risk rescue that involved a multi-agency team which became a high profile event with the media. Daly and Donini were extremely experienced and competent mountaineers who had planned Mount Hunter as their primary climb and Mount Thunder as a pre-climb. Donini had previously climbed many Alaskan alpine technical routes. Between the two of them there was a wealth of mountaineering knowledge. They both were physically fit allowing them to climb fast on alpine routes, which demanded minimal time on certain sections.

They were also extremely cautious in climbing this particular route at the right time of day, which generally was during the cold. Daly believes that prior to his fall he was in a solid stance, but remembers the integrity of the ice was questionable but nothing else regarding the event that caused the fall. With only one piece (ice screw) 15 feet below him, questionable ice, and no protection for the next 70 feet, he was at high risk if he fell. An additional piece of protection may have reduced the severity of the fall. Daly estimated initially he fell about 140 feet, but after they looked at pictures, they concluded it was approximately 200 feet. Donini's remarkable descent for help and the timing of Paul Roderick flying over were key elements in Daly surviving this event. The rescue scenarios without short hauling were extremely complicated and risky to the rescuers and Daly. After the initial assessment of pilot Jim Hood regarding a "no go" for the short haul, the rescue team looked at other strategies. The first option was to lower an attendant and litter from an ice/snow

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