

ditions present on the top of the mountain (as well as not having sleeping bags). In a worst case scenario, fuel would have become exhausted five to six days into the climb, well after both climbers would have been high on the route and in a position where retreat would have been more difficult. In addition, the climbers had pre-positioned a cache at the 14,200-foot camp that was found on May 18 by Giri-Giri #2 with supplies undisturbed. The Giri-Giri#1 team also found the Giri-Giri#2 sleeping bags at the 7,800-foot camp in their tent, suggesting that their situation was even worse and significantly lessens the probability of survival.

4. Continuing a high intensity search operation with multiple high-altitude sorties in the absence of any tangible clues as to the general whereabouts of the two climbers exposes rescue personnel to unwarranted risks. Multiple areas of the mountain have been searched by many different aerial resources without success. In addition, the poor prognosis of survival, coupled with the cold temperatures experienced during this period, further justifies that operations be scaled back.

5. The aerial search for live persons was officially suspended on May 30. If the bodies of Yuto Inoue and Tatsuro Yamada are discovered, a risk assessment will be conducted before an attempt is made to remove them. Limited search operations should be carried out only if by further examination significant clues are found either by digital photographs or by aviation methods, but only during a period of clear and calm weather.

Analysis

The known facts make it difficult to comprehend how, after completing the difficult traverse of the Kahiltna Peaks and climbing the most difficult portions of the Cassin, these two talented climbers would run into difficulty on a considerably less technically demanding section of the route. Early May in the Alaska Range is no doubt cold; however, there were not any known significant weather systems that caused problems for any other climbing expeditions high on the mountain in this timeframe.

Though there are many different strategies and styles climbers can employ to undertake the more technically demanding routes, it is critical that all parties carefully consider what equipment can be left behind and what equipment is critical for sustaining the needed strength and stamina for the technically demanding, high altitude, arctic routes of the Alaska Range. (Source: John D. Leonard and Daryl Miller, Rangers, Denali National Park)

FALL ON ROCK, CLIMBING ALONE

Alaska, Mount McKinley, West Buttress

Claude Ratté was a member of the Quebecoise 2008 Expedition, which consisted of two party members out of Quebec. Richard Cadorette, the

second team member, had left the expedition approximately a week before Ratté's accident due to team dynamic issues that could not be worked out at 14,200 feet. As a result, Ratté continued his climb above 14,200 feet as a solo climber.

At 1159, June 3rd, Ranger Roger Robinson received a call at the Talk-ee-na Ranger Station from DENA dispatch placed by Claude Ratté from his SAT phone. Ratté said he had fallen off the ridge between 16,200 and 17,200 feet, was not sure of his exact location, and was in his sleeping bag with injuries to his left eye and left ankle.

Ranger Brandon Latham and Dan Escalante (Latham's VIP), stationed at 17,200 feet, received a radio call regarding the incident, then packed and hired the necessary resources for a hasty search down the ridge. Kevin Koprak, a guide with Mountain Trip, was hired as the technical team leader and immediately assembled a team consisting of Brent Okita (Rainer Mountaineering Inc.), Josh O'Halloran (Rainer Mountaineering Inc.), Bill Billmeier (Mountain Trip) and Ted Reckas (private party member). Latham chose Koprak as the Team Leader due to his experience as a Rigging for Rescue instructor and Denali guide. This allowed Latham to focus more on the overall logistics of the operation.

At 1233, Ratté called back to Talk-ee-na stating he could see the ridge from his location, but was still unsure about where he had fallen from.

Latham prepared equipment from the 17,200-foot cache needed for a long, low angle raising operation, which included one 185m, 9.8mm low stretch rope; two 60m, 9.8mm low stretch ropes; pickets; rock protection (in case the patient was in the rocks below Washburn's Thumb); Sked; anchoring material; tent; stove; food; sleeping bag; and an assortment of medical supplies, including oxygen.

Latham and Escalante (hasty team) went down the ridge to confirm Ratté's location and situation (1255). At this time, Ranger Latham had not received any further information on the location of the patient and had planned on trying to initiate a verbal response through shouting out the patient's name while descending the ridge.

At 1320, Ratté called Talk-ee-na Ranger Station. The general impression was that he was sounding panicky. He said he felt he may expire in his sleeping bag. He stated he reached the top of the fixed lines and fell to the other side. Latham proceeded down the ridge continuing to shout in hopes for a verbal response upon receiving this new information.

Latham and Escalante arrived at the top of a slope approximately 60 meters above 16,400 feet and received a verbal response to shouts and also had a visual on what was thought to be Ratté's location. Visibility was poor, but Latham was confident they had an idea of Ratté's location and continued

to descend to the top of the fixed lines. Meanwhile, Ranger Shain briefed his team at 14,200 feet.

Latham and Koprek's team met at the top of fixed lines to discuss strategies for descending to Ratté's location on Peter's Glacier and conduct a raising operation to the top of the fixed lines. Potential objective hazards were identified and discussed, which included bergschrunds, avalanche hazard, and weather conditions.

At 1354, two teams, led by Latham and Koprek, traveled on 60-meter low stretch ropes with Latham leading down placing pickets for protection. The 600-foot low stretch rope was deployed approximately half way down in order to identify the location for a midway raising station. On the descent, the team encountered two bergschrunds. The first had a three to four foot span, which was relatively easy to navigate through. The second was approximately six to eight feet in height and required a rappel to overcome. The second rope team (Koprek's team) stopped 40 meters above the second bergschrund to establish an anchor in order for Latham, Billmeier, and Escalante to rappel and gain access to the patient. This was accomplished by tying the 600-foot rope and two 200-foot ropes together, which put them in flat terrain 30 feet from Ratté.

Latham and Billmeier reached Ratté at 1540. At this time, Station #1 was re-rigged for a raising operation with a rescue-sized load. Ratté was in stable condition with his chief complaint being pain and swelling in his left ankle and facial trauma. Ratté was packaged in a hypothermia wrap to help maintain a warm and dry environment during transport. Frostbite and increased inter-cranial pressure due to head injuries were two major concerns due to the prolonged exposure to the cold and the lack of movement in the extremities.

The raising operation at station #1 began at 1640. The terrain for the raise ranged from 30-50 degrees and included the two bergschrunds. The patient was switched over from the midway station to the top station. Ratté was then evacuated to the Ranger Camp at 14,200 feet where he was flown out via helicopter to Talkeetna the next day, then transferred to Life Flight to be taken to Anchorage. (Source: Daryl Miller, Ranger, Denali National Park)

(Editors Note: Maureen McLaughlin, Information Officer, stated the following: From the time of the initial distress call, the entire ground rescue operation took ten-and-a-half hours and involved 14 ground rescuers, including mountaineering rangers, NPS volunteers, mountain guides, and independent climbers. Denali mountaineering staff estimates there have been at least ten significant climbing falls onto the Peters Glacier, including three separate fatalities in 1998. The technical rope rescue of Ratté involves the longest raising operation in Denali mountaineering history.)

FALL ON ROCK, UNSAFE POSITION, FATIGUE

Alaska, Skagway, Black Lake

On June 14, Karl (28) was climbing an unnamed, single-pitch sport route rated at 5.9 near Skagway. Just below the top of the route, he had clipped into the final bolt and was preparing to climb through the crux, where the final bolt was just to the right and above the climber, while the second-last bolt was below and to the left. The crux involved beginning just below a small overhang where the climber under-clings, before climbing above the bolt. Due to the varied surface of this rock, it is natural to place the rope behind one's legs when passing through the crux.

When Karl passed the bolt, he found the natural line to the left of the bolt. The result was that his rope went to the right to the final anchor and back to the left to the second-to-last anchor. At this point, the rope was taut and directly below, passing at 45 degree angle between the anchors. Karl was approximately 1.5 above his final point of protection and three meters above the rope passing between the two anchors.

When Karl fell at the crux, his legs were caught in the rope passing between the anchors, causing him to be thrown upside down. While undesirable, this in itself did not result in any injury. Karl was injured when his foot, caught on the rope, smashed upwards into the overhang.

Karl was lowered to the ground and evacuated to a health centre in Skagway, some 5 km away. He was later diagnosed with a fracture of the left talus.

Analysis

Karl had noticed from the ground that a previous climber was forced to attempt the crux with the rope behind her legs. He noted that this was undesirable and potentially dangerous. While at the crux this was confirmed. When Karl arrived at the crux, he was fatigued and did not feel especially strong. Rather than retreating, he attempted the crux knowing he could very well fall and knowing that a fall would be dangerous given the position of the anchors.

The climber should have evaluated his fitness, the configuration of the anchors, and the potential for injury and decided that this move should not have been attempted. Alternatively, Karl could have made a concerted effort to avoid the rope below him while falling. He could have also attempted a different line above the final anchor such that a fall would have avoided the rope. (Source: From a report sent in by Karl)

FALL INTO BERGSCHRUND, FROSTBITE, WEATHER

Alaska, Mount McKinley, West Buttress

On the morning of June 16th, climbers woke to clear skies and calm winds at 17,200-foot high camp on the West Buttress. At 0800 as many as three