

only a thermos of hot chocolate. The Japanese traveled without survival gear, so they had no option but to attempt to descend to their supplies at high camp, where they dug a snow cave under their damaged tent site. Nothing was disturbed in the cave, including three unrolled sleeping bags. (Source: Bob Seibert, Mountaineering Ranger, Denali National Park.

FALL ON ICE, AVALANCHES, NO RADIO

Alaska, Mount Johnson

On April 14, 1989, Jim Sweeney (33) and Dave Nyman (31) flew to the base of Mount Dickey to attempt climbs of the Moose's Tooth and the Elevator Shaft, a steep ice couloir on the north side of Mount Johnson in the Ruth Gorge. They established a base camp and began rock climbing on the lower portion of the Moose's Tooth on the "Butterfly Buttress." On the 15th, Sweeney and Nyman continued climbing and encountered bad rock. They decided to attempt the Elevator Shaft on Mount Johnson rather than continue their climb of the Moose's Tooth.

On the 17th, after waiting out a day of bad weather, Sweeney and Nyman skied to Mount Johnson to look at the route and check avalanche conditions. They spent the night at their base camp near Mount Dickey. On the 18th, they skied to the base of Mount Johnson with packs and sleds. They climbed above the icefall on the north side of Mount Johnson and bivied 200 meters up at the base of the wall.

On May 19, they got up at 0500, left their down gear at their bivy site and proceeded to the base of the Elevator Shaft. They arrived there at 0730 and waited until the sun left the face above. They climbed the first three pitches in less than an hour. Sweeney started leading the fourth pitch and placed a picket ten meters up. About 15–16 meters above the belay, Sweeney encountered a difficult section and looked around the area of an ice "window" for any possibilities. He grabbed under the window and leaned out. When he did so, the entire formation on which he was climbing suddenly collapsed. This formation of weak snow and ice was three to four meters wide, ten-meters high and two meters thick. Nyman's anchor, to the side of the couloir, consisted of a screw, a picket and two tools. Everything except one tool held during Sweeney's 30 meter-fall and the ensuing avalanche.

Nyman tied Sweeney off and descended to him. Sweeney lay upside down, unconscious, with a crack in his helmet. He was bleeding from his mouth and nose. When Nyman touched him, Sweeney regained consciousness, but he was not aware that he had fallen. Sweeney had fractured his right hip. They were both in an area susceptible to avalanches from above, so Nyman began lowering Sweeney to the bottom of a snow cone below the Elevator Shaft. The lowering took about six hours. Nyman dug a trench, elevated Sweeney's feet and insulated him from the snow. Sweeney was alternating between extreme lucidity and hallucinations. Nyman ran back to their previous bivy site and took down bags, stove, liquids, and food back to Sweeney. Before leaving the bivy site, Nyman stamped "SOS" in the snow. They had no radio. Nyman was torn between stabilizing Sweeney's injuries and not moving him, and risking further injury to Sweeney by moving him to areas safer from the paths of avalanches. They spent the night in the trench Nyman had dug. They zippered their bags together for warmth; Sweeney was inside a vapor barrier liner inside the bags.

A large avalanche hit Sweeney and Nyman just before dawn on the 20th. Afterwards, Nyman dragged Sweeney about 60 meters further downhill on a 30 degree slope, up

valley and out of the avalanche chute of the Elevator Shaft. At 0930 he left Sweeney to try to get help from up the Ruth Glacier at the Mountain House, a small, permanent structure northwest of Mount Barrille above the glacier's airstrip. He stamped two "SOS"s in the snow at the base of Mount Johnson. Nyman continued on to their base camp at the base of Mount Dickey, arriving at 1230. He stamped an SOS, wrote a note on athletic tape and left it on the tent. ("Severely injured climber. Location: on north side of Mount Johnson. Helicopter evacuation with medic recommended. Am skiing to Ruth Mountain House for help.")

The weather was sunny and warm and Nyman experienced a lot of snow buildup on his skins. He reached the Mountain House at 1600. He was met by four skiers, but they also did not have a radio. The two strongest members of the party, Ron Antaya and Jay Allen, skied down to the base of Mount Johnson with a dry sleeping bag, arriving there at 2230. Nyman, exhausted, spent the night at the Mountain House. Neither Antaya nor Allen had crampons, but Nyman had left crampons and two tools at the base of the route. Allen did not feel comfortable ascending the steep terrain to reach Sweeney; Allen was an inexperienced climber. Antaya and Allen reported avalanche activity above the glacier and felt it was unwise for Antaya to go up the avalanche-prone slopes alone. They felt there was nothing they could do, so they skied back to Nyman and Sweeney's camp at the base of Mount Dickey, arriving there at 0100 on the 21st.

Nyman left the Mountain House with two skiers, Joyce Mucha and Doug Simpson. Mucha and Simpson were inexperienced in glacier travel, so Nyman briefed them on crevasse rescue before they went down the Ruth Glacier toward Mount Johnson. As they rounded the corner of Mount Barrille at 0900, they met Antaya and Allen skiing up toward them. Nyman asked for a volunteer to assist him in lowering Sweeney, but all declined. The group gave Nyman a large sleeping bag, aspirin, fuel, candy bars and a small backpack. Antaya and Allen returned to the Mountain House. Mucha and Simpson accompanied Nyman for another 20 minutes, then returned to Mountain House, leaving Nyman to solo through the crevasses to Mount Johnson. He returned to the camp at Mount Dickey at 0945. Nyman took one of the tents (a VE-25) from this camp, a small down sleeping bag, food for six days and one liter of fuel and returned to the base of Mount Johnson by 1115. Inside the other tent he put the message requesting help (after tearing off the part about going to the Mountain House).

Nyman climbed up to Sweeney at 1430. Just before arriving, he heard Sweeney yelling, "I'm being buried!" as another avalanche buried the immobile Sweeney up to his waist after carrying him ten to 15 meters. Nyman dug Sweeney out and set up the tent at the base of the snow cone below the debris. Nyman got Sweeney into dry clothes, a dry bag and dragged him 60 meters into the tent. This site was behind a large ice chunk that split the two avalanche paths and seemed safer than the previous location.

April 22 was a rest day for Sweeney and Nyman. Nyman moved the tent further north from the Elevator Shaft deposition zone to the north side of the valley. They heard a plane overhead and thought it was their pilot (Jim Okonek of K2 Aviation).

Unknown to Nyman and Sweeney, this plane was not Okonek's but was a Supercub piloted by Mark Niver with two passengers on board. Niver, his wife, and a friend of theirs had planned to have a picnic on the Ruth Glacier, but decided not to land when they encountered flat lighting conditions. As they neared the landing site, they saw "HELP" stamped in the snow and people frantically waving their ski poles. Niver reconsidered, attempted to land and crashed the plane. Niver's two passengers sustained minor injuries. All three were cared for by the skiers who had ample food,

fuel and warm clothing. Niver manually tripped the plane's ELT. The Rescue Coordination Center at Elmendorf Air Force Base (RCC) picked up the ELT "hits" around the Ruth area that evening. In the Ruth Glacier area it began to snow. Deteriorating weather conditions prevented flying from Talkeetna to check on the plane's location.

On the 23rd at 0430 a large avalanche completely buried Nyman and Sweeney. Their tent was buried and the poles were broken. They were able to dig themselves out, but they had lost their ropes, most of their climbing gear, backpack and most of their extra clothing. Nyman dragged Sweeney and the remains of the tent past the snow cone debris and they spent the rest of the day and that night there.

RCC notified the Talkeetna Ranger Station at 0610 of the overdue plane and the ELT hits in the Ruth Glacier area. Bob Siebert began coordinating the rescue mission and at the request of NPS, RCC sent an H-3 helicopter with two PJs and crew to Talkeetna. Weather was still not flyable in the Ruth.

On April 24 at 1000, another avalanche came, this one completely burying Sweeney and burying Nyman to his chest. Nyman dug Sweeney out, but they lost one of their good sleeping bags. Nyman moved Sweeney to a somewhat more protected site below a bergschrund, tunneled a hole in the cone of snow there and moved the tent and Sweeney to this spot.

At 1440, Niver transmitted a message from the Mountain House on his aircraft radio to a commercial plane that there were seven people in the Mountain House and that one climber had injuries. The climber's location and the extent of injury was not relayed.

At 2015, a message was relayed that a climber on Mount Johnson had a broken hip or broken femur. Seibert contacted Gary Bocarde, Charlie Sassara and Brian Okonek for information on the Elevator Shaft and vicinity of Mount Johnson. High altitude military aircraft (C-130s) were requested to facilitate communications with the party at the Mountain House during the next day's check-ins. Weather was still not flyable in the Ruth.

At 0100 on the 25th, Sweeney and Nyman heard a rumbling outside. The 100-meter avalanche slope above their camp slid and both were carried, wrapped up in their tent, about 30 meters. A major air blast from the avalanche had hit them, with accompanying debris. The tent floor was ripped out. Nyman dug a hole in the snow and with one bag and pad between them, they spent the next few hours. At first light (0430) they left all but the stove and 1 1/2 freeze-dried dinners and resumed their descent. Nyman put Sweeney in a bag on a Thermarest pad in a bivy sack and dragged him, retracing their original ascent route. Due to heavy snowfall, Nyman had to shovel a trench for 30 meters, pack it out, drag Sweeney to the end of the trench and then repeat the process. If he dug a longer trench, the spindrift would fill it in. Nyman succeeded in getting Sweeney across the 45-degree slope to their flat bivy site by 1745. As they continued their descent, they were hit by another avalanche that buried Sweeney. Nyman dug him out. Further on, Nyman was buried by yet another avalanche. His head was downhill, but he was able to hold onto the shovel and got himself out. He moved Sweeney to a series of snow and ice "spines," relatively protected areas along the slope, as he continued to cut his way to the entry ramp they had used on the ascent to gain access to the route from the Ruth Glacier. Nyman heard planes far overhead and felt these were triggering the avalanches upon them. Nyman dug a crooked downhill hole and both he and Sweeney spent the night inside one bag with a Gortex bivy bag inside the sleeping bag for added warmth. They got to bed about midnight.

Through the C-130's relay of messages, NPS communicated to the group at the Mountain House whose radio batteries were weak. Questions were framed in such a way that squelch breaks for "yes" or "no" could be used for responses.

Seibert asked Nick Parker, a local guide, to come to Talkeetna the next day with Charlie Sassara's slides of the Elevator Shaft area. Weather was still not flyable on the Ruth.

On the morning of the 26th, Nyman continued to cut a path toward the ramp leading to the main glacier. He later said he felt he was cutting a lower bond of the snowpack when he was cutting this trench. About two-thirds of the way across the final slope, the slope released and Nyman and Sweeney were carried over the lip of a crevasse and ten meters down inside. They both landed on debris within the crevasse with Nyman looking into a dark, gaping hole below him. He got to where Sweeney had landed and Nyman found a ramp that led out of the crevasse. Sweeney crawled using only his arms to help get himself up the ramp and out of the crevasse. After getting out of the crevasse, Nyman lowered Sweeney, eventually losing control and "tobogganing" together down the 25–50 degree slope leading to the Ruth Glacier. They got to the valley floor by 1130. Nyman moved Sweeney far from the face. The weather did not begin clearing until late afternoon.

At 0700 that morning, Jim Okonek (K2 Aviation) had flown toward the Ruth, and could see clearly as far as the icefall but not into the gorge. Weather improved somewhat by mid-morning. Chinook helicopters from Ft. Wainwright, in Talkeetna for high altitude flight training, flew Ranger Jim Litch and SCA Peter Fielding onto the Ruth Glacier at the 950 meter level at 1235 to assist with weather information. Charlie Sassara's slides of the Elevator Shaft area gave a good picture of the scene and the possibilities for a helicopter rescue. Several scenarios were planned for, involving hoisting or a fixed line fly-away with the ship. Weather did not improve until 1800. The H-3 helicopter flew to Mount Johnson with Nick Parker, guide and avalanche expert, on board. They found Sweeney and Nyman on the glacier at the base of Mount Johnson. Nyman was standing; Sweeney was prone. The PJs assessed the two climbers, loaded them into the helicopter and headed to Talkeetna. Meanwhile, the Chinooks picked up all seven people from the Mountain House (four skiers and three people from the plane crash) and transported them to Talkeetna. Sweeney and Nyman were transferred to a Chinook helicopter and flown from Talkeetna to Providence Hospital in Anchorage. Sweeney was admitted and underwent surgery for a fractured hip. Nyman was examined and released, suffering only superficial frostbite on the tip of one finger. (Source: Ralph Moore, Mountaineering Ranger, Denali National Park)

Analysis

The decision not to carry a radio turned a potentially simple rescue into a major life-and-death ordeal for two very experienced climbers. Weather between April 19 and 22 was flyable. Had it not been for a plane visiting the Mountain House area of the Ruth Glacier, there might have been no evacuation of Sweeney until April 29 when the next break in the weather occurred. Radios are recommended for remote and difficult climbs within the Alaska Range. While not completely reliable insurance, a radio can sometimes provide that one means to save a life in the event of a serious accident.

It would have been better for Nyman to lower Sweeney to the Ruth initially, getting both of them out of the high avalanche area as quickly as possible. While this might

have increased the risk of further injury, it is usually best to extricate a victim from a perilous situation as fast as possible before providing more definitive care. There was no way for Nyman to know whether the group at the Ruth had a radio or the experience necessary to assist him in the lowering. By going for help, he left Sweeney alone and immobile in a tenuous position exposed to avalanches.

Nyman and Sweeney did an outstanding job of self-rescue under incredible conditions. Their experience, cool-headed competence, and a strong will to live (and a lot of luck) combined to enable them to safely reach the Ruth Glacier where they were picked up. (Source: Ralph Moore, Mountaineering Ranger, Denali National Park)

HAPE

Alaska, Mount McKinley

On May 9, 1989, Elfi Hallinger (42) a member of a German ski traverse expedition, developed high altitude pulmonary edema (HAPE) at 4300 meters on the West Buttress route of Mount McKinley. After treatment at the Denali Medical Camp, Hallinger descended to the Southeast Fork of the Kahiltna Glacier arriving May 11, after a fixed-wing evacuation from 3000 meters was unsuccessful due to poor visibility. The party descended further to Kahiltna airstrip where a flight out occurred at 1930. (Source: James Litch, Mountaineering Ranger, Denali National Park)

Analysis

The party had taken six days to reach the 4300 meter camp (most parties take from five to seven). Although this is considered a normal ascent rate for this route, a small percentage of climbers may still develop serious altitude illness. In this case, HAPE developed without any early warning signs.

During the evacuation effort, the party continued the descent rather than wait for the weather to improve for the fixed-wing pick-up. The decision to continue the descent reflected party self-sufficiency and an understanding of the importance of not delaying descent with serious altitude illness. This decision may have avoided medical complications, spent time, and expense. (Source: James Litch, Mountaineering Ranger, Denali National Park)

FROSTBITE, INADEQUATE CLOTHING

Alaska, Mount McKinley

On April 28, 1989, the North Ireland Alaskan Expedition left for the West Buttress of Mount McKinley in order to acclimatize for the Cassin. After taking eight days to reach 4300 meters and spending three nights there, they chose to move higher for a summit bid. On May 10, while moving from 5000 to 5200 meters, Philip Holmes (40) noticed very cold hands. Arriving at the 5200 meter camp, he began cutting snow blocks and upon entering his tent noticed many of his fingers were white and completely numb. The next morning he showed the definite signs of frostbite on both the left and the right hands. He descended with partner Stelfox to the Medical Camp.

On May 11, Ian Rea (33) made a solo attempt on the summit and upon return to 4200 meters, he discovered the big toe on his right foot had been frostbitten. Both victims were examined at the Medical Camp and determined to have mild to moderate