

in the day of the 27th, three tents had been either destroyed or completely buried while the fourth remained free of drifting snow. This tent was used by the expedition members to get out of the weather for warmth and hot brew throughout the day.

At 5:00 p.m., Nick Gilman (19) came to Covington in the crevasse and complained of being cold and hypothermic. Covington noticed that he was shivering uncontrollably, that he was not wearing his gaiters or overboots and that his boots were unlaced. Covington repeatedly asked Gilman to put on his gaiters and overboots but Gilman took little notice of these requests, stating that "his overboots and gaiters didn't fit right." Helping Covington in the crevasse, Gilman recovered quickly. That evening, five members, including Gilman, spent the night in the crevasse. Covington noticed that Gilman's boots were full of ice, but when he was asked about his feet, Gilman stated that they were okay.

On the 28th the weather improved; by 4:00 p.m., the party began their descent off the South Buttress down to the east fork of the Kahiltna Glacier. They descended throughout the night, stopping for food and drinks at an 11,000-foot cache. Assistant guide Gall observed that Gilman was concerned about his feet. Gall noticed that Gilman's right foot was very white. Gilman told Gall that his foot was numb but okay. Due to a high potential for avalanches in the area, the party continued their descent. They finally stopped at 9,200 feet, when Steve Combs collapsed from exhaustion at 7:00 p.m. on the 29th. The party had slept only ten hours in a 74-hour period. Camp was established at this 9,200-foot location on the east fork. At 6:00 p.m. Gall mentioned his earlier discussion with Gilman to Covington. Covington immediately checked Gilman and found that the toes on his right foot were all black. Overnight, Covington had Gilman sleep with his foot outside of the sleeping bag. The next morning Covington bandaged Gilman's foot and placed him on a sled for the descent to the landing site. At 11:00 p.m. they arrived at Kahiltna Base, where a doctor from the U.S. Army High Altitude Team, Robert Breffeith, examined Gilman. At midnight he began a thawing treatment of the foot. At 8:00 a.m. on July 1, Gilman was flown out to Talkeetna and admitted to Providence Hospital on July 2. Gilman will lose most of his big toe and portions of the second toe, according to Dr. Dean Rau.

Gilman had mentioned to Covington that he "felt the frostbite occurred during the storm." Covington stated that Gilman acted with little or no concern for his feet during most of the climb, repeatedly ignoring his warnings. Covington stated, "All the other members were subjected to the same conditions with no incidence of frostbite." (Source: Roger Robinson, Mountaineering Ranger, Denali National Park)

### **Analysis**

Following up on the analysis of the previous accident, this situation illustrates that clients cannot be counted on to take care of themselves, even when (a) the guide knows the circumstances and (b) has told the client what to do. Visual inspection of feet and hands, actually dressing the client, and watching food and liquid intake are among the tasks sometimes required in a guiding situation. (Source: J. Williamson)

## **LOST CLIMBERS, BAD WEATHER**

### **Alaska, Mount McKinley**

A three-member mountaineering expedition, the Skin and Bones Expedition, from the Kansei Climbing Club (KCC) of Japan, failed to return from an attempt on the South Face of Mount McKinley. The three members, Makoto Kinoshita (28), Masuaki Ohnishi (35) and

Osamu Ozaki (25) flew to the southeast fork of the Kahiltna Glacier with Hudson Air Service of Talkeetna on June 12. Their plan was to first climb Mount McKinley by the standard West Buttress route and then attempt an alpine-style ascent of the American Direct route on the South Face. The latter route has only been ascended twice and may be the most difficult climb completed on the mountain. They succeeded in climbing the West Buttress route on June 21 when two members reached the summit. The third climbed solo from the high camp at 17,200 feet on June 23 and also summited. The expedition camped with a NPS Patrol led by Ranger David Buchanan at 16,200 feet on June 20. Two KCC climbers pushed to the summit the next day and returned to camp at 17,200 feet—a very long and hard ascent. After the third member summited on June 23, the trio descended that evening to 14,200 feet. In the process, they assisted an American party evacuating a sick climber by carrying down their excess gear. The NPS Patrol felt that the KCC expedition was a very fit group of climbers and was highly motivated to get to the South Face.

On June 30, the KCC climbers were moving up the east fork of the Kahiltna Glacier. They had left an orange dome tent clearly marked with Skin and Bones at the junction of the east fork and the main Kahiltna Glacier at 7,200 feet. (The east fork is the standard approach to the American Direct route on the South Face.) At 9,200 feet on the east fork, they met Fantasy Ridge Guide Service owner Mike Covington descending from an ascent of the South Buttress route with his party. Covington had just endured a very bad storm on the South Buttress during the preceding two days and was aware of the bad snow conditions and avalanche danger during and after a storm. Covington had also previously attempted a variation of the American Direct route. Covington noted the three Japanese climbers were snowshoeing up the east fork leaving wands as they went to mark the trail. He saw that they carried only two packs and a sled and were traveling very light. He felt that the use of wands to mark the route may have indicated that they planned to relay more loads up to the base of the South Face. Covington talked with the three climbers and they told him they planned to do the American Direct. Covington told them they should also consider the South Buttress route which also branched off from the east fork. They seemed to be interested in the possibility. Covington's group was the last to have contact with the KCC expedition.

When the group checked in with the Park Rangers in Talkeetna and on the mountain, they reported that they had a total of 40 days of food for both climbs. A local contact in Anchorage, Jack Kim, reports they had 50 days of food. Another local contact, Ned Lewis, said the group planned to take only 10–14 days of food for the alpine-style ascent of the South Face. He identified the colors of much of their gear and said they had also expressed interest in the Scott-Haston route—a route that leaves the American Direct halfway up the South Face. Lewis had discussed these plans and the timetable with the KCC expedition when they stayed with him in Anchorage prior to their departure for the mountain.

According to weather data compiled at the southeast fork of the Kahiltna Glacier Base Camp by manager Francis Randall, the weather from July 1–3 was climbable on the mountain. Randall maintained radio contact via CB with expeditions on McKinley for most of the period when the KCC expedition was presumed to be attempting the climb. The KCC expedition chose not to carry a radio on either ascent.

Late in the day on July 4, the weather at the higher elevations became worse as a storm moved in. Steady winds and new snow were reported at the 14,200-foot level on the West Buttress on July 5. The high winds, snow, and generally poor weather continued through July 16. On July 9, the 14,200-foot camp reported approximately nine feet of new snow and continuing high winds. Guide Nick Parker of Fantasy Ridge felt avalanche conditions in the area were extreme. During the period from July 4–13, aircraft were unable to reach the

Kahiltna Base Camp—an unusually long period of bad weather. The weather cleared for a few hours late on July 13, allowing aircraft into the base camp, but socked in again that night. The weather on the mountain continued to be very poor through July 21, when the next clearing occurred. By July 22 the weather had deteriorated again.

On July 15, a three-man expedition, the Harvard-Brown Expedition, started up the east fork to begin a climb of the Cassin Ridge. The Cassin is a ridge just northwest of the American Direct and Haston-Scott routes on the South Face. They carried a radio and were aware that the Japanese party might be up the east fork. They found no sign or tracks but were not surprised because of the heavy snow and high wind during the two weeks since they had last been seen. They noticed the orange Skin and Bones tent at the junction as well as two pairs of skis at 9,200 feet on the east fork. Covington had previously reported these skis to NPS personnel. He had seen the skis prior to meeting the Japanese and believed they were left by an earlier party attempting the Cassin. The Japanese were wearing snowshoes.

The NPS Mountaineering Rangers were very concerned during July due to the continuing bad weather, high winds and heavy snow, and the large number of parties all over the mountain. Several had not been heard from and were close to or past their due out dates. A brief search was initiated for overdue parties on the Harper Glacier and upper West Buttress on July 14 but consisted only of a high fly-over by a military C-130 at 23,000 feet. That was the closest they could fly to the mountain and they could observe little due to the heavy cloud cover. The NPS planned a flight around the mountain to check on the status of various groups during the first good weather high on the mountain.

On July 16, Lewis was descending from an unsuccessful attempt on the Cassin Glacier when he passed the Skin and Bones tent on the Kahiltna Glacier. He checked the tent and found one sled, a small pack with personal items and some food. It did not appear that anyone had inhabited the tent recently. Other parties descending during the stormy weather also reported no activity around the tent.

The weather improved enough on the evening of July 17 for Ranger Robinson to make a flight high on the mountain with pilot Doug Geeting of Talkeetna Air Taxi in a Cessna 185. In 1.3 hours of flying, they flew the South Face between 15,500 and 18,000 feet. They checked the West Rib, the Cassin, the South Face routes (American Direct and Haston-Scott) and the South Buttress and found no signs of the KCC expedition. Late that afternoon, several parties, including the Colorado On Top Expedition and an Australian team, had summited and had also not seen any sign of the KCC expedition. The Australians had come up from the Harper Glacier and another party, Towson State, was at 15,000 feet behind them. They had not seen the KCC climbers on the Harper. During most of this period, several parties were in the high camp on the West Buttress—a logical descent route if the KCC made it up the South Face—and no one reported any sign of them. Several parties, including a group from the US Army High Altitude Team, summited during the next good weather on July 21, and no one reported any sign of the KCC expedition high on the mountain.

On July 20 the NPS contract Bell Jet Ranger Helicopter with pilot Bill Roberts was sent to Talkeetna to assist in the search for the KCC expedition which was becoming increasingly overdue. Lewis had come off the mountain on July 21 and reported that the KCC planned only 10–14 days on the route. That afternoon Robinson flew in the Jet Ranger to 13,000 feet on the South Face and covered the east fork extensively. He found no sign of the missing climbers. He landed at the tent at the junction and inventoried the gear and supplies there. The total flight time was two and a half hours.

The weather continued to improve on the afternoon of July 21 and a second flight was

made in the Jet Ranger. Rangers Robinson and Buchanan were aboard. The South Face had cleared considerably and was checked closely from 12,000 to 17,000 feet. Parts of the South Buttress and the Cassin Ridge were also checked. The Harvard-Brown Expedition was easily spotted at 11,500 feet on the Cassin. During the two-hour flight, no sign of the missing climbers was found.

The weather was bad on July 22 and did not improve again until the afternoon of July 23. Robinson made a two-hour flight with Kimball Forrest of K-2 Aviation. They checked the South Face routes closely from 16,000 to 19,000 feet. Around the same time, an OAS Cessna 402 piloted by NPS pilot Roy Sanborn flew over the mountain. Buchanan was on board as an observer. The 402 covered the upper mountain extensively from 15,000 feet up. Neither flight found any sign of the KCC expedition. Robinson observed and contacted the Harvard/Brown Expedition on the Cassin Ridge; they had not seen the missing party.

The weather deteriorated late that afternoon preventing Robinson from covering the upper 1,000 feet of the South Face. The weather did not improve until the morning of July 26. Buchanan made a flight with Forrest of K-2 Aviation to cover the upper mountain more carefully in a Cessna 185. The South Face and South Buttress were covered extensively from 11,000 feet up except for a cloud layer that hung on the face between 16,000 and 17,000 feet. A search flight was made out the east fork of the Kahiltna Glacier. There was no sign of the missing climbers. Flight time was three and a half hours.

The NPS contract helicopter had returned to Talkeetna and was waiting to go back up for the search. Buchanan left with the helicopter in midafternoon. An extensive search was made from 11,000–20,000 feet except for a cloud layer between 16,000 and 17,000 feet. It was a very good day otherwise and nothing was found. The Harvard-Brown Expedition was observed easily during both flights on July 26. The camp at the junction was removed by Buchanan and turned over to the coroner in Healy. After the flight, search efforts for the missing climbers were terminated.

During all the flights, extensive avalanche activity was observed all over the mountain. The east fork can be a very dangerous glacier with the possibility of large avalanches that can sweep across the entire glacier. The base camp for the American Direct route is in a basin at 11,000–12,000 feet and is in a very hazardous location directly under the South Face. Exposure to avalanches is very high in that location. (Source: Dave Buchanan, Park Ranger, Denali National Park)

### **Analysis**

Ranger Buchanan felt that the chances of the KCC expedition getting very high on the route were slim. They were last observed at least a day below the start before the weather turned bad. Avalanche danger was obviously very high, and continuing storm and avalanche activity would have hidden any trace of the expedition had they been buried earlier.

This accident points out the expenditure of hours and dollars required for a search effort in this area. Added to the Waterman search effort, the total time in searches alone for 1981 exceeds previous years. (Source: J. Williamson)

### **ALTITUDE SICKNESS, BAD WEATHER, AVALANCHE Alaska, Mount McKinley**

On July 19, three members of the four-man Spanish Volaska expedition to the West Buttress of Mount McKinley were descending from the 16,000-foot camp because Gomis Zارا-