

Tanaina Peak Avalanche Fatality

From "The Snowy Torrents"

January 1, 1974 , 2 climbers caught, 1 partly buried, 1 buried and killed. Weather Conditions: New Year's Day in south-central Alaska was clear with a steady chinook wind of 40 mph gusting to 50 mph. At the time of the accident, air temperature in the Tanaina Peak area was approximately 40 F. The storm of December 19-21 had deposited about 8 to 10 inches of new snow in Chugach State Park, and prevailing southeast winds from December 24 to 26 had caused heavy snow transport. Detailed weather conditions setting the scene for this accident are described in accident **No. 73-17**.

Accident Summary: On December 29, three teenage boys, Mark Rainery, 16; Mike Sawada, 15; and Dirk Greely, 17, all from the Anchorage area, set out on a 5-day outing to Chugach State Park. Their goal was to make winter ascents on several peaks in the north fork of the Campbell Creek area of the park. After 2 days of traveling, they established a base camp near the lower Williwaw Lakes. On December 31, they climbed a peak on the north side of Campbell Creek, ascending and descending using a ridge route. During the day, they noticed evidence of one small, hard slab avalanche. The following day, January 1, Greely remained in camp while Rainery and Sawada, traveling on foot, headed east up the valley to scout a route up what they thought was Knoya Peak but was actually Tanaina Peak. They chose a ridge route on the southwest side and ascended the peak. For their descent route they chose a traverse that left the ridge and crossed a large bowl. The bowl, formed by the saddle between Tanaina and an unnamed pak to the west, narrowed to a long, steep gully. They chose this route, faster than the ridge route, to avoid returning to base camp after dark. At about 13:15, as Sawada and Rainery were crossing the bowl, the avalanche released, sweeping both boys down the gully below. Mike Sawada tried to stay on the surface of the avalanche by swimming and keeping his head up hill. He felt himself being turned over several times, but was never totally covered with snow. At the end of his 1,000-foot trip, he was lying on his back, head uphill, with his ice ax lying across his chest and his day pack still on. He was encased in snow up to his chest. With his arms free he was able to use his ice ax to extricate the rest of his body. After a hasty search of the area, seeing no indications of Rainery's location, Sawada marked his exit point from the avalanche debris and returned to base camp. Both Sawada and Greely returned to the avalanche site for another search. Finding nothing, they traveled on foot down the Nort Fork Valley and out of the mountains until they reached a residence with a telephone.

Rescue: At around 23:00 hours, the state troopers, who received the first call, contacted the Alaska Rescue Group, and the rescue operation was set in motion. First on the scene was a U.S. Air Force helicopter with six para-rescue men and Sawada aboard. The rescue team was left at the accident area while the helicopter returned to Elmendorf Air Force Base to refuel and to pick up the Alaska Rescue Group party. The second flight arrived at 02:00 landing in 50 mph winds. After establishing a base camp, the experienced Alaska Rescue Group personnel began a coarse probe at 02:30. A hasty search by the Air Force rescue team had produced nothing. Throughout the early morning hours, as an Air Force HC-130 continually dropped flares to light the search area, strong winds loaded snow into the starting zone above the rescuers. Two Doberman Pinscher dogs and their two handlers were brought to the site by helicopter. Although the dogs were not trained for avalanche rescue, the handlers thought their excellent noes might be of value. The dogs searched the area while probe lines continued, but neither party found anything. The dogs and several of the rescue party were finally taken from the scene, leaving nine men at the site. With no results by 06:00, the accident site commander called off the rescue effort so the group could get some sleep. At 08:00, the rescue effort resumed. More personnel were brought to the

scene throughout the morning, including one man with a metal detector. About 25 rescue personnel were at work.

By noon, the rescue leaders were becoming concerned about the safety of the probe group in the higher area of the avalanche due to the warm temperature and the large amounts of wind-deposited snow adjacent to the avalanche. The upper-area search party was recalled, and when they arrived at the base of the avalanche, the leader reported that they had spotted the victim's entry point. (Poor visibility earlier in the rescue had prevented locating the point of entry.) The group was able to track the path of the victim's descent and determined that Rainery should be near the bottom of the avalanche. The entire group concentrated on probing and trenching. Finally at 13:35, little more than 24 hours after the accident, the probe line found Rainery's body.

The body was buried 18 inches deep, prone, with head uphill, arms extended above head, glasses still on, and ice ax tied to the right wrist. The body was completely frozen, and there was no evidence of either ice mask formation or attempts to move under the snow. Evidence of extensive bleeding at the base of the skull led the rescuers to believe that Rainery could have been hit by a rock or his ice ax on his descent, and very likely he was dead or unconscious when the slide came to rest.

Avalanche Data: Classified as HS-AO~**G**, this avalanche released about **50~o** of the snow in the very large starting zone. The southwest-facing slope had an average slope of 30 degrees, and the length of the avalanche was 3,000 feet with a vertical fall of 1,500 feet. The starting zone elevation was 4,800 feet, and the victim was located 170 feet above the toe of the slide. Debris was 10 feet at its deepest area but 2 to 3 feet generally. On all wind-sheltered slopes in the Chugach at this time, there was at least 8 inches of well developed depth hoar at the ground surface. In some areas, depth hoar extended to the thin crust near the surface. Chinook winds, causing heavy drifting and rising temperatures, and a weak base added to an extremely unstable snowpack which needed only a light trigger to release.

Comments: This accident followed by only 2 days another fatality less than 10 miles away (see **No. 73-17**). Both accidents could have been avoided had the victims been knowledgeable of the high avalanche hazard. Educational programs and public information on avalanche conditions are essential. The rescue was handled well, considering the large size of the avalanche and the multiple choices for possible victim location due to several lobes of avalanche debris. Once the group was able to locate the victim's point of entry, they were able to better estimate his path of descent and to locate the body. The victim was eventually found only 10 feet from where Sawada had come to rest. Since Sawada had carefully marked his point of exit, perhaps this area should have been probed more carefully at first. The untrained Dobermans were used only in the upper debris deposition area. Whether they would have been successful closer to where the victim was buried remains unanswered. However, in avalanche rescue situations, all available help, be it untrained dogs or untrained rescuers, can be used provided they help, not hinder, the search.