

## ACCIDENTS 1971 NOT PREVIOUSLY REPORTED

### UNITED STATES

*California, Sierra Nevada, Mt. Ritter.* The accident occurred on a trip which was advertised by its organizer, the Sierra Singles Section of the Loma Prieta Chapter, as a Memorial Day weekend outing to Lake Ediza with an optional climb of Mt. Ritter for those who wished to participate. The Sierra Singles party camped that night somewhat above and to the west of Lake Ediza in a group of trees. The weather on Saturday was hot and sunny with good visibility and zero winds until the party reached Lake Ediza where there was perhaps a 10-15 mph breeze, weather still clear. That evening some clouds were observed high on the surrounding mountains. All climbers reportedly retired early — not later than 9:00 p.m.

Not all of the party had the intention of climbing Mt. Ritter, only five decided to attempt the climb on Sunday, May 30th. These were the trip leader Glenn Welsh (32), Gordon Howe (30), Bill Alves (27), Bob Smith (25), and Dick Schroeder (25). The first three had had a moderate amount of experience, the last two rather little.

The party arose at 0730 and the five climbers were underway somewhat after 0800. The weather at the time of departure from Lake Ediza was mostly clear with some early morning cloud formations in the area. The temperature was in the low 20's. Shortly after leaving base camp, the party passed the campsite of two other climbers who were still in their tent and did not come out until sometime after the Welsh party passed their camp.

All members of the climbing party had ice axes although Dick Schroeder had limited experience in its use. All members with the exception of Bob Smith had crampons and apparently adequate foot gear. All climbers apparently wore adequate clothing for what was to be a late spring climb in the Sierras. All had down jackets of some kind, Bill Alves having only a down vest. Parkas or windbreakers were worn by all and Glenn Welsh reportedly was wearing long underwear. All except either Schroeder or Smith wore mittens. One of these two wore black leather gloves of the type worn for skiing. At least one member of the party wore tan jeans rather than mountaineering pants. All climbers had wool caps or Balaclava hats. At least one member of the party also had wind pants since one pair was found at the base of the chute where two bodies were later found. Howe and Alves shared a day pack while the others each had their own pack with food and additional clothing. One 7/16 inch 120-foot rope was carried by the party and later used. It had been intended to climb with two ropes but Howe neglected to bring the second rope.

The route selected by Welsh was Route No. 2, "The East Cliff and North Face", class 3. The route proceeds from Lake Ediza to the saddle between Mts. Banner and Ritter, then ascends a snow field to the right or west of two chutes leading up the north wall of Mt. Ritter. From the top of the west chute, the route crosses a ridge to the left into the head of the east chute to a wide ledge leading diagonally left to the arete. The arete is then followed west to the summit. Only two members of the party had limited experience with the route.

All members of the party with the exception of Smith climbed directly up a snow gully to the saddle between Mts. Ritter and Banner. Smith attempted to climb on the rocks to the saddle. The rocks, however, were covered with snow and ice and he eventually had to back down the section and climb back up by the snow route as the other four members had done. The party waited for about 15 minutes for Smith to reach the saddle. In the meantime, Alves and Howe walked west from the saddle to seek shelter behind a rock. Alves estimates the wind as being perhaps 15 mph and the temperature 20-25 degrees. The weather was still clear and the wind was apparently coming from the east since Alves remembers going down to the west side of the saddle to gain protection from the wind. While they were waiting for Smith to reach the saddle, they removed their packs and had something to eat and drink. This was apparently the only extended lunch stop until three of the party made the final bivouac later in the day. Some members of the party snacked as they climbed. Time of arrival at the saddle was about 1030. Smith reached the saddle about 1045 and the party left immediately for the gullies leading up toward the summit ridge. They identified the proper west gully but noticed that the direct route into the bottom of the gully appeared very difficult due to the ice conditions. Rather than attempt the west gully directly, the party went up the east gully a short distance and traversed over a snow-covered ledge into the west gully. Before traversing the ledge, all five roped up on the single rope. This decision was made because of the exposure rather than any climbing difficulty. Order on the rope was Welsh leading, then Schroeder, Howe, Alves and Smith. They traversed into the west gully and climbed continuously up to the summit ridge. Time of traversal to the west gully was about 1100. Time of arrival at the summit ridge was estimated at 1200 to 1230. In the process of climbing the gully to the summit ridge, the party noticed increasing fog and decreasing visibility. Wind was about 20-30 mph and the temperature was still in the low 20's.

In the meantime, some members of the outing group who had remained at the Lake Ediza base camp decided to hike to Garnet and Thousand Island Lakes. At about 1130 they noticed that the wind had increased considerably, that it had become quite cloudy and snow was falling between 1200 and 1230. At the saddle between Garnet and Thousand Island Lakes they decided to turn back because of the wind and reached camp about 1300. The wind was quite strong (gusting to 30 mph) and it continued to snow that afternoon. Occasionally, there were white-out conditions. Three other members of the base camp party, Conn, Todd, and Stump, had decided to hike out on Sunday via Devil's Postpile. They also noted that it clouded over about 1030 to 1100 and that by noon, hail was falling. They thought that the party on Mt. Ritter would certainly have turned back by that time. When Conn, Todd, and Stump reached the San Joaquin river crossing, wind was blowing at about 15-20 mph in gusts. They cancelled their plans to hike out via Devil's Postpile. At about 1400 in Agnew Meadows, wind was extremely hard and seemed to push the hikers along. During this time, Todd recorded temperatures in the range of 34 to 36 degrees F. They reached their car at about 1630 and drove home.

The five climbers on Mt. Ritter had meanwhile proceeded up the summit ridge quite slowly because of a recurring necessity to belay. With five people on the rope, each person could move only a short distance while being belayed. On some occasions four people were standing in place

while one person was climbing. After about 30 to 45 minutes of climbing on the ridge, two members of the party stated they were getting cold and Welsh decided that the party would turn back. The weather during this time had slowly deteriorated. The decision to turn back was made quickly and Alves later stated that he was disappointed that they didn't continue further. The estimated time of arrival at the highest point was between 1330 and 1400. Smith recorded an altimeter reading of 12,900 feet (summit altitude is 13,157 feet). The party proceeded down by the same route as they had climbed, belaying over the difficult parts and moving independently when belays were not required. Alves reported that Howe required considerable belaying over exposed areas.

The other party of two climbers mentioned earlier passed the Sierra Singles party shortly before the Singles party turned around. The party of two was still ascending at this point. Five to ten minutes later, the other party again passed the Singles party while the latter was descending. They told the Singles party that they thought they had reached the summit but were not sure. They later reported difficulty in finding the correct route down in the storm which enveloped the mountain. They found it necessary to traverse the west side of Mt. Banner to descend back to Lake Ediza. They reached Lake Ediza Sunday night at 2100 to 2130 and reported that they had passed the Sierra Singles party at about 1400. They also reported that they had descended very quickly and passed the Sierra Singles party who were belaying down.

The Sierra Singles climbing party continued to descend the summit ridge. According to Alves, within 10 minutes of turning back it thundered near them and immediately thereafter the wind increased substantially. It began snowing and sleeting. Alves believes that the temperature also decreased at that time, but it may just have been the chill factor. He estimates that the wind was gusting over 60 mph and was blowing continuously with a velocity of at least 50 mph. He reported being knocked down by the force of the wind several times. The visibility was reduced at times to 100 feet. Snow was striking his face with stinging force. The members of the party who were wearing glasses or goggles found that they became completely obscured by snow in a matter of seconds and that it became necessary to remove the glasses. The snow continued to strike the face and stuck to the eyelids and eyebrows, freezing them shut. It became necessary to remove a mitten to clear the snow and ice away from the eyes. Howe in particular was bothered by snow and ice collecting on his eyes. Alves recalled that lumps the size of refrigerator ice cubes formed over Howe's eyes. Later, as the party began descending a gully, Howe could not open his eyes. Howe reportedly resisted suggestions that the ice be removed from his eyes.

The party continued to descend the ridge, belaying where necessary and then started down what appeared to be the gully which they had climbed earlier. Because of very limited visibility under white-out conditions, the party was unsure of directions. Winds were swirling in gusts. They soon concluded that they had chosen the wrong gully and traversed across a rib into what they believed was the correct gully. Weather continued extremely bad. Still roped, they descended the gully. The wind was blowing directly up the gully into their faces. Snow continued to fall and visibility was quite bad. During descent of the gully, Alves reports that Smith slipped twice and that he, Alves, had to arrest him. Smith

did not attempt to arrest himself. They descended an estimated 400 to 500 feet in the gully. At that point, Alves and Welsh consulted on a course of action and concluded that if they had to go much further, the other people would start to lose muscular coordination. Although Alves believed that no one was in serious trouble, Welsh decided that they should stop at that point and dig snow caves. No one disagreed with this decision, although responses were minimal. It was decided that each person would start his own snow cave at 20 foot intervals and that they would pick the two most promising caves, enlarge those and the party would then bivouac. The digging of the caves went very poorly since it was snowing hard and there was no consolidation of the falling snow. The snow would slide down into the caves from above, wiping out what work had been done. They had been working for 15 to 20 minutes when it cleared somewhat below and they could see that the gully was very steep and that there was a lake at the bottom. They concluded that they were in the wrong gully since the correct gully had no lake at the base. There was confusion in the party regarding the identity of the lake. Evidently Welsh thought that it was Iceberg Lake at the time. It later turned out to be Big Ritter Lake.

Because of the poor progress, Welsh decided to abandon the attempt to dig the snow caves. Because of the apparent steepness and danger of an unknown route, Welsh decided that the party should climb back up to the ridge and seek the proper gully for the descent. No one disagreed with this decision and the group started back up the gully. When they started to ascend, the weather again became quite severe and the visibility decreased. As the group was climbing, Alves noticed a crampon in the snow and stopped to pick it up. He returned the crampon to Schroeder who was apparently unaware that he had lost it. He had been climbing perhaps 50 feet of steep slope without noticing its loss. As Alves returned the crampon to Schroeder, there was a verbal exchange that indicated to Alves that Schroeder was not functioning properly. Schroeder said, "What are you doing with that crampon?" Alves replied, "You lost the crampon." To this Schroeder said, "I lost a crampon?" The manner in which he replied indicated that he was not completely coherent. Shortly thereafter, and without warning, Alves reports that two of the climbers, Schroeder and Smith, dropped to their knees.

Welsh and Alves were the only ones functioning normally at that point. Howe's eyes were still frozen shut and it was necessary to lead him by tugging on his rope. Alves reports that Howe was becoming incoherent at this point. Welsh and Alves approached both Schroeder and Smith and tried to explain to them that they had found a naturally formed hollow beneath a rock outcropping which could offer some shelter. Alves and Welsh had decided that they would try to get the other three climbers into the shelter of this snow cave and that they would then hike out for help. The snow cave was 200 feet above them in the gully and they attempted to guide the others to its shelter. Neither Schroeder nor Smith were responding or functioning in any way. It was impossible to get them to move. Welsh and Alves attempted to pull them up the slope but could not move them. The upward slope was estimated by Alves and members of the rescue team to be at least 45 degrees. Welsh and Alves decided that it was impossible to move either Schroeder or Smith and that they should concentrate on moving Howe immediately to shelter. They decided



to cut the rope linking the five climbers together. This was accomplished and they proceeded up the chute with Howe to the rock shelter. Alves removed Howe's pack which contained both his and Howe's gear and food. He took out a can of nuts which he and Welsh ate. Howe was unable to eat. Alves then used the can as a scoop to enlarge the cave. He estimates that this process took approximately one hour. In the process, Alves asked Welsh to remain outside the cave while he dug it out. Welsh replied that he was losing his strength and couldn't remain outside. Alves then helped Welsh and Howe part way into the cave. The cave consisted of an enlarged wind pocket beneath an overhanging rock and proved to be drafty, lacking adequate protection from the continuing winds. When the process of enlarging the cave was completed, all three were able to get into the cave. Howe was on one side, Welsh on the other and Alves in the middle. Alves estimates that it was about 1600 to 1630 when they were finally established in the cave.

In the process of digging the snow cave, Alves remembers looking back down the slope and seeing either Smith or Schroeder sliding rapidly down the chute, bouncing from side to side off the rocks and disappearing below. At that time the other climber was still on the slope. Alves did not see him fall, but he was also found by the rescue party at the bottom of the chute.

Alves and Welsh had decided by that time to remain in the cave with Howe and thereby discarded their previous plan of hiking out for help. It was apparent that Howe could not survive alone in the cave. During the night, Alves reports that he got very little sleep, perhaps none at all. He believes that both Welsh and Howe did sleep. Alves tried to maintain his warmth by huddling close to Welsh. He had a day pack beneath him for insulation. He chose not to remove his crampons for fear of not being able to put them on again in the morning. Sometime during the night Welsh became incoherent. Alves believes that he died shortly after midnight. Howe evidently died sometime later than Welsh because his trunk seemed warmer in the morning.

The storm continued through most of the night. Sometime after dawn, Alves came out of the cave but was extremely dizzy and weak. He collapsed. He decided that he needed additional sleep, he went back into the cave and moved the bodies of Howe and Welsh to make room to sleep. He probably slept for several hours before leaving the cave again. Again he collapsed. He tried to drink some water but found it frozen and lost the water bottle down the slope. He was evidently lacking in muscular coordination. He crawled over to a rock which was not covered with snow and slept in the warm sun. When he awakened, he climbed back up to the ridge and started to look for the gully in which to make his descent of the mountain. Before leaving the cave, he took one of Welsh's mittens and Howe's down parka. There was apparently food, clothing and matches in the gear of the dead climbers which he neglected to take with him. He walked along the ridge in very low visibility looking for the correct gully but was unable to find it. He eventually descended a gully to Catherine Lake and slept nearby in a moat for several hours. After the moon came out that evening, he hiked for many hours down to the tree line on the west side of the Minaret Ridge where he spent the night. He was still carrying his ice axe and used it to chop tree limbs, making a bed of boughs. After walking for several days down the basin of the North Fork

of the San Joaquin River, he reached an unoccupied ranger station where he obtained food and shelter. The following day he hiked out to a road and hailed a passing motorist.

Word of the overdue climbers first reached authorities at 1530 on Monday, May 31 when the two, as yet unidentified, climbers reported to the U. S. Forest Service Mammoth Ranger Station. At 1705 other members of the Sierra Club party reached the ranger station and confirmed that the climbers had not returned. The Madera County Sheriff, who has legal responsibility for rescues in his county, was notified at 1800 Monday.

Early Tuesday morning, a light aircraft with two forest rangers plus pilot made three passes over Mt. Ritter including the area where the bodies were subsequently found but were unable to spot anything because of five inches of snow that had apparently fallen in the area the previous night. Later in the day, Forest Service and Mono County ground rescue teams started in to Lake Ediza with the Madera County Sheriff accompanying the latter. By 1900 all groups had reached Lake Ediza.

Early Wednesday morning, the Forest Service team started up the same route the climbers had taken and the air search was resumed. At 0700 the first two bodies were located from the air. High avalanche hazard conditions prevailed on the ground. Around noon, a helicopter with rescuers from Yosemite arrived at the request of the Madera County Sheriff. Volunteer Mountain Rescue Association teams who had been on standby since Monday were taken off alert apparently because of the number of men already on the scene and the avalanche hazard indicating no more men than necessary should be in the area. The helicopter departed to refuel and was unable to resume operations on return because of deteriorating weather. The Forest Service team returned to Lake Ediza.

Early Thursday morning, the Yosemite climbers were flown to Big Ritter Lake where the bodies had been spotted. After some searching, the other two bodies were sighted and reached. Search in avalanche debris continued for the fifth climber until tracks were spotted leading west from the scene. About that time word arrived that the fifth climber had walked out. The bodies were retrieved and the operation concluded.

Source: Report of Mt. Ritter accident investigation Committee

Analysis: (By Committee). It is the opinion of the Committee that the following factors contributed to the accident:

1. The weather became unusually severe for this time of year.
2. While three of the five appeared to have adequate experience for a climb of this type at this time of year, the other two probably had less mountaineering experience. This is demonstrated by Schroeder's lack of knowledge regarding the use of an ice axe and Smith's failure to bring crampons. It should be noted that it is not unusual to have this mixture of experience on such a climb.
3. With the exception of the lacking crampons and the single rope, the equipment would have been fully adequate for this climb under weather conditions normal for this time of year. Climbing without crampons may have slowed Smith and hastened the onset of hypothermia. If roped climbing is expected, as it should be on a class 3 route under adverse conditions, then there should be no more than three persons on a rope. It is evident that the use of a single rope considerably delayed their progress both up and down the summit ridge.

4. Reports from other parties in the area clearly indicated deteriorating weather (strong winds, clouds, precipitation) at least 1-2 hours before the Ritter party turned back. Considering the composition of the party and their equipment, they should have turned back sooner.
5. There is a question if their intake of food and liquid was adequate during the day of the climb to furnish maximum energy.
6. Under the conditions of minimal visibility, they should have marked the descent route, e.g. at intersection of gully and ridge, or, lacking material for this, they should have retreated.
7. The sudden hypothermic collapse of two of the party made escape or the construction of an adequate bivouac shelter virtually impossible. (It also demonstrates the insidious nature of hypothermia. ed).

## ACCIDENTS, 1972

### CANADA

*British Columbia, Canadian Rockies, Clemenceau Ice Field.* On 2 August Roly Morrison (31), Bill Sharp (35), and Howie Ridge (27) set off from the base camp of the A.C.C. Climbing Camp to establish a High Camp in the Duplicate — Shackleton cwm for three days.

Approximately one third of the way up the Duplicate ice-fall and on a previously established and used route, the party was hit suddenly, and without warning, by a falling serac. The serac fell from above and landed directly upon Bill Sharp, who was in the middle of the rope. Morrison, the leader, was pulled into the path of the falling ice, by the drag on the rope, flung over the ledge directly below the party. Howie was being pulled into the falling debris, but was fortunately stopped, when a large block of ice fell onto the rope, between him and the slide of ice. Howie's chest was jammed very tightly against the ice-block and he was slowly being suffocated by the pull of the rope from under the block. He was able to take a knife from his pocket, with one free hand, open the blade by using one hand and his teeth, and to cut through his chest harness.

Bill was not in sight from Howie's stance, but Roly was in view on the lower ledge. Upon descending to Roly, Howie found him to be without life. On further looking, Bill was discovered hanging by the rope, part way down the ledge, which Howie had just descended to reach Roly. He too was obviously without life and very badly crushed. On the other hand Roly, virtually unmarked, seemed to have died from internal injuries.

As nothing could be done for the victims, Howie made the return trip to the base Camp and alerted the few people not climbing.

The bodies were recovered and lowered to the foot of the glacier, where they were covered and left. Dr. Jeff Mellor made the official pronouncement of death at the site of the accident before the recovery took place. Two members of Helmut Microy's Party were kind enough to assist in the recovery operation.

Much credit must be given to Howie and his presence of mind under the circumstances, and to all and sundry who participated in the unhappy task of recovering the bodies.