

**ACCIDENTS IN AMERICAN MOUNTAINEERING  
ELEVENTH ANNUAL REPORT OF THE SAFETY  
COMMITTEE OF THE AMERICAN ALPINE CLUB  
1958**

This is the eleventh annual report of the reported mountaineering accidents that occurred in the United States and Alaska during 1957. Six additional accidents that had occurred during 1956 were reported and the statistics for 1956 have therefore been corrected to include these data.

The general pattern of accidents has shown no marked change during the past year. The number of accidents, however, is the largest so far reported. This may be due to better reporting by the various climbers involved. Whether this indicates an increase in the accident rate is difficult to determine since the magnitude of the population at risk as well as the duration of risk can only be estimated. It is hoped that better data may be compiled in the future. If there is a good response to our requests for information a better estimate of the amount of climbing done during a year will be possible. Earlier estimates of man-mountain days have been necessarily rough estimates. A yearly compilation of more accurate data will allow a comparison of climbing activities from year to year.

Winter mountaineering continues and it is pertinent to emphasize that winter climbing is much more hazardous than summer climbing in large part due to unstable weather conditions, shorter daylight hours, and if an injury occurs the cold is more likely to lead to shock and possibly death.

In respect to the need for head covering during winter climbing, Guy Everett has pointed out an article in the *Journal of Applied Physiology* 10: 235, 1957 (March) by Gerd Froese and Alan C. Burton. This study demonstrated that the heat loss from the head was linearly related to the external or ambient temperature. The temperature range studied was 32°C to -21°C. The implication was that at -4°C (25°F) the heat loss from the uncovered head may amount to half the total resting heat production. Because of this adequate head gear must be worn to minimize the heat loss by this route. The hat should be wind proof and offer insulation such as offered by a lined ski cap or wool felt hat. A precaution not to be considered lightly is an extra cap or hat in the climbing pack. Loss of hats in mountaineering is not too uncommon. Usually this only leads to inconvenience but it could be a serious loss in bad weather. The fact that the head does not feel cold even when heat loss is great means that nature gives us no warning that we should cover the head to conserve body heat.

It is also germane to emphasize that clothing should be removed or opened during periods of exercise. This permits cooling and evaporation of moisture. When inactivity is resumed the clothing should be replaced or closed. A scarf or similar object worn around the neck not only keeps the neck warm but also acts as a stopper to prevent a flow of air up through the layers of clothing and a concomittant removal of heat.

A number of layers of clothing is better than one heavy layer. This is because still air is an excellent insulator, and it is the air trapped between the layers that is effective. An outer covering of windproof and if necessary water proof material should be worn.

Special attention to clothing is most important during winter climbing and extra clothing and shelter should be carried on such trips. One must not forget that high altitude summer climbing may also be similar to low level winter climbing and comparable precautions should be taken. Naturally there must be a balance between taking all possible precautions and taking none. Judgement comes with experience. This experience is best obtained by climbing with competent experienced climbers where one doesn't have to learn the hard way and become a statistic.

## ACCIDENTS—1956 (NOT PREVIOUSLY REPORTED)

*New York, Mt. Marcy*—On 25 November 1956 a party of three set out on a winter climb from Lake Colden over Mt. Marcy down over Little Haystack to Snow Bird Leanto and return. This was a total distance of 12 miles and 6000 feet of ascent and descent. The weather was cold and there was much deep snow on the trail. After a short distance one of the party dropped out. The other two, Timothy Bond and Norman Nisson (28), continued the trip on snowshoes. Nisson had never been on snowshoes before. Apparently on the return during the descent from the cone of Marcy, Nisson became completely exhausted, and collapsed at 7 P.M. Bond carried him a short distance but realized he could not carry him far. He placed Nisson in a single down bag at timberline and went for help at Lake Colden, 4¼ miles away.

The rescue party found Nisson's body the next morning at 1 A.M. Nisson had partially crawled out of the bag and had been frozen to death. Temperature was estimated at 20° F below zero.

*Source:* the Ad-i-ron-dac 21: 26, 1957; Kimball Hart

*Analysis:* Any trip into remote country in winter weather must have as a minimum four trained, healthy persons in excellent physical condition. They must be properly equipped and prepared to camp out for several days. This implies sleeping bags, tent, food, and extra clothing. Winter climbing *must not* be compared with summer hiking. What might take one or two hours in the summer over a trail may require more than 7 or 8 hours, under winter conditions, even with snowshoes. Another point made by Hart is most interesting: "Of course by hindsight one can say he (Nisson) should have been roped to his sleeping bag. Bond could not have been expected to anticipate the consequences of the delirium that we have twice seen come to exhausted winter mountaineers."

*Colorado, Turkey Creek practice rocks*—This accident occurred during May, 1956, on one of the regularly scheduled field trips of the Colorado Mountain Club's technical climbing school. A beginning group of about 10 people under the supervision of L. Kropp was standing on a wide ledge 30 feet above the ground. Robert Kreuzer (15) began traversing the ledge to the west. He found the ledge blocked by other members of the party and so decided to climb up and over a large boulder. As he got partly over the boulder, he felt he would not be able to make it, but he decided to try to go on over anyhow. Kreuzer's left foot then slipped and his right hand lost its hold. He peeled off backwards and fell head first into a gully. He took a free fall of 10 to 12 feet and then slipped another 10 or 15 feet. He arrested him-