

BAD WEATHER, EXPOSURE—*Washington, Mt. Rainier, Liberty Ridge.* Tim Riordan (31), Jeff Jones (21) and Jack Tackle (23) were helicoptered from 8,500 feet on the Winthrop Glacier after a two day search effort. Bad weather conditions had forced them to hole up for several days at high elevations, including one day on the summit. Two of them suffered frostbite. Search efforts were hampered by the fact that these climbers had not signed out or made their route known to anyone. (Source: John Ritenour, Mt. Rainier National Park)

CLIMBING UNROPED AND UNPROTECTED—*Washington, Mt. St. Helens, Ape Canyon.* Sp. 4 Peter Mosier (26) was with a U.S. Army training group when he fell 200 feet to his death down a shear rock wall. He was free climbing on a cockscomb like ridge of loose, rotten rock at 3,700 feet. His three companions did not see him fall, but heard him scream. One member then left to report the accident. (Source: MRC publication "Bergrage," October 1976)

FALL INTO CONCEALED CREVASSE—*Washington, Mt. St. Helens.* On May 29 Professor John Patrick O'Shea (46) of Oregon State University, Corvallis, Oregon, was leading a group of students from his mountaineering class at OSU, in a climb to the top of Mt. St. Helens. At 11:30 a.m. Professor O'Shea, his wife Carolyn (39), Ruth Beers and Dennis Welbourn who were in one team of four roped together, were ascending the mountain and crossed a crevasse at the 8,400 feet level, which they did not know existed. Professor O'Shea said that there was no indication of the crevasse or any other type of warning to indicate that there was a crevasse which they were crossing. Apparently there was a snow bridge across this crevasse and when the O'Shea group got onto the bridge, it caved in in an area approximately 100 feet by 100 feet. Both the O'Sheas fell into the crevasse approximately 30 to 50 feet below the top edge of the crevasse. Professor O'Shea was buried under approximately 4 feet of heavy, wet snow. Mrs. O'Shea also fell into the same general area as her husband. All of these four were roped approximately 30 feet apart.

Professor O'Shea was dug out by the other members of his entire group and upon reaching Mrs. O'Shea, they simply followed and dug along the rope until they found where she was trapped. Both were slightly injured—Mrs. O'Shea complained of a soreness in both her back and her right shoulder. However, neither she nor her husband felt that it was serious enough to go to the doctor. Professor O'Shea complained of a soreness in his chest and rib area and he also had a small laceration in the top right hand side of the skull. As was said before, both injuries were minor, there was reportedly a doctor with another group which was camped nearby, but neither of the O'Sheas felt that it was necessary to go to talk to the doctor or to have the doctor look at them.

At the time of the accident, Professor O'Shea stated that visibility was 100%, it was clear and there were nice weather conditions. However, during the rescue effort, winds were gusting from 50 to 70 miles per hour and started to snow, was clouded in and foggy and at times there were "white out" conditions. Mr. O'Shea was buried for somewhere between one to two hours. (Source: Sgt. Clinton Peters) (Ed. Note: For a complete account by Professor O'Shea, see *Northwest Magazine*, August 8, 1976.)

FALL/SLIP ON SNOW—Washington, Mt. St. Helens. Vernar Stiles (54) and Judi Amos (27) slid and tumbled more than 3,000 feet to their deaths from Nelson Glacier on Mt. St. Helens, February 7. They were with a group of 12, all experienced and well equipped, who were climbing the mountain in smaller groups on different routes. All that is known is that these three were well behind the others, and once they started to slide, could not stop themselves. (Source: *The Daily News*, February 9, 1976.)

FALL/SLIP ON ICE, FAILURE TO PLACE PROTECTION, NO HARD HAT—Washington, Mt. St. Helens. Ken Stroud (25) and Steven Carey (22), both respected and experienced climbers, died on Mt. St. Helens after an apparent fall into a crevasse.

Analysis: Our observations led us to form a fairly definite opinion as to what happened. One of the two led the short steep section and then continued to the ledge about 50 feet up, where he set up some sort of ice axe belay. He did not place an ice screw for an anchor, perhaps because at this position he was not directly over the crevasse and the exposure did not seem that bad. The second climber came up and continued on into the lead. He may not have been fully aware of the increasing exposure as he moved further to the right, and in any event, he did not place any ice screws for protection. For some reason, he slipped, was unable to keep a grip on his axe, and fell. He dropped about 40 feet before any strain came on the belayer, and by then the fall had too much force to hold. Both fell about 80 to 100 feet to the bottom of the crevasse.

I can only guess as to the cause of the slip. The most likely explanation would be that the lead climber encountered some unexpectedly brittle ice. This fall there have been many reports of very poor ice conditions on Mt. Hood and St. Helens, where, when a single crampon point pulled, everything let go. On firm, plastic water ice a 50° slope would not have posed any problem for either of these climbers, but brittle ice would have been another matter. Both had done many good ice climbs over several seasons, but with snow and ice one never stops learning.

If the above opinion is reasonably accurate, the most apparent contributing cause was the failure to use ice screws for belay anchors and protection. The question of when and how often to place screws has no easy answer. The