

*Source:* Stephen Wennstrom and Grace Hoeman.

*Analysis:* There should have been more careful communication and procedures while travelling on fixed line. Irregularly spaced anchors should make simultaneous unclipping impossible. All rope teams in the party should have equal length ropes so that anchors can be spaced appropriately. Extra obstructions in the fixed line, i.e. knots, should be avoided whenever possible.

Comment by Wennstrom: . . . a little beyond the anchor where one member had to unclip, a knot was found, maybe the climber walked without being fixed to the line for more than usual distance.

Comment by Hoeman: . . . in the past it has been observed that Jumars may come off the fixed line when angle with the rope occurs. This theory was tested by Wennstrom and Schaefer and they found no evidence of tug and recoil in the snow surrounding the anchor site. Yet, the potential of Jumars slipping off should be tested.

*Alaska, Mt. McKinley.* Tom Kensler (22) and five companions reached 14,600 feet on June 21st, used the 22nd as a rest day, and Kensler moved to 16,400 feet on the 23rd. During this period Kensler had headaches, but with the aid of aspirin was able to sleep and function normally. On the 24th, camp was moved up to 17,500 feet and while moving he felt as good as he had above Browne Tower. However, that night he slept poorly and felt nauseous at breakfast on the 25th. That day half the party (3) made a summit attempt, but turned back at Archdeacon's Tower (19,600 feet) and the rest went up to Denali Pass where they turned around because Kensler was feeling dizzy. On the descent to camp he vomited twice, but was not having respiratory problems (20 breaths/minute, pulse 78). They spent the next 28 hours at camp resting—Kensler slept fitfully, but was able to get liquids down. About 7:30 p.m. on the 26th his breathing became forced (pulse 60). It was at this point that his complete loss of balance control became apparent. Two of the party then went to Denali Pass to establish radio contact with Dick Collins at Lake Minchumina. The other three started to evacuate him to the 15,400 foot level. On the 28th, he was moved to 15,000 feet for the helicopter pickup.

*Source:* T. Kensler.

*Analysis:* My analysis is that our ascent was too rapid for me, but not really rapid when compared with timetables of previous expeditions on the Muldrow route or with the rate many people were parading up and down the West Buttress. Our major failing came in not recognizing the developing cerebellar edema and correlating it with the altitude sickness syndrome—for that was what was debilitating, not the incipient stages of pulmonary edema that made the group aware of the severity of the problem. I don't think the warning signs below 17,500 feet were significant to have caused any alarm.

*Alaska, Mt. McKinley.* An all-female expedition consisting of Mrs. Grace Hoeman, Margaret Young, Margaret Clark, Mrs. Dana Isherwood, Faye Kerr, and Arlene Blum were climbing McKinley.

The 5th of July all members rested at 17,200 foot level. At 05:00 in the morning of 6 July all members started for the summit. A slow