were signs of an oncoming cerebral edema, he chose to descend alone. Wanting to lose altitude as quickly as possible and not daring to rappel from the Lho La, he descended on the Tibetan side, reaching finally the deserted, ruined Rongbuk Monastery and after several days the first village. Eventually he was taken to Shigatse, where he was interrogated. The authorities allowed him to proceed on January 11 and drove him to the Tibetan-Nepalese frontier at Kodari. Although winter floods had washed out a part of the road, he walked across this and caught a bus for Kathmandu. My companions had feared him dead in a crevasse and searched six days for him. After they had returned to Kathmandu, he finally turned up "from the dead."

LOUIS AUDOUBERT, Club Alpine Français

Everest Winter Ascent and Tragedy. Yasuo Kato, 33, was lost on Everest after becoming the first climber to reach the summit in a winter, solo attempt. His partner, Toshiaki Kobayashi, 34, who was following with bivouac supplies and met Kato just below the South Summit, also failed to return. This was Kato's third ascent of Everest. Kobayashi had been on expeditions to Dhaulagiri, K2 and Everest. The 7-man Japanese expedition accomplished its ascent in a very rapid 25 days. After establishing Base Camp on December 2, Kato reached the base of the South Col on December 22. In winter the main enemy is the frigid high-altitude jet stream which drops down to blast the mountain with force enough to send loose rocks sailing. Kato counted on the belief that the jet stream rises clear of the mountain every few weeks for two or three days. His plan was to launch an alpine-style attempt in that brief, calm period, with Kobayashi following in support. His first attempt on December 23 took him to 8100 meters before he was turned back by 50 to 60 kph wind and -40° C temperature. Kato could hardly keep upright, and the batteries of his radio froze within 15 minutes. Kato's next chance came on the 27th. Using oxygen, Kato and Kobayashi left Camp IV at five A.M. At ten A.M. climber Yoshimasa Sasaki caught Kato's transmission reporting they had reached 8400 meters and discovered the body of a climber (Frau Schmatz?). At 7:30 P.M. Kato reported the following: He had reached the South Summit at 1:50 P.M. and the summit at 3:55 P.M., at which time it was almost dark. On his descent he had met Kobayashi, who carried 27 kilos (60 pounds) of bivouac supplies to the agreed upon campsite just below the south summit. By then it was already pitch dark and very cold. Kobayashi was slightly frostbitten. Sasaki asked if Sherpas should be sent up to the South Col in preparation for a possible rescue. "No, that won't be necessary," Kato replied. "Both of us are well, and we've got a good bivouac. I'll call you tomorrow at seven A.M." Kato's voice sounded confident and in good spirits. In each of his other two Everest ascents he had bivoucked above 8000 meters without equipment. Now being fully prepared, he expected no difficulties. That night a terrific storm and cold wave blew in. The Indian Mountaineering Foundation forecast winds of 150 to 200 kph (!) at Everest altitude, and a temperature of -43° C. The resulting cold wave caused the deaths of over 200 people in northern India. The jet stream dipped down enough to strip Camp II at 6600 meters off the mountain. The next day, in spite of terrific wind, Sherpa Noan Yonden was able to climb to the South Col in hope of helping the stranded climbers to descend. He saw no sign of them, nor any the following day. On December 30 the search was abandoned. Dr. Yasuo Sasa, the President of the Japanese Alpine Club, flew to Kathmandu with Kato's sister to attend the funeral of the two lost climbers. The Japanese speculate that because there was too little snow on the southeast ridge to dig a snow cave, the climbers were probably forced to seek shelter in the tent carried up by Kobayashi. The extreme force of the jet stream wind, they believe, had blown the tent and occupants down the mountain. Other Japanese Everesters expressed the opinion that no one would be able to climb the southeast ridge in the wind storms typical of the post-Christmas season. (This information was sent by the Japanese Alpine Club.)

THOMAS HOLZEL

Articles Resulting from the American Medical Research Expedition to Everest. Only two scientific articles have so far (February 1983) been published. They are:

West, J.B. "Man at Extreme Altitude." *Journal of Applied Physiology*, 52: 1393-1399, 1982.

West, J.B. "American Medical Research Expedition to Everest, 1981." *The Physiologist*, 25: 36-38, 1982.

Many articles are in the process of publication and the book *High Altitude and Men* edited by J.B. West and S. Lahiri should be published late this year or early next. An update will appear in the *American Alpine Journal*, 1984.

JOHN B. WEST, M.D.

Pumori. The four members of our expedition were Pierre Faivre, Jean-François Lemoine, Guy Mevellec and I, all mountain guides. We made an alpine-style ascent of the south ridge (French route of 1972) and descended the east ridge, the normal route. We left Kathmandu on September 14 and with 17 porters arrived at Base Camp after a 14-day walk from Kirantichhap. We spent eight days acclimatizing and reconnoitering the lower section of the normal route. On October 5 we placed a camp on the south ridge at 20,350 feet and then waited a full week for good weather. We all left Base Camp on October 14 and camped at 23,000 feet on October 17 at the head of the south ridge, which had been mainly a mixed climb with very sustained difficulties. We fixed the rock sections. On October 18 Lemoine and I reached the summit in a storm. Bad weather obliged us to spend another night at 23,000 feet. On the 19th the weather cleared and Faivre and I got to the top. All four of us descended the normal route in one day to Base Camp.

ERIK DECAMP, Club Alpin Français