

more than doubled, while the blood flow to the arms and legs dropped to 25 percent of typical flow rates. The pounding headaches, poor appetite, muscle cramps, etc., that climbers experience may be explained, at least in part, by the significant redistribution of blood away from less vital organs and areas, such as the stomach, to the brain in an attempt to survive a low-oxygen environment. The project collected a large data set of imaging duplex Doppler ultrasound of blood flow at high altitude.

Drs. Kamler and Macedonia suggest that climbers going to high altitude consider the pneumococcus vaccination called Pneumovax. It is a one-time vaccination that is considered safe and effective at preventing the major subtypes of pneumonia caused by pneumococcus bacterium. Pneumovax is usually only given to the elderly and people with impaired immune systems. High altitude appears to produce similar risks in impairment of healing and in damage to the system that removes contaminants from our airways. Pneumovax has minimal risks to high-altitude climbers with potential life-saving properties.

SCOTT HAMILTON

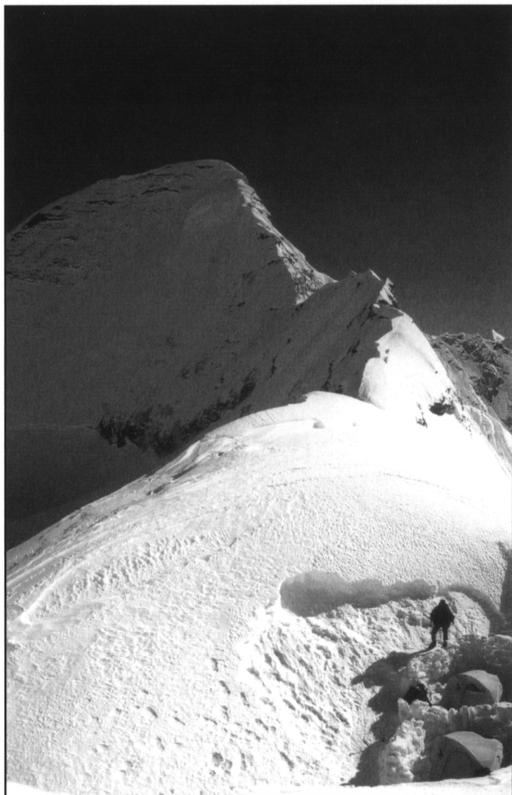
*Erkimkang, North Face, and Khatung Kang, Ascents.* In mid-August I went to the Langtang region, north of Kathmandu, where I retraced the steps of Bill Tilman, who visited the area in the late 1940s. Like Tilman, I made a base at the yersa (temporary settlement) of Langshisa, exploring and making acclimatization hikes in the area. I made an ascent of "Buddha Peak" (Tilman's name, locally known as Erkimkang, ca. 6100m), in three days round-trip from base camp, via the north face. The climb involved some moderate mixed climbing but was mostly snow and ice. I descended to the west, down a glacier. Tilman approached this by crossing the river downstream of Langshisa near the Yersa of Numathang, but now there is a small bridge at Langshisa itself. This may or may not have been the peak's first ascent.

In September I went to Pokhara by bus, then flew to Jomsom. From there I trekked over the Thorung La, and to acclimate climbed Khatung Kang (6400m) from the east by a moderate snow/ice route.

CHARLIE FOWLER

*Cho Polu, First Official Ascent.* Our team was composed of Dieter Ruelker, Guenter Jung, Dr. Olaf Rieck and myself as leader. On October 13, we started from Kathmandu, reaching Lukla by airplane and continuing on via the normal trekking route to Namche Bazar in a few days of reasonably good weather. On October 18, just as we reached Dingboche, it started to snow heavily, forcing us to stop for two days before continuing via Chukhung to Island Peak (Imja Tse) Base Camp. On the last ten kilometers we broke trail through one meter of snow and dug out a path for the yaks with shovels (while lots of trekking groups waited behind us to enjoy the fruits of our work when it was done). On October 23 and 24, the yaks reached the porter shelter near Island BC, but were not able to continue further to Island Peak or even Cho Polu BC. We lost three more days carrying the loads by ourselves before establishing our BC on the moraine east of Island Peak on October 26 at about 5200 meters.

Two days later we started our first reconnaissance, but due to the vast amount of snow on the Lhotse Shar Glacier it took us until November 1 to reach the base of the mountain. We approached from the west and put in a line on the west face of the col ("Hardie's Col," 6183m) on November 1 after two days of climbing under continuous avalanche danger. Due



*High camp at Hardie's Col (6183m), a snowy saddle on the ridge between Shartse and Cho Polu. The north face of Cho Polu is visible behind. It was climbed via a line right of center (Jung-Rieck-Rüelker-Walter) in 1999. MARKUS WALTER*

to really bad snow conditions and unstable cornices, continuing via the north ridge to the summit would have been like playing Russian roulette. One day of reconnaissance on the ridge resulted in nothing other than cold fingers in the incredible winds. Stormy weather with heavy winds (but no snowfall) and not enough food for a longer summit attempt forced us to descend to Base Camp. We left two tents and some cooking and climbing equipment at Hardie's Col.

After three rest days in Base Camp, we reached our camp at Hardie's Col once more, this time with enough food for a longer stay during our summit attempt. The next day we descended down the east side of Hardie's Col, rappelling about 80 meters down onto a plateau of the Barun Glacier, at which point we crossed the glacier hollow through deep snow and reached the bergschrund on the north face of Cho Polu. We found excellent snow conditions on the steep wall above the bergschrund, and so we climbed 100 meters, fixed two ropes and returned to our High Camp, reaching it in darkness. The next morning, November 12, we started at 4 a.m., reached the bergschrund at 6 a.m. at dawn and

climbed up our fixed ropes, taking them with us after reaching the highest point of the previous day's reconnaissance and continuing toward the summit. We climbed a direct line up the center of the north face, passing some seracs and small crevasses in the upper part of the wall. The whole face was about 600 meters high and up to 60 degrees. Because of  $-25^{\circ}\text{C}$  temperatures and excellent ice conditions, we climbed unroped without belaying. Sixty meters below the summit cornice, we turned slightly to the right, gained a big crevasse and used the lower lip of this crevasse as a natural traverse line to reach the north ridge. A few steps on the broad ridge brought us to the summit of Cho Polu (6734m). Incredibly good weather with low winds and a fantastic view over hundreds of summits was waiting for us, and so we spent more than one hour on the very top, taking a 360-degree panoramic photograph and several hundred telephoto shots of the neighboring mountains. The ascent took us about four hours from the bergschrund, the descent via the same route two hours. We reached our camp at Hardie's Col late in the afternoon and over the next two days descended down to BC with all the equipment. Climbing on the sunny west face of Hardie's Col was still much more difficult and dangerous than on Cho Polu's north face because of the snow conditions.



*Guenter Jung on the north face of Cho Polu. The summit above him is Kangchungtse (7640m), while to the left is Chomo Lönzö (7790m).* MARKUS WALTER

Reaching BC on November 14, we completed our successful ascent of Cho Polu by all four team members. Before leaving BC on November 19, we celebrated Dieter Rüelker's 60th birthday on November 17 by making a short ascent of Island Peak in three hours from BC.

MARKUS WALTER, *Alpinclub Sachsen, Germany*

*Cho Polu, First Ascent, Previously Unreported.* Spanish mountaineer Nil Bohigas reports that he did very quick solo climbs to the summits of Cho Polu and of nearby Pethangtse in the autumn of 1984 and several days later also soloed Baruntse. However, he had no official permission for these ascents, and no one except a few of his friends knew about them until recently.

Bohigas says that he went up the north face to the northeast ridge of Cho Polo to the top on the same day, in late October or early November, on which he had just climbed Pethangtse (he does not remember the exact dates). He stayed at a bivouac at 6000 meters, left a cache of supplies there, went out

and summited Pethangtse (6710m) before sunrise in a very quick ascent and descent untroubled by any technical difficulties. He then moved south to Cho Polu. "I found the main difficulties on the north face's first section, especially on the descent. I reached the summit by the northeast ridge. I descended by the same route and I reached the glacier at night.... I did not take more than 16 hours in total. Three days later I soloed Baruntse."

He had already pioneered a new route on the difficult south face of Annapurna I with just one teammate, Eric Lucas (see 1985 AAJ, p. 285) and now "I felt perfectly acclimatized to the altitude." He also reports he found good snow conditions, which must have been significantly better than those the Germans encountered this autumn, and he does not mention any problems with the wind.

The Germans, without knowing the above exact details, found the claim by Bohigas to have summited Pethangtse and Cho Polu on the same day "unbelievable" because they were sure he would have had "just not enough time" to descend Pethangtse, cross an estimated five kilometers of plateau between these two mountains and scale the difficult north side of Cho Polu.

However, it is a truism that what one man cannot do another person can; skills, strengths and experience vary enormously. Also, one must consider the facts that the Germans had worse weather; they did not climb alpine style but pitched two fixed camps, which meant they