An Electrifying Experience

Michael Jardine
Plates 45–48

The Silk Road, after leaving China proper on its journey west, crosses the second largest desert in the world, the Takla Makan. This is also the lowest desert in the world—at one point dipping more than 150m below sea level—as well as one of the hottest. The Takla Makan is rimmed on all sides by four of the world's highest mountain ranges: the Tien Shan to the north, the Kunlun and Tibet to the south and east, the Karakoram to the southwest and the Pamirs to the west. On the western edge, rising over seven vertical kilometres above the Takla Makan, are the two highest peaks of the Pamirs, Kongur and Muztagh Ata. For their northerly latitude, they are also the two highest peaks in the world (further north there are no peaks as high). Rising thermals from scorching desert heat clash against soaring glacial masses thousands of metres above: a natural arena for electrostatic fireworks, in which we became a captive audience.

The name Muztagh Ata, in the various Ural-Altaic dialects of the region, translates roughly as 'Father of Ice Mountains' (or was it only a Kirgiz herdsman's reply in the honorific, 'Mustagh, Father,' to passing explorer Francis Younghusband?). I had come across the name many times, the first being in Beijing in 1980 when I met Chris Bonington on his way west to make a reconnaissance of then-unclimbed Kongur. After his epic first ascent the following year—to date still no other expedition has ever set foot on the summit—we met again in 1982 in Tibet, this time travelling across the roof of the world together, Chris to find a route up the last unclimbed ridge of Everest and I to look after a group of trekkers accompanying his expedition as far as the E Rongbuk glacier above Base Camp. Chris had with him two alumni from the Kongur climb, the now legendary climbing pair of Pete Boardman and Joe Tasker. To these three who, together with Al Rouse, had spent several days and nights near the summit of Kongur burrowed in individual 'snow coffins' waiting out a prolonged fierce blizzard, Muztagh Ata was hardly a challenge worth considering, despite its altitude. After all, it had just been ascended on skis (setting a world altitude record in the process). But to me, and for exactly the same reasons as made them dismiss it, it sounded like the perfect mountain for ski-mountaineering.

Muztagh Ata had been climbed (and ski'd) several times before we finally got permission from the Chinese Mountaineering Association, and thus we had a wealth of information about the region, the mountain, and the various routes, including a detailed account of the first British ascent of Muztagh Ata appearing in *AJ88*, 29–36, 1983. Indeed, before we set off I had spoken to or corresponded with people from four previous expeditions. Extreme cold weather and sudden fierce snow-storms, together with hidden crevasses and extreme altitude—the summit dome stretches for almost two kilometres

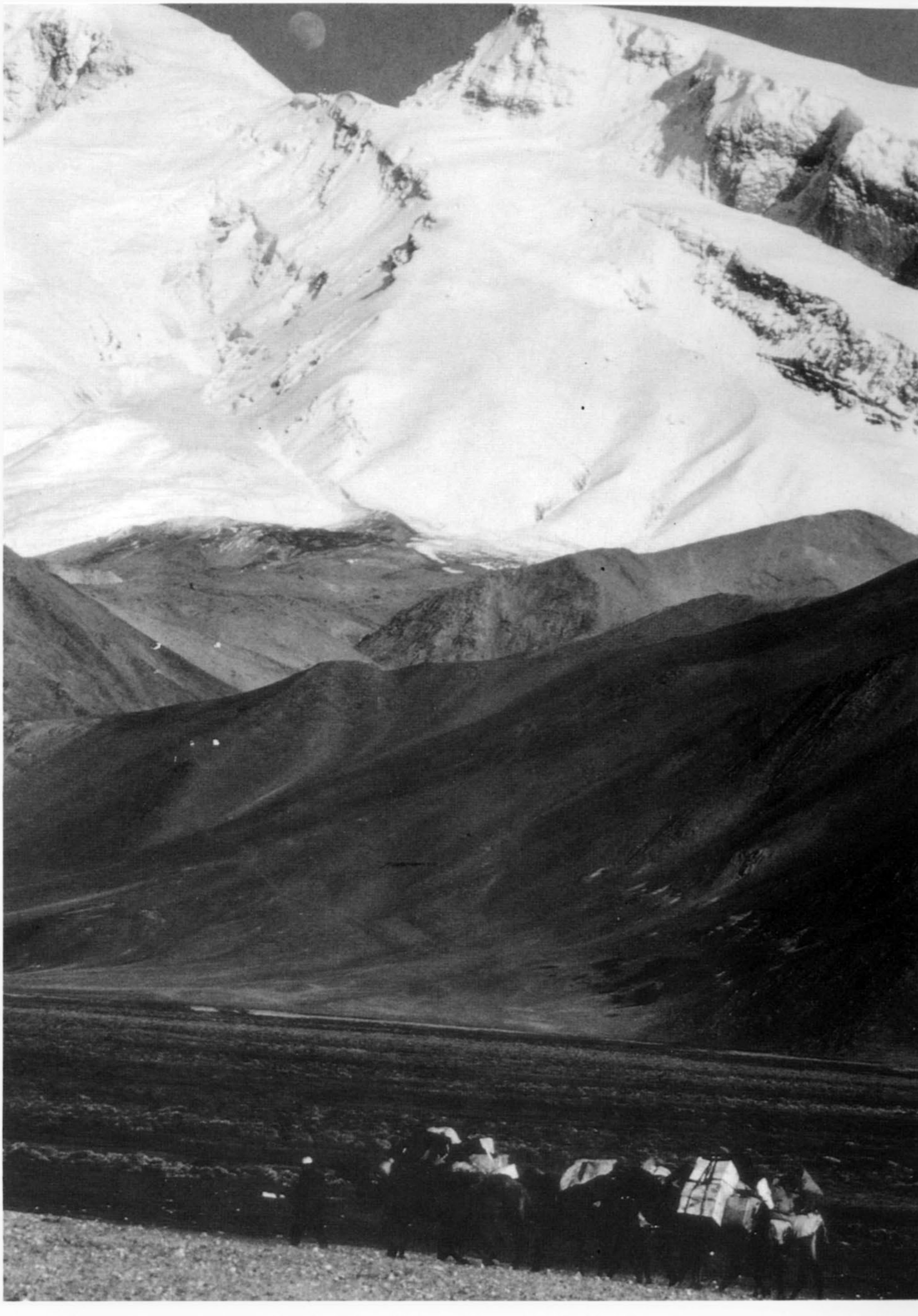

Photo: Michael Jardin

45 *A modern-day camel caravan makes its way beneath the twin peaks of Muztagh Ata. The full moon sits directly above 'Stein's Gap'.*

beyond the 7000m level—were the problems that each expedition had had in common, solved with varying degrees of success. Not once, however, was there any mention of electrical storms. On the contrary, such phenomena are rather common down at valley level where the air picks up moisture and is superheated by the sun and the desert. But high up on a mountain they are rare, presumably so because the air is then re-cooled. At any rate, little if any mention is made of electrical storms in Himalayan mountaineering literature. Indeed, to include 'lightning rods' as an item on our packing list would have seemed ludicrous. As it turned out, we carried an effective substitute: metal edged skis. Unfortunately, we carried them attached to our feet.

Judging from past successful ascents, July/August is the best time of year for a ski ascent/descent of Muztagh Ata, though it is also the most dangerous period for crevasses. We had chosen mid-June in the hope of there being a lower snow line and thus more skiing, as well as minimizing the risks on the only technically troublesome part of the Yambulak route: an ice-fall band between 6000m and 6300m which, aside from being a minefield of crevasses, is also narrowly squeezed between broken ice-cliffs on the right and a sheer 1000m rock cliff to the left. Our first expectation was easily met: a whiteout and 20cm of snow at our 3800m roadhead camp on the morning of the walk-in to Base Camp, and a solid skiable base (albeit with a slightly precipitous and narrow chute at the bottom) down to the Yambulak glacier at 4700m, just around the corner from Base Camp.

The weather, on the other hand, was completely contrary to expectation. Calm, cool nights (average −10°C at 5300m) during which fresh snow often fell softly, followed by crystal-blue mornings, growing warmer towards noon and melting the icy base to soft corn. By noon, thunderheads would roll in from the SW (Afghanistan, no less) and drop rain on the valley, hail on the mountains and, once the clouds had collided with the cold upper slopes of Muztagh Ata, electrical storms. Every day.

On our second carry from Base to Camp I at 5300m, Mark, our skiing doctor, Kevin, my co-organizer, and I were taking a steady pace up the rounded ridge at about 5100m and not paying a great deal of attention to the weather surrounding us— the morning had been a constant oscillation of brilliant blue skies and big snow-puff clouds dotting the mountainscape with dark shadows— when suddenly it was as if someone had dimmed the lights in the theatre. Not only did it grow dark, but a quietness descended. A massive thunderhead had billowed up from nowhere, sneaking in amongst the harmless white puff clouds like a wolf among the sheep, and was arranging to set itself down exactly on the exposed ridge that we were ascending. It started off with hail-balls zinging and pinging everywhere. We hurried on towards Camp I, not wanting to stop and sit out the storm because we were drenched in sweat from the work under what, two minutes ago, had been a very hot sun. Then the thunder came in, spitting at us from all directions. We quickened our pace considerably. The hail-balls continued, but the thunder dropped away to an eerie, complete silence again. The only sound was that of our lungs heaving at the quickened pace, and our skis scraping the now-hardened snow. And a curious crackling sound, coming from somewhere just above my head. . .

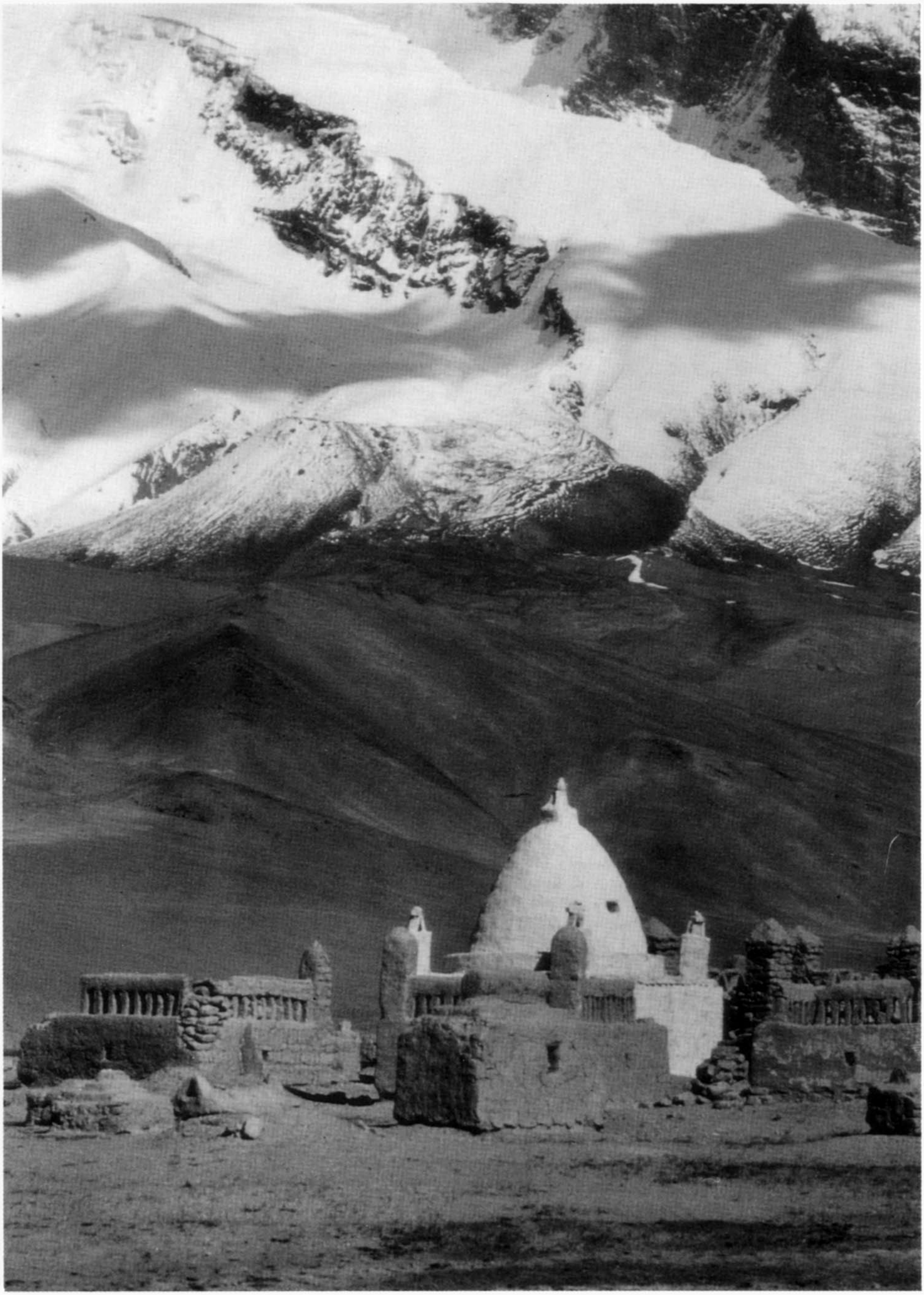

Photo: Michael Jardine

46 *Kirghiz burial grounds at the base of Muztagh Ata. The route of Sir Aurel Stein's 1900 attempt is seen directly above the white dome.*

I looked up at the marker wands tightly fastened to the sides of my pack and sticking several feet above my head, with the bright fluorescent pink flags attached to each. It sounded as if the many little flags were flapping in the wind, but the wind had disappeared and the sound was still there. At altitude one's mind does play tricks, and now the flapping sound took on that of crackling fire. Had the flags somehow caught fire? I paused to crane my neck up at the flags, but they were not even moving. Most bizarre. My sixth sense was on full alert, trying to discover what was wrong, for clearly something was, but nothing could be seen or felt. I called out to Mark and Kevin, wondering whether they too had sensed anything. As I did so I realized what I had subconsciously feared, and this had the same effect on the other two who also felt that something was amiss. We simultaneously realized that the three of us were conducting electricity from the thunderhead through to the snowy ridge, and that it was gradually building up to what is called a lightning strike. Once this was verbalized—though not through intelligent speech, I must admit—things happened very quickly. Strange sensations which seconds earlier had not made any sense were now understood. The crackling sound was explained obviously: electricity was arcing between the flagged marker wands. Almost before this thought had registered, I had thrown my backpack off on to the slope in front of me. It sat there buzzing like a giant wounded cicada-monster from some B-grade science fiction film—I use this peculiar description because it was exactly the one going through my mind at the time. The others also threw off their packs. In the same instant, several other inputs rang emergency bells in my mind. First, electricity was also arcing between our skis, as well as our ski-poles. Second, we were on the most exposed part of the ridge—the backbone—and too close together. Third, a descent off the ridge into one of the two steep gullies on either side would invite the risk of avalanche, increased by the concussions of thunder. But before we had a chance to weigh the risks rationally, our bodies had already reacted with the most obvious response: Mark and I were out of our skis and someone was yelling (was it me?) 'get off the ridge!' Mark and I tumbled down the slope, our boots breaking through the crust and plunging into the deep snow underneath. But Kevin was still up there, fumbling to get his skis off and yelling expletives. (It should be mentioned here that Kevin's personal gear, which he had checked as baggage on the PanAm flight to Beijing, had somehow ended up, ironically, in Taipei instead. Everything he was wearing had been borrowed from other expedition members, including the climbing boots which did not fit into the ski-mountaineering bindings and so had to be strapped in tightly.) Every time Kevin reached down to try to undo the wrapping, he received a sharp shock. As we looked up at him through the darkness, there was a loud boom and he disappeared over the other side of the ridge, literally blown out of his bindings. As he described later, 'it felt as if some huge force picked me up and threw me sprawling across the snow.' He was thrown ten metres, in fact—just to the other side of the ridge where we could not see him. I called out and heard what I thought to be a reply, but the wind had picked up and was blowing even the sound of our emergency whistles up and away. Mark and I descended to a point on the ridge that was less directly exposed and crossed over to search for Kevin.

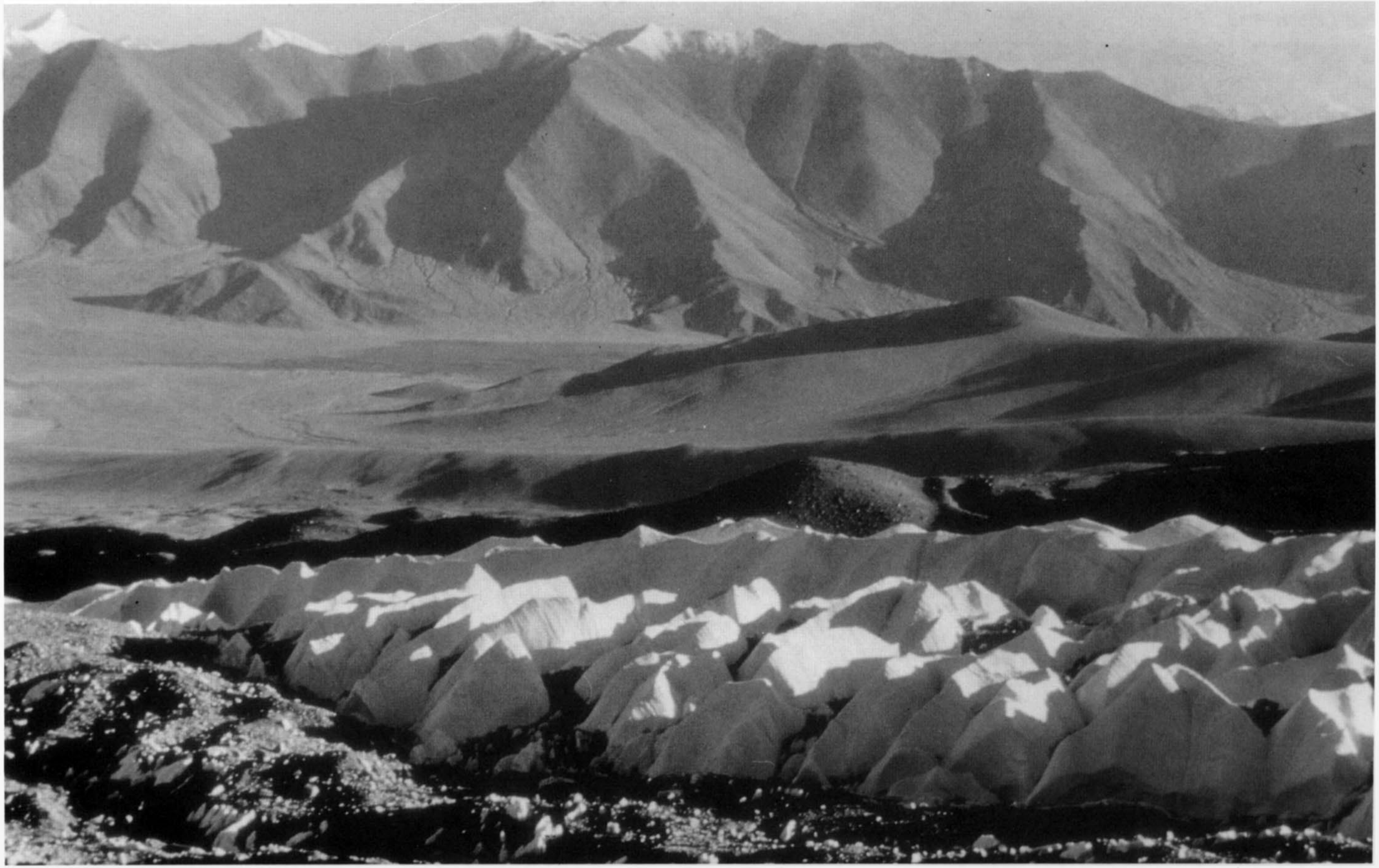

Photo: Michael Jardine

47 *View from Base Camp down to the valley floor (route of the Karakoram Highway).*

He was nowhere to be seen. Up above, the rounded ridge curved off into rock outcrops ending in a steep, narrow gully. The dark thunderhead was slowly picking itself up and preparing to move off, but visibility was still no more than a hundred metres. We started off uphill again, but just as we did so, we made out the image of Kevin picking his way down through the rocks, visibly shaken but seemingly unharmed. Mark confirmed this after a quick check: he only seemed to be suffering from mild shock (no pun); dilated eyes, his face chalk white and slightly swollen, and he was muttering in a queer high-pitched voice. Mark determined that Kevin was able to descend, and so we did, rather quickly. Within half an hour the thundercloud and its accompanying regiments had completely disappeared, leaving a clear blue sky as we walked down the scree into Base Camp. Total time elapsed from blue sky to blue sky: 90 minutes. A surreal sunset that evening over the Russian Pamirs just across the valley to the west helped to soothe some frayed nerves.

This strange weather persisted every day without exception for a fortnight. After the first occurrence we were better prepared. The following day when we occupied Camp I, we buried all propane cylinders as well as the oxygen bottle in the snow about 30m downhill from the two tents; our skis, ski poles, marker wands, and other tall metallic objects were all stuck out of the snow at a considerable distance above camp. Each afternoon when the storms would blow through—usually two in an afternoon with blue skies in between—we would huddle in our tents and clatter bones whilst the surrounding mountainside shook from the thunder, and we wondered whether our Camp I was really in such a protected position after all.

Successive camps were established at 5800m and 6400m, but the afternoon storms still persisted. During one carry from Camp I to Camp II, a storm came by in mid-morning, catching us *en route*. Mark, Kevin and I, still gun-shy from the occurrence at 'Flash Point' (as we fondly named the scene of Kevin's quick release from his ski-bindings), needed no convincing to descend on skis to a safer place. The other two, John and Hiroo, not as confident skiing downhill as uphill, chose to sit out the storm by sticking their skis in the slope above them as lightning rods and digging small trenches in which to shelter from the bombardment. They too spent an hour on the slope with electricity arcing all around.

One particular note is worth mentioning: at no point during any of the storms did we actually see bolts of lightning, at least not up on the mountain. Bolts would frequently strike down from the thunderheads as they rolled in across the valley below, but once these thunderheads collided with the upper slopes of the mountain they produced mostly thunderous booming like a concussive explosion, accompanied and followed by high concentrations of static electricity, some of it apparently moving either through the snow or beneath the surface through rocks. Indeed, 'lightning' as we know it had no opportunity to strike since the cloud was at this point in direct contact with the mountain slope. Our Liaison Officer later confirmed with the local Kirgiz shepherds that the rock on Muztagh Ata contains magnetic ores which attract electricity, and that June is the most active month for electrical storms. I am unqualified to comment on the former, though our compasses were not affected. Regarding

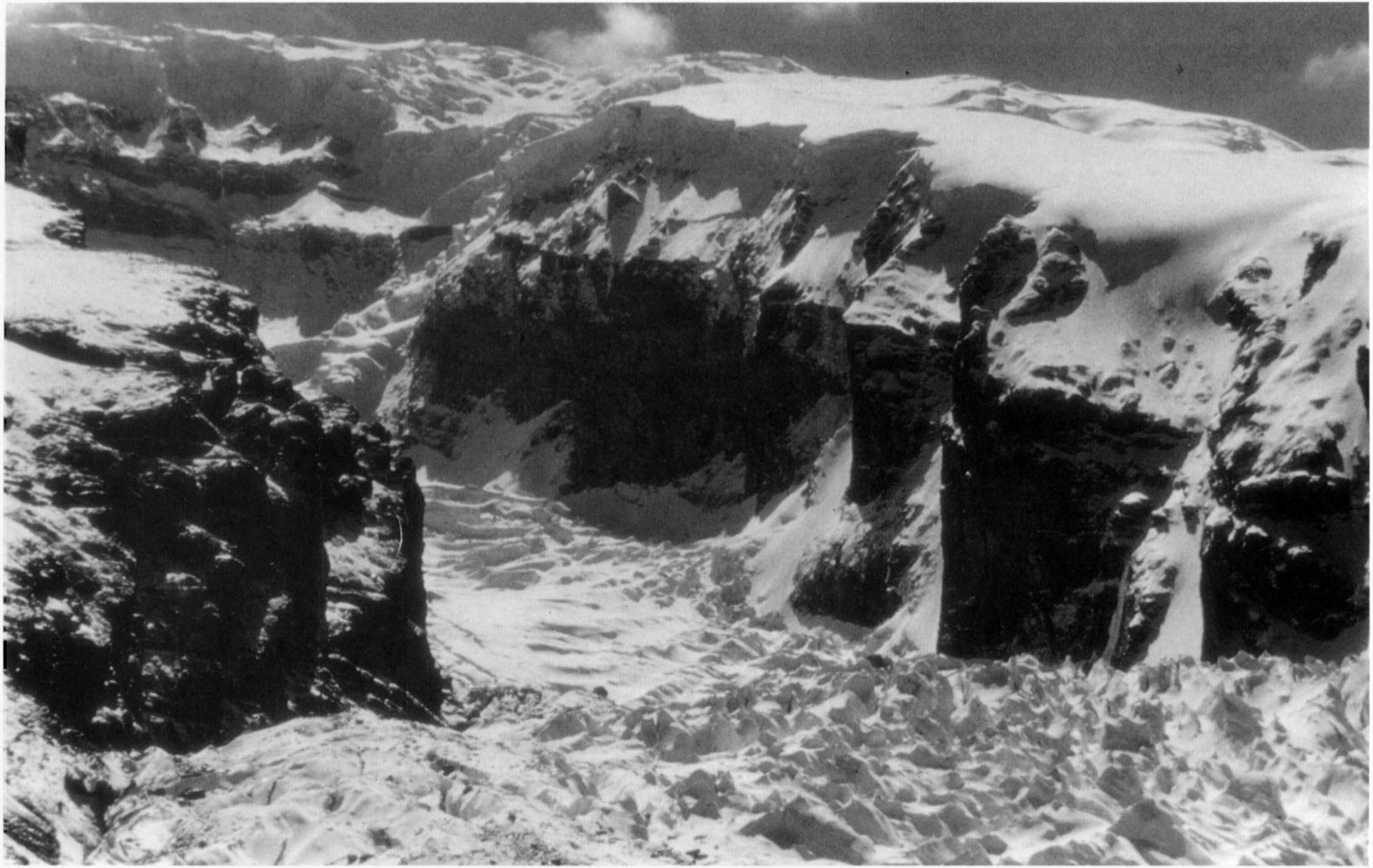

Photo: Michael Jardine

48 *Chaltumak Glacier, the S boundary of our winding route up Muztagh Ata.*

the latter, there was no need for explanations; we were clearly being targeted by the Father of Ice Mountains as subjects to whom a lesson needed to be taught, and the higher we reached on the mountain, the more stern the lesson. On the eve of making a decision whether to occupy the top camp for a summit bid, Hiroo fell ill with cerebral oedema and had to be evacuated from the mountain with Mark's assistance. The next day we took down our camps and abandoned the mountain, reaching Base just in time for a superb electrical storm which battered the upper slopes for over two hours. As Eric Shipton, British Consul to Kashgar, who in 1947 came within less than 300m of the summit, once said 'Mountains are stern teachers'.

As a postscript I might add that every good lesson has its moral. We learnt ours on the following day—what would have been our 'summit day'—when we descended from Base to the valley below, a modern-day camel caravan carrying our equipment. Not a cloud all day long, just beautiful blue skies as we gazed at the full panorama of Muztagh Ata for the first time, a full moon hanging just above the summit, seemingly daring us to come back. I am afraid I shall have to accept the challenge.