Nudo de Apolobamba

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THE NUDO DE APOLOBAMBA is a group of peaks varying in altitude from about 18,000 feet to nearly 20,000 feet, which stretch from Cololo to Yagua Yagua between 14°30′ and 15° South latitude and between 69° and 69°25′ West longitude. The most northerly part of the group, from Palomani Tranca to Yagua Yagua, forms the border between Peru and Bolivia, the remainder being entirely within the latter country. A rough but passable road connects the Paso de Pelechuco in the southern end of the group with La Paz via Puerto Acosta on the shores of Lake Titicaca. Because of its low altitude, peculiar snow conditions would be expected, especially as the most suitable climbing period appears to be during the winter months.

In 1957 our prospect for permission to enter the Karakoram looked black and so we cast around for a suitable alternative. Searching the maps of the Royal Geographic Society library, we found an unmapped region with many unclimbed high peaks, not too distant from England, the Nudo de Apolobamba. When Pakistani permission was granted, the Apolobamba idea was for the time dropped. When our interest revived, we found to our dismay that two parties, a German one led by Hans Richter in 1957 (*A.A.J.*, 1958, 11:1, p. 102) and an Italian one led by Romano Merendi in 1958 (*A.A.J.*, 1959, 11:2, pp. 321-322) had visited the area and climbed the highest peaks. However, they had left untouched the Matchu Suchi Coochi and Soral ridges and had done no mapping or geological work in the area. We made our plans accordingly: Tony Ewart and Paul Garrard, geologists, would cover the geology of the previously surveyed area from Cojata to Tambopata, while John Jenkinson, Bill Melbourne, Arthur Smith and I would cover the mapping and geology of the region between the Matchu Suchi Coochi and Soral ridges. This region, called by us the Tuichi valley, appeared on the existing maps as a wide valley draining eastward. We did not plan to have any standing base camps, but merely to dump food at suitable locations and to carry our own supplies from these dumps as required.

All of us were from Imperial College. Getting the financial backing was

not easy, but eventually the Imperial College Exploration Board and the Mount Everest Foundation provided the donations which made the expedition possible. Prior to leaving England, we had contacted Sr. G. Farwig, president of the Club Andino Boliviano, who offered to assist in all ways possible, including a reconnaissance of road conditions, tentative arrangements for mules and the loan of a truck for our transport.

Our travel arrangements were complicated by differing requirements of the various people and the University timetable. Tony Ewart intended to travel ahead to spend some time with Dr. Francis' Cordillera Carabaya party (See *Climbs and Expeditions*) before joining us. Bill Melbourne and I had to travel by ship to Arica to chase our baggage through customs while the others made use of the quickest route available after late exams. A strike by Italian seamen completely upset our arrangements. At one stage Tony was aboard a strike-bound ship in Dakar, Bill and I were stranded without a ship on the Cannes beaches and the others were making desperate efforts in London to get the last berths on a British ship bound for Río. We did all arrive in La Paz on time by rather devious routes, but Tony had to forgo his Carabaya jaunt. Because the baggage was not chased, it became available in La Paz only on July 11, although it left London on May 1.

After a short stay in La Paz and a quick trip to Chacaltaya (18,000 feet) to help our acclimatization, on July 13 we left La Paz by truck. We took with us Venancio, who was to be with us for the whole trip as porter, and Carlos Caraffa, who was to stay with us for a fortnight to gain climbing experience. At first we drove across the flat, bare and dreary altiplano, which is relieved only by the distant Cordillera Real. Near Lake Titicaca the scenery was much more pleasant, but beyond Puerto Acosta it was flat pampa again. However, soon the Apolobamba loomed up and speculation became rife. It took us only 12 hours to travel the 200 miles to the Pelechuco Pass at the end of the useful road, but it took two more days to make any further progress. It was fiesta time in Pelechuco and the muleteers were loath to leave. Although we finally persuaded them to come to the pass and load the gear, do what we could, we could not persuade them to take the gear via Pelechuco to the Tuichi valley. Deciding it was better to let them take us somewhere, Melbourne, Caraffa and I set off with them along a route they said existed around the western end of the Matchu Suchi Coochi. Soon after our departure, the truck arrived on a second trip from La Paz and took the others to the gold workings at Lago Suches. From there Ewart and Garrard did the geological mapping of the country between Cojata and Sina Pass. Jenkinson and Smith came with Caraffa to meet Melbourne and me at our main food dump at the snout of the West Soral

Glacier. This was as far as the muleteers would take us as they insisted that this was the Tuichi valley, although it was really the head of the Suches system and hence drained southwest. Still confused about the actual location of the Tuichi valley, we decided to get high as soon as possible. After burying surplus food in the moraines, we established a camp on dry rock at 16,800 feet under the northern side of the Matchu Suchi Coochi ridge. Conditions were in marked contrast to those on the southern slopes, where the glaciers descended to 15,000 feet. From this camp we climbed six peaks over 18,000 feet on the Matchu Suchi Coochi ridge and from the views began to understand the structure of the country. The Suches-Tuichi watershed was much farther east than on existing maps; the supposed broad valley at the head of the Tuichi turned out to be a narrow valley locally called the Sanches Cucho.

Most of the climbs on the Matchu Suchi ridge were done on northern slopes or ridges where the snow was in good condition. They provided good, clean, exposed climbs, but were not of a technically difficult nature. One day when we had split forces, both groups discovered how bad the snow can be on southern slopes. Despite the conditions, Jenkinson, Melbourne and Carlos climbed Pelechuco Huaracha. Smith and I tried to cross the West Soral Glacier and climb the highest peak of the West Soral ridge. We gave up our attempt after having spent five hours on less than two miles of gently rising glacier. We even tried crawling on hands and knees as an alternative to sinking waist-deep in the snow.

Azucarani, an isolated peak between the Matchu Suchi Coochi and Soral ridges was also climbed from this camp. Although there was some deep, soft snow before we got onto the ridge, the rest was delightful climbing on steep ice ridges and faces. From the top we could see awe inspiring ice ridges and glaciers guarding the East Soral peaks. East Soral's east face could not be climbed in any reasonable time and so we should have to find other ways of slipping past its defences.

After a period of mapping and geology, during which Caraffa left us for La Paz, Jenkinson and I set off to find a route to the East Soral ridge. Hoping to return to camp that same night, we carried only sleeping bags and emergency rations. However, by the time we had found a route into the valley to the north of the East Soral peak, it was snowing heavily and we took shelter in a tiny, stone herdsman's hut to await a break in the weather. At sunset a brief glimpse of the peaks justified our ideas that the northern slopes are much less glaciated and that there were possible climbing routes. After a night huddled in the dripping shelter of stone, we scuttled back to camp the next day.

With supplies for a week, we all returned to the valley north of the East Soral, though it was not till the next day that it cleared and showed us the beautiful valley we were camped in. Below lay a string of blue-green lakes and above a series of gleaming white glaciers fed down from the enclosing rock walls. Two possible routes up the East Soral ridges seemed to by-pass the monstrous gendarmes on each of the approach ridges. One led up a series of ledges past the gendarmes to gain the ridge between the highest peak and its easterly neighbor; the other ascended a gully around the gendarmes and led directly up the ridge to the highest peak.

We first tried the indirect route, but the traverse was too long and broken and so we consoled ourselves by traversing the easterly peak. The next day we set off at daybreak and hurried to the foot of the gully. At the bottom the snow was deep and soft, but the rock walls were so loose and flaky as to be unsafe. Higher, the snow was merely a thin covering over ice-covered rock and there we were forced onto the peeling slate walls. It took us two hours to climb the 300 feet of the gully. The ridge itself was not easy going either since there were two smaller gendarmes, many buttresses and above, a great deal of rotten ice. Even the final cone was in bad condition from melting. After a six-hour struggle we basked on the top in the sun before the clouds rose from the valley below. All four of us began the descent of the northwest ridge just below its crest, which was too rotten to trust. At the first col Melbourne and Smith continued straight down the ice face in order to complete work in that area, while Jenkinson and I traversed to a second peak. Here, as on other ridges, we found the same curious U-shaped trench between the rocks on the north and the glacial ice to the south. Moving in the trench except where a gap forced us onto either the rocks or the ice, we traversed onto this second peak and down to a second col beyond, but not until we had passed a 100-foot-high ice pyramid, split vertically by two intersecting crevasses 15 to 20 feet wide. Beyond the pyramid the ridge was a shamble of crevasses and rotten ice humps which forced us to zigzag. Close to the third summit the only reasonable route took us across steep soft snow on the eastern side of the ridge. On this time-consuming slope, the snow compressed down about two feet and then bulged out through the overlying soft snow so that although our legs were encased in snow, our feet reappeared in the open on small, crumbling snow platforms. Although we gained a semi-stable rock platform ten feet below the summit, we did not risk climbing higher, because one well placed axe-blow would have sent the whole of the rotten ice toppling to the valley. Not fancying to return by the same route, in deteriorating weather we abseiled down the rock into the mists. Six abseils dropped us 500 feet onto a steep corrie glacier, down

which we swept in a series of glissades. We ran down the scree in deepening gloom and thickening snow to reach camp just before nightfall.

Having satisfied temporarily our climbing ambitions with the ascents of the five principal peaks on the East Soral ridge, we spent the next few days exploring the valleys leading to Puina, Queara and Pelechuco. After returning to our main food dump, we began to shift stores into the Chucuyo Grande basin. Ewart, Garrard and Venancio had finished their work on the pampas and on August 12 joined us there at the old buildings of the San Antonio gold mine. While the survey and geological work in this area was being started, Jenkinson and I reconnoitered a route to the West Soral ridge, which did not involve too much climbing on southern slopes. We established camp at 17,500 feet on a glacier fed from the West Soral ridge.

While Jenkinson and I carried out some measurements on the glaciers of the basin, the other four moved up to the camp. They climbed the highest peak of the West Soral chain by a long and delicate ice ridge from which they were occasionally forced onto the steep northern face, but the ascent of the second highest peak presented no more difficulties than deep snow. Jenkinson and I joined them at this camp to make further glacial surveys and to climb other peaks. The coldest weather of the trip with minimum temperatures of at least —2°F. (the float jammed at this temperature) and gusty winds made the surveying so slow and trying that it left us time for only one other climb, Chucuyo Grande. It should be noted that although cold, the weather was not so severe as expected from Hans Ertl's remarks about the "polar cold . . . in the winter months of July and August" in the *Mountain World 1953.*

After this final burst of mountaineering activity, the party split once more, but poor visibility after 11 A.M. each day hampered all work. Only by starting to survey at daybreak could Melbourne complete his survey work in the Pelechuco Pass. Smith and Ewart failed to climb Katantika because of poor visibility, miserable snow conditions and a stolen food dump.

We were reunited on August 23 at the Suches gold workings. When the truck arrived to take half of us back to La Paz, we discovered that changed shipping schedules would prevent the rest of us from spending another fortnight in the valleys on the western side of the Palomani ridge. After a rush evacuation of our gear from the San Antonio mine, we set off for La Paz. In six weeks we had surveyed 200 square miles of new country, made a geological map of 500 square miles, made extensive glaciological observations, collected plants and lichens for the British Museum and climbed 15 virgin peaks.

Summary of Statistics

AREA: Cordillera Apolobamba, Bolivia.

Ascents:

(All first ascents.)

Traverse of the two highest peaks on the Matchu Suchi Coochi ridge from northwest to southeast, 5670 meters, or 18,603 feet, and 5680 meters, or 18,635 feet, July 22, 1959 (Bratt, Smith).

Neighboring peak to the two above, 5640 meters, or 18,504 feet, via northwest face, July 22, 1959 (Jenkinson, Melbourne).

Pelechuco Huaracha, 5650 meters, or 18,537 feet, via north ridge, July 23, 1959 (Melbourne, Jenkinson, Caraffa).

Azucarani, 5580 meters, or 18,307 feet, via northwest ridge, July 24, 1959 (Bratt, Jenkinson, Melbourne, Smith).

Peak southeast of highest peaks of Matchu Suchi Coochi ridge, 5610 meters, or 18,406 feet, via north ridge, July 27, 1959 (Bratt, Jenkinson, Caraffa).

Extreme northwest peak of Matchu Suchi Coochi ridge, 5600 meters, or 18,373 feet, via northeast ridge, July 31, 1959 (Bratt, Jenkinson).

Peak southeast of East Soral Peak, 5380 meters, or 17,651 feet, via north ridge, August 6, 1959 (Bratt, Jenkinson, Melbourne, Smith).

Peak southeast of above peak, 5320 meters, or 17,454 feet, traverse from this peak, August 6, 1959 (Bratt, Jenkinson).

East Soral Peak, 5470 meters, or 17,946 feet, via north ridge, August 7, 1959 (Bratt, Jenkinson, Melbourne, Smith).

Two peaks northwest of East Soral Peak, 5430 meters, or 17,815 feet, and 5390 meters, or 17,684 feet, via traverse of northwest ridge, August 7, 1959 (Bratt, Jenkinson).

West Soral Peak, 5640 meters, or 18,504 feet, via west ridge, August 15, 1959 (Ewart, Garrard, Melbourne).

End snow dome of West Soral ridge, 5560 meters, or 18,242 feet, August 16, 1959 (Ewart, Garrard, Smith).

Chucuyo Grande, 5430 meters, or 17,815 feet, via west face and ridge, August 16, 1959 (Bratt, Jenkinson).

PERSONNEL: Geoffrey C. Bratt, leader, Anthony Ewart, Paul Garrard, John Jenkinson, William Melbourne, Arthur Smith and the Bolivians Carlos Caraffa and Venancio.