Yuracuno-Ritipampa de Quelccaya region borders an interesting topographic pattern. The low-lying, gently dipping volcanic plateaus towards Macusani have been eroded to form rock towers, 30 to 40 feet high. These occur at an altitude betweeen 14,000 and 15,000 feet. There are also signs of internal drainage, sink holes and an absence of water. The rock towers are friable. Steps can be cut in them with an ice axe. The whole area must occupy more than 100 square miles. At several points the rounded glaciated highlands end where the *bosque* begins, leaving a dramatic indication of former ice extent.

JOHN RICKER, New Zealand Alpine Club

Cordillera Carabaya. Our expedition climbed in the Nudo Allinccapac. The members were Anthony Bland, Hugh Donohoe, Clive Ogilvie, my wife Elspeth and I as leader. From June 15 to 22, we attempted the south side of Cornice. We approached from Macusani and placed a camp at 15,100 feet. From here two attempts were made on Cornice. On the first, all of us but Donohoe reached 18,000 feet on the Cornice Glacier, where further ascent was prevented by a 20-foot wall of unconsolidated snow overlooking the bergschrund. This was followed by an attempt on the south ridge by all but my wife. Although a magnificent line, this route proved dangerous due to poor snow. From June 30 to July 3 my wife and a porter made the first ascent of "Chichoccapac" (16,800 feet), a peak on the east ridge of still unclimbed Incaccapac. Bland, Donohoe and Ogilvie made the first ascent of the three peaks on the north ridge of Chichiccapac, all three of which were about 16,750 feet. Unfortunately during the greater part of the expedition the weather and consequent snow conditions were bad.

ROGER WHEWELL, British Carabaya Expedition

Trident and Other Peaks, Cordillera Carabaya. Our party, W. Goodfellow, S. C. Dudley, D. G. Massam, R. G. McKenzie, Dr. G. G. Jackson, A. O. Parton, J. Dowd, A. N. H. Chinn and I as leader, was mostly from the Auckland Section of the New Zealand Alpine Club. We climbed in the Cordillera Carabaya, a small compact mountain group, which is virtually a continuation of the Cordillera Vilcanota. As we had been held up by customs in Lima, a bus with two drivers was hired to avoid further delay. It took 2¹/₂ days of hard travelling to reach Macusani (13,868 feet) by 6:30 A.M. on June 5. Great help was rendered by our genial host, Señor Alberto Zavala, and so we were able to get organized

200

rapidly. After lunch, an advance party of Parton, Massam and Dudley left in our host's Landrover for Kana Village School (11,500 feet). Next day Massam and Parton prospected up the Río Taype. This same day I contracted pulmonary oedema and after treatment with oxygen and antibiotics was evacuated to Ollachea clinic (8940 feet). All previous parties had climbed from the south or Macusani side. Our three-day approach was from the northeast and Base Camp was set up by a large lake at 14,600 feet near the head of the Río Taype. Horses and llamas could be taken about a third the distance up the valley as far as a waterfall above which the valley rose so steeply that only porters could be employed. Generally very good firm snow was experienced on this side, suitable for cramponing. Large névés with more gradual slopes made setting up high camps easier than on the south side, where Roger Whewell's English party experienced steep soft snow.

The fine snow peak C2 (16,645 feet), dominating Base Camp, was climbed from Camp I at 15,800 feet on June 14 by Chinn, Massam, Parton and Dudley via the southwest ridge. Descent was down the western buttress. This first ascent was repeated on the 16th by Goodfellow and McKenzie. Camp II (17,100 feet) was established above a col which we hoped would give access to Trident. A first ascent was made of the steep snow and ice peak C3 (17,164 feet) by Parton, Massam, Dudley and Chinn on June 19. They ascended the southeast ridge over the lower peak and descended directly down the south face from the high summit. On the 21st the same four and McKenzie climbed the icefall to the snow névé on Tococcapac, gaining the north ridge 300 yards from the summit (18,415 feet). Juraccapac (18,267 feet) was climbed that day from the névé by the broad southeast ridge. Both were new routes. Our major objective was the first ascent of Trident. This was accomplished by the same party from Camp II on June 22. They climbed via eastern snow slopes to the col between the east and main peak and thence along the northeast rock ridge to the summit. Descent was directly down the eastern rock face from the summit. Even though the climb was technical, they carried theodolite, movie and still cameras to the summit. Goodfellow, Jackson and Dowd gained a large névé south of Base Camp. A number of rock and snow peaks protruded from the névé, one of which was climbed on June 22. The next day five more of these minor peaks were climbed by Jackson and Dowd. It is possible that some were the same as those climbed by the Keele University party of 1965 but the position of the peaks climbed by them is not clear. Later Jackson and Dowd made a new

route on C2, climbing it directly from Base Camp by the south face of an eastern outlier, thence to a col and ridge to the lower east peak of C2 (16,630 feet; also a first ascent) and to the top.

After two weeks of convalescing at Ollachea and Macusani, I walked in to Base Camp on June 22. On the third day I climbed to Camp II, hoping to climb Trident (18,012 feet) with Jackson and Goodfellow. After two nights at this altitude, I had a slight relapse and so we returned to Base. After another at 16,500 feet, it was evident that further climbing was out for me.

Meanwhile Camp III was set up on the névé of the large northflowing glacier. Dudley, Parton, Massam and Chinn made the very interesting climb of the rock peak Screwdriver (18,184 feet) by the northwest rib and face. The climb was repeated by Chinn and Goodfellow on June 30. This peak was first climbed by the Keele party by the same route. Tower (18,295 feet) was climbed from Camp III by Chinn, Dudley, Parton and Massam on June 29 via a new route, the northwest face. The first ascent of Cornice (18,374 feet) was made by Massam and Parton on July 1 from Camp IV (17,300 feet) at the base of Wedge, Tower and Cornice. They climbed the east face to gain the south ridge 200 feet short of the summit. Goodfellow and McKenzie climbed the small rock peak between Cornice and Tower on July 3, a first ascent. Parton fixed a rope up the rock and ice gut through the cliffs below Recce Peak. Though short in distance, the climb to Camp V (17,900 feet) was a terrible grind; it was necessary to rappel down the steep gut from it. From Camp V Parton, Dudley, Massam and Chinn on July 5 made a new route onto Allinccapac (18,859 feet) from the northeast snow névé. Descent was along the southeast ridge. Contrary to previous parties' reports, there appeared to be only one definite summit. As the weather showed signs of deteriorating the next day while the above party made a new route on Huaynaccapac (18,629 feet) by its eastern slopes and a descent of the southwest slopes, they abandoned the idea of a traverse to the lower north peak (18,585 feet). Heavy snow fell that night and so the party returned to Base in unpleasant snow conditions.

DAVID COOPER, New Zealand Alpine Club

Climbs in Southern Peru. In April, 1966 I made three first ascents in southern Peru solo. Though not challenging, the climbs in this region have the advantage of good weather when it is out of season for most Peruvian ranges. Though César Morales lists Nevado Mismi (18,363)