

CORDILLERA APOLOBAMBA EXPEDITION: PERU 1985

THE FIRST ASCENT OF PALOMANI TRANCA

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CORDILLERA APOLOBAMBA EXPEDITION: PERU 1985

Approved by:

Mount Everest Foundation
British Mountaineering Council

Patron:
Doug Scott

S.J. Brown, Esq.
Hon. Secretary,
Mount Everest Foundation,
212 Greys Road,
Henley-on-Thames,
Oxon.

Address as below

26th September 1985

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Dear Simon,

BRIEF SUMMARY

Jim Curran and myself have both returned safely from our visit to Peru and I shall be preparing a full expedition report over the next month. I write briefly now simply to convey the good news that we were successful in our primary objective of making the first ascent of Palomani Tranca (5633m - 18,480 ft.)

After an abortive attempt to reach and climb the short but steep north ridge, owing to an unacceptably dangerous approach on a crevassed glacier, we eventually climbed the mountain by the west ridge which was about two miles long. The route was mixed in character with some rock; much powder snow; some ice; and it culminated in two 100 ft. high rock pinnacles, the furthest one of which was the summit.

It took some time to explore the approach to the mountain, establish an advance base at the foot of the peak, and then assess the various alternative routes. Once we had decided that the west ridge was the most practicable option, the actual climb took two days. Day one took us from advance base up the initial slopes to the start of the main ridge, where we camped at about 17,000 ft; and day two took us along the ridge to the summit. Weather was perfect and we arrived at 2.00 p.m. We retraced our steps and descended to advance base by 6.30 p.m. Snow and rock conditions were awful which seems to be par for the course: the snow was mostly knee deep powder, with hardly any consolidation except on icy bulges and flanks facing the sun, and the rock was frost shattered and in an advanced state of decay, being mainly of a slaty character.

The whole experience took one month. We arrived in Lima on Monday, 1st July; left Lima on 5th July, having made the necessary courtesy visits but failed to extract a map from the "military"; left Puno (on the shores of Lake Titicaca) on 9th July for the final 100 miles up and across the altiplano by lorry; arrived at base camp on 11th July; stayed on the mountain between 11th July and 23rd July; arrived back at Puno on 25th July; with the return to Lima requiring a further three days.

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In the one month available to us, our time actually on the mountain was reduced to two weeks owing to the time and difficulty involved in travelling to and from this remote area. We had hoped to attempt a new route on one of the other mountains though this was not practicable within our timescale, particularly as local transport was virtually non-existent, thereby precluding a "quick" transfer of base camp to another mountain.

However, with the knowledge we have gained of the geography of the area, and the foibles of the local transport system, we are able to make suggestions as to how to maximise the use of available transport and point to possible future objectives and likely base camps. This we shall do in our main report. In brief, there are clearly some very worthwhile climbing objectives in the area with many new routes to be done on the Peruvian flanks.

I trust this letter will suffice as a "Preliminary Report" and will forward the main report in due course.

Kind regards.

Yours sincerely,

A handwritten signature in black ink, appearing to be 'Geoff' followed by a flourish that likely represents 'Tier and Jim Curran'.

Geoff Tier and Jim Curran

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EXPEDITION REPORT

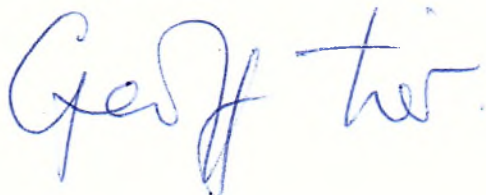
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MAPS 1 to 4 at the end of the report

Geoff Tier November 1985



THE FOUR SUMMITS OF PALOMANI TRANCA

No.1 is the highest.
The others are about 20ft. lower.
The cols between nos.2 and 3 are 300ft. deep.
No.4 is well detached from the rest.

No.1

No.2

No.3

No.4



The route approaches along the west ridge, from bottom right; follows the rising snow slope; directly up the ice arete on the left of the serac barrier; to summit no.3 at the top of the seracs; drops down to the hidden col on the left; up the next summit; down to the hidden col behind; and up the final summit on the left.

THE SUMMIT OF PALOMANI TRANCA
18,480ft. 5,633m.

The main summit

The secondary summit

Level of col behind
secondary summit

Level of first col
below snow shoulder

Descending from the
top of the serac
barrier



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1. MEMBERS

1. Geoff Tier, age 40, town planning consultant, lives in Reading. 14 years rock climbing and mountaineering experience. Frequent visitor to the Alps. One previous expedition to Mt. Barnaj in the Kishtwar Himalaya: 1977.
2. Jim Curran, age 41, college lecturer, lives in Sheffield. 24 years rock climbing and mountaineering experience. Frequent visitor to the Alps. Previous expeditions to Trango Tower (Karakorum) 1975: Barnaj (Kishtwar) 1977 & 1978: Choktoi (Karakorum) 1979: Mt. Kongur (China) 1981.
3. Andy Maskrey, age 29, town planning consultant, based in Lima since 1982. 10 years climbing experience. Widely travelled in the Peruvian Andes. Fluent in Spanish.

Our aim was to climb alpine style and be light weight in all respects, thereby keeping costs to a minimum, avoiding transport problems because of excessive baggage, and allowing maximum flexibility when we reached the mountains. We originally intended to have a team of four; 3 from U.K. and Andy in Peru. We finally settled on 3 and this proved quite acceptable.

2. OBJECTIVES: BACKGROUND RESEARCH

Andy had been pressing me to go out to Peru for several years, explaining how cheap it was, how attractive were the mountains, and how suitable it was for low cost/light weight expeditions. There are 21 glaciated Cordillera in Peru and so the first problem was to decide on which one to visit and then find a suitable objective.

Andy had several conversations with Cesar Moralis at the Instituto Peruano del Deporte which is the Peruvian equivalent of the Sports Council. We were looking for an opportunity to visit one of the more remote ranges, unknown to British climbers, and if possible find an unclimbed mountain. This clearly ruled out the Cordilleras Blanca, Huayash, Central & Vilcabamba, the most frequently visited ranges with perhaps the most spectacular peaks.

Cesar Moralis pointed us in the direction of the Cordillera Apolobamba on the Peru/Bolivian border, about 80 miles north east of Lake Titicaca, in the south east corner of the country. He said this was one of the remotest ranges in Peru; had very rarely been visited from the Peruvian side; and would probably include unclimbed summits. Andy could find no details of the area in Peru. **Maps appear at the end of report.**

I visited the Alpine Club and Royal Geographical Society and went through every book in the "Peruvian" shelves. No success; no worthwhile mention of the Apolobamba range. Did it really exist? After one particularly long and uneventful session in the R.G.S. Library, I was sitting at a table wondering where else we might go when I casually looked over at a pile of books on the adjoining table. On top were a number of technical reports on fishing in the E.E.C. and underneath, incredibly, was a volume called "Peru-Bolivia Boundary Commission Report". How lucky can you get? It was the work of an R.G.S. survey party carried out in 1911 and it covered the entire Apolobamba range. It included maps, photographs, definitive lists of summits, heights, etc. etc. The book is usually stored in the archives and had probably been brought up that particular day for the first time in decades. This stroke of good fortune meant we finally had a destination.

The next task was to locate a particular objective and this meant researching the records to see what had been done. Alan Rouse saved me hours of research by suggesting I concentrate on the American Alpine Journal, which includes very detailed accounts of most expeditions; Mountain World; and the Alpine Journal. In fact, the A.A.J. was by far the most useful, especially an article in Volume 13 which gave an exhaustive survey of ascents in the Apolobamba range up to 1960. Using this survey as a starting point, I then progressed through all subsequent volumes of the A.A.J. and was able to compile a complete record for the area.

Appendix 3 attached summarises my research and includes exhaustive lists of all the peaks on both the Peruvian and Bolivian sides of the border; with their names, heights, dates of ascents and routes climbed, where mentioned.

Arising out of this study, it emerged that the Peruvian side of the border had been rarely visited, never by British climbers, and there was only one major unclimbed peak in the whole range: Palomani Tranca at 18,480 ft/5633 m. At last we seemed to be in business and the Boundary Commission book even included a panoramic view of our mountains, with Palomani Tranca a small bump on the horizon, some 20 miles away. In addition to attempting a first ascent, it was also clear that all the mountains along the border itself were awaiting ascents by new routes from the west. The scope for new routes was therefore very great.

On paper, our objectives were as follows:

- (a) to be the first British party to visit the Cordillera Apolobamba from the Peruvian side;
- (b) to make the first ascent of Palomani Tranca by the north or west ridges, the only unclimbed and unattempted mountain in the range;
- (c) to make other ascents of mountains along the border, by new routes from the Peruvian side.

It is simple to define objectives on paper; for the more commonly visited ranges they can be very precise and very carefully thought out. It is also simple to convince yourself in advance for their practicality. In our case, though, we were constrained in many ways. We did not have the benefit of experience from other visitors to the area; we had no knowledge of climbing conditions; no close up photos of the mountains; no large scale maps of the area; and no precise details as to how we could travel the last 80 miles from Juliaca to the mountains.

But it was these "unknowns" that made the trip so attractive and the eventual outcome so uncertain. Could we actually get transport up to the mountains? Could we reach Palomani Tranca from the west? Why was it still unclimbed? Why had there been so few visitors to the Peruvian side? On the face of it, the "unknowns" appeared to be so fundamental that there had to be a fair probability of failure, perhaps even to reach the mountain.

3. ACHIEVEMENTS: SUMMARY

In the event, we had a remarkably trouble free trip with no major problems. Problems there certainly were, almost continuously, but solving them always proved possible, with time, and this led to a high degree of satisfaction.

We did reach the mountains and we did make the first ascent of Palomani Tranca. Time did not allow us to attempt any other routes. We also gained a good knowledge of the area and have put forward some suggestions for future objectives in the last section of the report.

Surprisingly, we were able to reach the mountains with a minimum of difficulty, though we were remarkably lucky in many respects as explained in Section 5. The approach to the range starts at Juliaca, the last town at 12,500 ft, near the edge of Lake Titicaca. From here, the final 100 miles is across the gently rising altiplano, a high level desert with successive ridges and intervening planes that have to be laboriously crossed.

There are only two tracks available. We took the western approach on our way out and arrived at Ananea, a small gold mining village at 15,200 ft. From there, we travelled east for 30 miles to reach the foot of Palomani Tranca, midway along the 10 mile long Lake Suches. On our return we followed the eastern route, via Cojata, and arrived once again at Juliaca. We therefore gained detailed knowledge of both routes into the range. Travel beyond Juliaca is only possible by lorry, very cheap, but time consuming. Travel as far as Ananea or Cojata is straightforward, with a daily lorry service, but beyond these last two villages lorries have to be negotiated for the final 30 miles up to the mountains on the border.

The range itself lies north/south, mainly along the border. Palomani Tranca lies at the eastern end of Lake Suches, midway along the range. To the south are the summits of Huanacuni, Cololo and Huellacaloc which lie some 20 miles east of the border. To the north are the highest summits of Palomani Grande, Nevada de Salluyo and Chupi Orco, all lying on the border. To the north west is an outlying arm of the range which includes the attractive peaks of Ananea and Calijon. The range as a whole is heavily glaciated and the majority of peaks are snow/ice summits, surrounded by massive ice sheets and glaciers, especially on the Bolivian side.

More detailed aspects of the trip are given in the following sections, including a detailed travel itinerary and a diary of events on the mountain. At this point, a brief summary of the climb is given, and Appendix 1 is a narrative account of the trip by Jim Curran.

We established a base camp at about 15,000ft on the northern edge of Lake Suches, mid way along the lake, and about seven miles from the foot of the mountain. It took some time to explore the approach to the mountain, establish an advance base at about 16,000ft at the foot of the mountain, and then assess the various alternative routes.

Our first attempt was abortive. At first sight, it seemed that we could probably ascend a glacier between Palomani Grande and Palomani Tranca, reach the intervening col, and from there climb Palomani Tranca by its short but steep north ridge. This route was abandoned after an unsuccessful attempt to reach the col. The glacier was steeper and more difficult than it appeared, with two loosely consolidated ice falls to contend with, and the two glacier basins were covered in deep powder snow. But of greater concern was the fact that the two snow basins were riddled with concealed crevasses, hidden by only a foot or so of soft snow. The night temperatures were around -20°C and day time temperatures only just above freezing. There was therefore no prospect that the snow on the glacier would freeze, thereby protecting us from the hidden crevasses, and so this route was quickly abandoned.

We then explored a number of alternative routes and eventually decided on the west ridge. It had a very steep approach from advance base at about 16,000ft, up to the start of the ridge proper at about 17,800ft. From there, the ridge undulated for about 2 miles over rock/snow/ice bulges, gradually rising to the summit pinacles.

The route was very mixed in character with some rock; much powder snow; some ice. It culminated in a steep serac barrier, beyond which were 2 quite independent pinacles, the furthest one being the summit. Once we had decided on the west ridge, the actual climb took 2 days. Day 1 took us from advance base, up the initial slopes to the start of the main ridge, where we camped at about 17,500ft. Day 2 took us along the undulating ridge, over the serac barrier, over the first pinnacle beyond, and finally up the second pinnacle to the summit at 18,480ft./5,633m. Weather was perfect and we arrived at 2.00pm. We retraced our steps and descended to advance base by 6.00pm.

Snow and rock conditions were awful and this is typical of this part of the range. The snow was mostly knee deep powder, often with a thin crust, and there was very little consolidation except on icy bulges and flanks facing the sun. The rock was slaty in character and extremely frost shattered, being in an advanced state of decay.

The whole experience took one month. We arrived in Lima on Monday 1st July; left Lima on 5th July, having made the necessary courtesy visits but failed to extract any large scale maps of the area from any source; left Juliaca (near Lake Titicaca) on 9th July for the final 100 miles up and across the altiplano; arrived at base camp on 11th July; stayed on the mountain between 11th July and 23rd July; arrived back at Juliaca on 25th July; with the return to Lima needing a further 2 days.

In the one month available to us, our time on the mountain was reduced to 2 weeks owing to the time and difficulty in travel to and from the mountain. We had hoped to attempt a new route on one of the other mountains in the area, possibly on one of the higher and more remote peaks. In the event this was not possible within our timescale, especially because local transport within the area was virtually non-existent, thereby precluding a quick transfer of base camp to another area.

However, with the knowledge we have gained of the geography of the area, and the foibles of the transport system, we are able to make suggestions for the future, including possible objectives and base camps. In brief, there are some attractive unclimbed routes on the west side of all the border peaks, all involving snow and ice work.

4. POLITICAL CONSIDERATIONS

1) Permits/visas.

It is not necessary for mountaineering expeditions to have formal permits from the authorities. They are free to visit any range, at any time and for any period. Entry into the country is quite straightforward; no formal visas are required in advance. Instead, you obtain a Tourist Visa at the point of entry which can be for 30, 60 or 90 days. Insist on a 90 day visa as renewals of Tourist Visas can be very time consuming. Keep your carbon copy of the Visa as this has to be handed in when you leave the country.

2) Informal liaison with authorities; general.

This is not essential, certainly to visit the popular ranges such as the Cordilleras Blanca, Huayash, Central and Vilcabamba. However, it is advisable (and in our case proved invaluable) to make contact with the authorities before visiting remote ranges in order to get appropriate documentation.

As we found on our visit to the Apolobamba range, which lies on the Bolivian/Peru border, access can present problems. There are frequent customs/police check points beyond Juliaca and all visitors to this remote area are viewed with suspicion; partly because of the smuggling problem across the border; partly because of the gold mining in the area; and because visitors are virtually unknown in the area and therefore attract constant attention. Whichever way you

approach the range beyond Juliaca, you will have to pass three customs posts. At worst, you could be refused access, and at best, you could have to part with clothes, food or whicky "in exchange" for entry. To avoid these problems, and the need to try and talk your way through, get a basic set of documents as described below.

3) Contact with Instituto Peruano del Deporte (I.P.D.)

This body is equivalent to the Sports Council and has a mountaineering section which is run by Cesar Moralis, an experienced mountaineer and effectively the "father" of Peruvian mountaineering. He has a wealth of knowledge about the main mountain areas, the history of ascents, access etc. He likes to hear about all expeditions and keeps records of their achievements. A visit to the I.P.D is always welcome, even from those visiting the more popular ranges,

Before visiting remote ranges, we suggest you write to the I.P.D., referring to any support from the M.E.F. and B.M.C., and let Cesar Moralis know of your objectives, destination, timetable, members etc. Also, ask for a reply confirming that the I.P.D. know of and approve your plans. Always carry copies of your letter (with Spanish copy) and the I.P.D. reply. As we found out, these letters are highly regarded by local officials.

Address; Cesar Moralis, Instituto Peruano del Deporte,
Estadio Nacional, Lima, Peru. Tel: Lima 619789

4) Contact with British Embassy.

Although not essential, the Embassy would like to hear from all U.K. visitors because they are the first to be contacted in the event of emergency, and also for more routine problems. Although the Embassy appeared to have advance knowledge of most of the expeditions this summer, they were not told, for example, of a Northumberland schoolboys trip to the Cordillera Blanca until we mentioned it in passing. Imagine the recriminations that would have followed had that party got into difficulty, not to mention the embarrassment of the Embassy who would have been called upon (and expected) to be co-operative in every way.

Robert Rayner, Second Secretary and Vice Consul, asked us to say a special word in our report. However low key the expedition, please let the Embassy know in advance of your arrival. When you arrive, let them know of your destination, objectives, itinerary, timetable etc. Not only is this courteous behaviour, but from our experience, it proved most beneficial.

In our case, we wrote a letter in advance and then visited the Embassy once in Lima to arrange for documents to assist us in our travels. The Embassy letter was most impressive, with a Spanish translation, and the 2" wide red stamp assured us of an uneventful passage through all customs posts without the need to part with any possessions. It was this document that seemed to have most authority with the local police/customs officials .. and without it we would certainly not have got through the customs posts at Ananea and Trapiche without parting with possessions.

Address; Her Majesty's Vice Consul, British Embassy,
Edificio Pacifico Washington, Plaza Washington, Lima
Tel: Lima 283830

5) Customs.

Our entry at Lima airport was straightforward and we were through in about two minutes. This is not always the case. Our baggage was plastered with Headed Notepaper with the words "Mountaineering equipment and clothes" written in spanish on each piece of paper. In addition we had a complete list of gear handy and this appearance of "organisation" seems to be effective. Although you probably won't speak spanish, just keep saying "Alpiniste" and keep repeating it time and again until the message gets through. If that doesn't work ... open the box.

5. TRANSPORT AND BAGGAGE

1) Baggage allowance.

Flight to Peru. VIASA airways offer the best baggage allowance with 40kg per person (in 2 pieces) on the outward journey, but only 20kg on the return. This is just sufficient for a lightweight trip if you are ruthless at keeping to bare essentials. Extra 20kg items are charged at £30 each. We made good use of hand baggage and filled our shoulder bags with heavy items, reaching about 20kg. Keep your hand baggage out of sight at Heathrow when checking in; afterwards there were no queries about weight. On our return, weight was a problem. We wore almost every item of clothing we had, 7 layers in one case. Also, hand baggage again was up to about 20kg and not queried. The check in scales at Lima airport are conveniently placed for a "misplaced boot" underneath the scales and heavier items can easily be got through. Otherwise, excess baggage is charged at \$10 per kilo... which means you don't have any.

2) Travel in Peru; long distance.

Except in the mountains where private lorries are used, travel was always on public transport, in buses or trains. Fares are very cheap, often with a small addition for luggage. On trains, there was no problem with the amount of baggage as it goes in the luggage van. On buses, problems of space can arise but we managed to get by with 2 large items per person. Details of travel costs and times for the journey from Lima to the mountains are given in Appendix 2.

3) Travel locally.

Travel in transit between hotels, bus and rail stations etc is best done by taxis which are very cheap; most have large roof racks. Where you have very short journeys, up to a mile, use the cycle carts. Agree the prices in advance, and always argue.

4) Safety of baggage.

Despite the commonly held view that theft is rife, we managed our trip without any losses, though Andy's flat was burgled in our absence! Remember always to leave someone with the baggage, preferably sitting on it, and link all the items together with a long chain and lock. Once it is on the bus, train or lorry it would seem to be quite safe.

5) Travel in the mountains.

To get into the mountains from Juliaca is quite straightforward. Travel is by lorry, the only form of public transport, and very cheap. See appendix 2 for prices, times etc. There are two possible routes: a) The western route, via Huancane and Putina, up to Ananea. This is ideal if you want to climb in the Ananea and Calijon massif, a few

miles to the north. A lorry can be hired in the village to take you up to possible base camps, one of which might be near a gold mine to which there is daily transport. If you want to climb in the border peaks, 20 miles to the east, don't go by this route as the last 20 miles will present problems. We were very lucky in that Andy speaks spanish and was able to persuade a lorry driver to take us over.

b) The eastern route, via Huancane and Cojata, is a better road and quicker for the border peaks. There is still another 20 miles to go beyond Cojata, but it should be possible to hire a lorry for this final stage.. there were plenty about in the village. Otherwise, there are mules and Llamas. There is also a lorry up to Sina pass on Saturdays which would be ideal for the highest mountains around Chupi Orco.

6. EQUIPMENT

We climbed alpine style and were a lightweight trip. We took one rucksack and one trunk each. The journey involves many changeovers in transport and it is helpful to keep baggage items to a minimum. The trunks, with handles, were very convenient; easy to move about and not easily damaged.

We did not need to buy any equipment or clothes, except where members did this for personal reasons. All climbing and camping gear was provided from member's own belongings.

Generally, the range of our gear was similar to what you would take to the Alps. Check list in appendix 5.

Regarding clothes, we had been led to believe, by Andy and others, that temperatures would be very high and so "cold weather" clothes could be kept to a minimum. In the event, nighttime temperatures were about -20 C, and daytime temperatures just above freezing. So take plenty of warm gear, especially sleeping bags and a duvet jacket.

Ski sticks were invaluable, if you can "accept and tolerate" them for alpine style climbing! The peaks are mainly of snow and ice; they are surrounded by extensive ice sheets and glaciers; snow surfaces are invariably powdery, often with a thin and insecure crust; and progress is difficult and slow. Ski sticks were always used on the approaches, on the glaciers, snow plateaux and were ideal for general stability on crusty snow, for searching out hidden crevasses and for support whilst resting. Also, they were good for fending off angry dogs, which appear from every farmstead .. and the three legged varieties are especially viscious, though we only encountered one such cripple. Jim found that throwing stone/boulders at the dogs was perhaps better than waving ski sticks.

7. FOOD

1) Food during travel.

The cost of living is so cheap in Peru that we ate out in restaurants all the time, usually eating 3 regular meals a day, and often more. Once away from Lima your money goes a long way. Breakfasts usually consisted of fried egg or melted cheese sandwiches, jam sandwich, followed by tea or coffee. Cost; about 30p. Lunches and dinners involved the same menus. We usually had a starter such as stuffed

avocado (a meal in itself); a main course which was rice or pasta based with meat and vegetables, or similar to a mixed grill; and a sweet such as jam pancake, gateaux or fruit. Cost: about £1.50 for all three courses. We were invariably full after two courses and often only ate the main course at about 80p.

We usually ate in the better restaurants and if you want to eat very well, and often, allow about £2.50 a day. If cost is a problem you could get by on £1.50 a day. At lunch time, a cheap option is to go for the "set menu", which all restaurants have to provide by law, usually involving a large bowl of soup, rice and stew, and a glass of fruit juice -- all for the standard price of 40p. -- and very filling. Beer is about 30p. a bottle. On average, assume £2 per person per day for food.

The standard of cooking and quality of food was generally very good, both in the towns and villages. We suffered no stomach upsets on account of hygiene. However, we each had a couple of bad mornings as a result of excessive gluttony or celebratory occasions but these were a small penalty to pay for such memorable bouts of eating.

2) Food on the mountain.

Because of the low baggage allowance on the flights to Peru we decided to buy virtually all our hill food locally. However, we did take a few luxury items with us such as a large cheese, large salami, tins of ham, a fruit cake, instant soups, ready brek, and some special tea bags.

The bulk of our food was bought in Puno, the last major town, and every conceivable item of food can be bought in the extensive markets. If you don't want to visit Puno, then the same applies to Juliaca from where you get transport up to the mountains. In both towns there are "contraband" markets where cheap goods can be bought which have been smuggled in from Bolivia - tins of Danish ham and malt whisky, for example, all much cheaper than in England.

Our food on the mountain was very basic and our aim was to buy food which could be cooked easily and was easy to digest. For breakfasts on the hill, we tended to eat ready brek/porridge, cup-a-soups, and brews. In base camps, breakfast became a drawn out affair lasting several hours and included porridge, cup-a-soup, and numerous chapatti butties flavoured with honey/marmite/jam/salami/cheese. During the day time we ate biscuits, dried fruit and chocolate. The evening meal was the main meal of the day and always started with a cup-a-soup, followed by a huge dish of dehydrated potato, spiced with mixed herbs & chillis and topped with melted cheese, with cold meat or fish added. It was simple to prepare, needing only one stove and one saucepan; easy to eat and was readily digested.

3) The overriding culinary success was the cup-a-soup.

These were generously donated by Bachelors Foods and were a constant source of enjoyment. They were drunk every day and, on the mountain, at every meal. We only took the "creamy" varieties, to avoid any rehydration problems, and the flavours were so varied that no-one ever became bored. I tried these cup-a-soups when they first came out many years ago and was most unimpressed, but they have clearly

been very much improved, so much so, that I would now put cup-a-soup at the top of my list for hill food.

In fact we not only drunk them on the hill but we were so addicted to them that we "brewed up" in our hotel bedrooms, much to the consternation of safety conscious Jim. Our petrol primus was very temperamental and had a regular habit of bursting into two foot high flames; every drink of cup-a-soup came to be equated with a potential attempt at arson.

But Jim soon overcame his fear and accepted that pyromaniac attempts at demolishing hotels were more than justified in the interests of continued drinking of cup-a-soups. He also found, probably because of his fear of fire, that whisky flavoured cup-a-soups are even tastier!

4) Emergency food by courtesy of Prices Candles Ltd.

On previous trips I had always regarded dextrasol and cigarettes as emergency food. For this trip, we always carried a candle, not just for lighting the tent but also for emergency food. When I first wrote to Prices Candles, my letter concentrated on the usual "lighting" benefits of candles in high altitude tests. We were delighted to be offered a donation of several boxes of candles.

However, there was a condition. "Would we please try out a new make of edible candle?" I thought this was a joke at first, but was soon convinced that this was a genuine offer. Prices have produced a candle which is made of 100% protein and which is undergoing tests with the marines who always carry such a candle for both light and emergency food. If the marines can eat them, then so could we, in extremis! And think of the weight saving on the mountain; perhaps we could simply take up cup-a-soups, cook them by candle light, then finish the meal by eating the rest of the candle. A completely new concept.

But the theory didn't quite work out in practice. The candles were certainly very good for light, being short, thick, very sturdy and slow burning. However, their edible qualities were not easily put to the test. We had sampled one in England before we left and found they could in fact be eaten, though they were predictably bland and quite tasteless. But what matter, if they were 100% protein then they had to be good.

The problem came when we tried to have a nibble on the summit in an attempt to photograph a "first" for the Prices catalogue. The temperature was well below freezing, and unfortunately, the candles were so "rock hard" that we couldn't make any impression on them. We were glad we weren't in an emergency, but I suppose we could have lit the candle first and drunk the wax -- or engaged in some other similarly devious scheme.

The idea, though, is surely very sound. In the light of our experience, perhaps Prices can develop the candle a stage further and include an anti-freeze agent (after all wine producers use it), and add a flavour, preferably whisky. Such a product could become as popular as cup-a-soup, and would solve the perpetual problem of what to use for light and food at high altitude; simply carry a multi-purpose supply of candles and cup a soups.

8. MEDICAL SUPPLIES

Although we took a comprehensive medical kit, described in appendix 4, we had remarkably few problems. General standards of health in Peru appear to be quite high; water supplies and food in restaurants are obviously clean as we ate out and suffered no stomach upsets due to lack of hiegiene. This may be partly explained by the fact that temperatures were so low that germs found it difficult to survive at this time of year.

The only problems we encountered were these:

- a) Geoff suffered constantly from constipation, but with no ill effects, and his once a week motion was much envied by all, especially Jim whose clock was regular to the minute, several times a day. Only once was dulcolax taken, just to see how effective it was. It worked.
- b) Jim and Geoff suffered two upset stomachs each, following on from gluttony the previous evenings, but recovery was complete within half a day.
- c) Geoff suffered a continuous "altitude cough" in the mountains which could not be removed by dimotame or benylin syrups. But there were no side effects which constrained the climbing.
- d) Andy suffered from altitude headache for one day at Puno (12,600ft) and after the first day at base camp (15,000ft). Otherwise he had no recurrence of headaches.

Altitude sickness. Geoff and Jim had no problems. They both took one diamox tablet daily, starting at Arequipa. Andy had two days with headaches, but was not taking diamox. Does diamox work? The answer is probably yes: Geoff and Jim did not suffer, Andy did briefly. However, our journey up to altitude was progressive in the classic sense and was slow enough for us to acclimatise in the normal way. We took 4 days to travel from Arequipa to Ananea (7,800ft to 15,200ft). We were then around 15,000ft to 16,000ft for the next 5 days, up and down within this range. The final 7 days involved climbing up and down between 16,000ft and 18,480ft.

Given these facts, it is difficult to be confident that diamox was the only reason why Geoff and Jim had no headaches. It was probably a bit of both; diamox and a steady gain in height, Either way, we had no side effects and will certainly use it again, especially because our breathing and recovery rates were unusually trouble free .. which probably can be accounted for by diamox.

9. WEATHER AND CLIMBING CONDITIONS

These aspects have been referred to earlier but are summaraised again.

1) Weather.

June, July and August are the winter months in Peru and are best for climbing. In the Apolobamba range, we had a perfect July with continuously clear skies by day and night. No sign of any rain, and only one day of cloud at Puno and half a day on the journey to Ananea. Day time temperatures were just above freezing, and usually freezing in the shade. There was usually a breeze which meant it was never hot and

sweaters and fibre pile jackets were always worn. The nights were incredibly cold, always, and temperatures were probably about -15 C at Puno (according to the South American handbook) and if that was the case were probably down to -25 C on the mountain .. where it was much colder than Puno. Water froze in 2 minutes at base camp! Towards the end of July, the breeze became a wind and this apparently gets stronger and stronger in August and September .. until summer arrives ... which in this area apparently means clouds and rain. July is said to be the finest month, reliably so, and weather on the mountains is always fine, that is, those mountains on the border where the influence from the jungle is not severe owing to further intervening mountains on the Bolivian side. In the Ananea and Calijon massif, however, to the north west, the jungle is just on the other side and we noticed they were regularly under cloud by mid afternoon.

2) Climbing conditions.

Because of the severely cold weather, snow conditions were reliably awful. Powder snow was the order of the day, often knee deep, with little or no consolidation and thin and insecure crusts. Neve was hardly ever encountered. This gave difficult and dangerous conditions on the glaciers owing to deep snow and concealed crevasses. Snow bridges over crevasses were not to be trusted. Rock conditions were equally bad with the slaty rock being extremely frost shattered. The rock ridges we climbed on were also plastered with powder snow and this led to precarious climbing at all times. Belays were virtually non existent on both rock and snow. However, our route was not in constant sun and was either in the shade or only had the benefit of oblique sun, hence the lack of any thawing and lack of good snow. It could well be that routes facing north have much better conditions with more sun/melt/neve, but we were not able to check this theory out. Also, it is possible that June might be warmer, though less reliable for climbing.

10. MAPS

This poses severe problems. Before we went we had very little to go by in terms of description of the area; its geography; access etc. In the event, this was not found to be a drawback and it is possible to reach and operate in the area without the need for large scale maps.

- 1) We had a copy of a small scale map in the 1911-1913 Boundary Commission Report produced by the RGS which was useful if only to establish the general position of the mountain. (See Map 1)
- 2) We had a map of Peru at a scale of 1:2,200,000 produced by the National Geographical Institute of Peru, and available from Stanfords in London. (See Map 2) It showed the two tracks up to the mountains beyond Juliaca, but we had no knowledge of their actual existence, nor the size of the villages marked on it.
- 3) We had a copy of the Boundary Commission map, at a scale of 1:250,000, which was too small for us to make any decisions in advance about likely positions for base camps and approach routes to the mountain. In retrospect, this map was accurate in all respects. (See Map 3)
- 4) Once in Peru, we acquired a map of the Puno Department at a scale of 1:670,000. This was useful for showing the general position of roads, tracks and villages but again, we had no idea of its accuracy. As we found out, a small black dot denotes a farmstead and not a village. This map can also be bought at Stanfords, though they have no current copies.

5) We had hoped to get a copy of a large scale map once in Peru, at 1:50,000 scale, but the Military authorities would not release one owing to its inclusion of the sensitive border. Andy had been trying for several months to get a copy, prior to our arrival and he was always told he could have it "later". "Later" never materialised, though we were never actually refused a copy.

However, the maps we did have were quite sufficient for our purposes. Once up on the altiplano, wide panoramic views of all the mountains were possible and so it was very easy to establish the general geography of the area from a distance. For local travel, once in the mountains, assessments were possible by eye because the mountains are orientated north/south along the border and the altiplano rises up to them with no major interrupting features.

11. COSTS: BALANCE SHEET

Calculations are for 2 persons from the U.K. Andy Maskrey was already in Peru. Costs were invariably incurred on a per person basis, not as a group, and so a balance sheet can readily be drawn up. There were no communal expenditures, such as climbing and camping gear, as all such items were provided on a personal basis.

<u>EXPENDITURE</u>	for 2 persons
air travel to Peru; Heathrow to Lima	930
air travel in Peru; Cuzco to Lima	102
travel from Lima to mountains and back to Cuzco	86
travel within towns; allow say	20
B.M.C. insurance	166
medical supplies	48
food in transit; assume £2 per person per day. Allow	72
food on mountain; assume 75p per person per day. Allow	20
hotels. Assume 40p per night per person. Say	6
films. 15 rolls of 35mm colour film	75
<u>Total for 2 persons:</u>	<u>1525</u>
 <u>INCOME</u>	
Mount Everest Foundation grant	350
British Mountaineering Council grant	400
Reading Evening Post donation	125
Geoff Tier personal	325
Jim Curran personal	325
<u>Total</u>	<u>1525</u>

12. LESSONS LEARNT

Many of these have been alluded to or described earlier, or in the various appendices. In summary:

- 1) Cost of living in Peru is extremely cheap by our standards. Travel/food/hotel costs are minimal and standards are generally high.
- 2) Access from Juliaca to the Apolobamba range is straightforward by lorry, as far as Ananea or Cojata, but beyond there may be serious problems in getting to a base camp within the mountains.
- 3) A knowledge of SPANISH is probably essential in the remoter areas. No one spoke English beyond Arequipa. Delays in arranging for transport could be serious, especially to get beyond Ananea and Cojata, though getting that far should be simple. Andy had great troubles arranging for lorries from Ananea to base camp; from base camp to Cojata; and then back to Juliaca. Without his spanish, we might never have got beyond Ananea.
- 4) Once you arrive at base camp, and your "once off" transport has gone, there is minimal scope for transferring to another base camp unless you walk. So choose a base from where there are several objectives, easily accessible. However, now that we know that a farmer by Lake Suches has a lorry, it may be possible to get him to move you about in the area. We didn't find out he had a lorry until we were ready to leave.
- 5) In view of the above comments, and the time taken to travel to and from Lima, a minimum of 4 weeks is essential to give you 2 weeks climbing. But the weather is obviously very reliable in July and so climbing every day should be possible. If you want to climb from more than one base, then 6 weeks would be essential.
- 6) It would appear that base camps will usually be some 5 miles or so west of the actual mountains, thereby requiring an advance base from which to actually climb. Heavy carries up to advance base must therefore be assumed, and this you will have to do yourselves. There is therefore a limit to the amount of time that you can operate at advance base, without having to waste time returning to base for supplies.
- 7) Safety of baggage in the mountains. We were fortunate in having Andy's girlfriend with us and she was always able to guard advance base. Base camp did not present problems because it was watched for us by the nearby farmer. The altiplano is widely grazed by Alpaca and the herdsmen appear from nowhere; they do not live locally and so cannot be relied upon. To leave camps unattended could well result in theft, probably not from the local farmers who you will be seeing regularly, but by the nomadic herdsmen.

13. POSSIBILITIES FOR THE FUTURE

We had good views of all the mountains in the range; Ananea and Calijon to the north west; the highest massif of Chupi Orco; the three Palomani summits; and the more remote peaks beyond the Bolivian border.

Possibilities include:

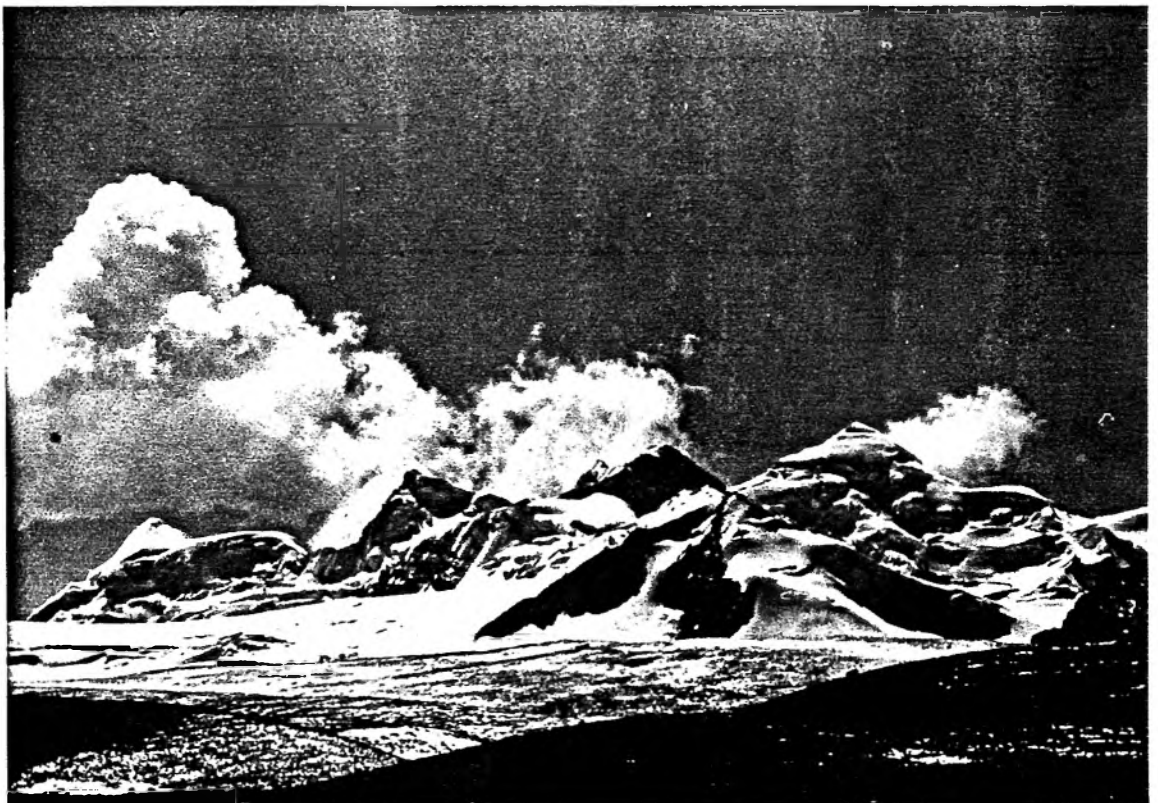
- 1) Generally, new routes on the western sides of all the border peaks, none of which appear to have been climbed from the west, except for Palomani Trance which we climbed.
 - 2) Calijon (19,117 ft). A second ascent by the steep unclimbed west ridge. (See photo over leaf)
 - 3) Chupi Orco massif, with 4 summits above 19,000 ft. New routes on the west side of each of the peaks. Chupi Orco is the highest peak in the range at 19,830 ft. See photo overleaf.
 - 4) Palomani Grande; new route up west ridge. We saw this at close hand and it is mainly a mixed snow/rock route for the lower third; a steep snow arete in the middle section; with a long gentle snow slope to the summit.
 - 5) Cololo (19,408 ft) in Bolivia. Second ascent by the unclimbed west ridge. See photo.
 - 6) Huanacuni (19,023 ft) in Bolivia. Second ascent by the unclimbed west ridge. See photo.
-



Ananea (19,168ft)

Calijon (19,117ft)

Calijon has only had one ascent by right skyline; left skyline (west ridge) unattempted.



The highest peaks in the range; the Chupi Orco massif. Chupi Orco itself is the highest at 19,830 ft. All of these peaks remain unclimbed from this, the Peruvian side.

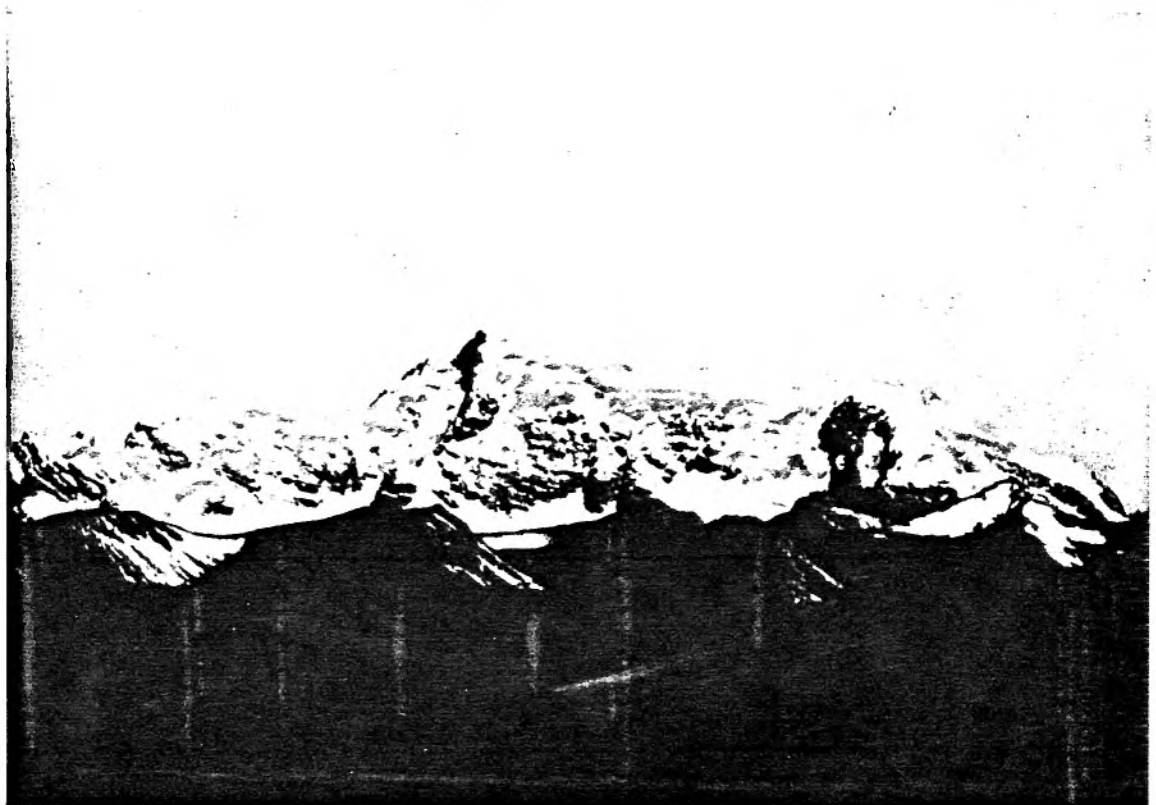
COLOLO (19,408 ft)

Well inside the Bolivian border.
Unclimbed from this, the western side.
Only had one ascent in 1957.



HUANACUNI (19,023 ft)

Well inside the Bolivian border, near Cololo.
Unclimbed from this, the western side.
Only had one ascent in 1957.



CORDILLERA APOLOBAMBA EXPEDITION: PERU 1985

Approved by:
Mount Everest Foundation
British Mountaineering Council

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Doug Scott

FIRST ASCENT OF PALOMANI TRANCA:

APPENDIX 1

NARRATIVE ACCOUNT BY JIM CURRAN

PART ONE: GETTING THERE

"In South America 'mañana' doesn't seem to convey quite the same sense of urgency as it does in Spain".

Geoff Tier and Jim Curran were sitting in the Sheraton Hotel in Caracas, already delayed by twelve hours on their way from Heathrow to Lima at the start of the Cordillera Apolobamba Expedition to attempt Geoff's unclimbed "mystery mountain", Palomani Tranca (18,500 ft.) on the Peru/Bolivian border. This jaded comment was premature, Peru was to hold many more time consuming gambits up her sleeve before the expedition was over.

Lima at last. Here, with some relief, Geoff and Jim met the third expedition member, Andy Maskrey and Chepi, his Peruvian girl friend. Andy had spent five years in Peru and was quite invaluable in beating the system (or lack of one) that seemed perversely determined to foil every effort to reach the mountains. Even so, it took five days before all four were able to leave Lima on the overnight bus to Arequipa, 600 miles to the South.

At 7,000 feet, Arequipa was a delightful contrast to the modern grey anonymity of Lima. A beautiful 16th century Spanish colonial city with impressive squares, churches and monasteries set under a semi-dormant volcano and sacred Inca mountain, Misti - "The White Man of the Mountains."

A day was too short to spend in this fascinating city, but time was pressing and the same evening saw the party en route on the overnight Pullman to Puno on the shores of the fabled Lake Titicaca, at 12,500 ft. the highest navigable lake in the world.

Two days of sightseeing by Jim and Geoff was excused by the need to acclimatise gently, and by the even more pressing necessity for Andy and Chepi to organise a lorry for the last 100 mile stage to the mountains. Transport arrangements throughout the expedition posed problems and the means available ranged from aircraft, lorries, buses, taxis and trains; on one especially surreal occasion, in the middle of the night and in the middle of nowhere, it consisted of five very young children and a wheelbarrow! While various options were considered, argued and rejected, Geoff and Jim indulged in visits to Pre-Inca tombs and ruins and a boat trip to the reed islands of Lake Titicaca, inhabited by the Aymara and Uro Indians, fishing and building their famous reed boats. A quick visit to the contraband market in Puno enabled last minute purchases of food to be made, as well as a bottle of Scotch that was only half the price of the same article in Reading!

Eventually, a lorry was found that was going to Ananea, a small gold mining village only 30 miles or so from Lake Suches at the foot of the mountain. An excruciating 10 hours drive over dusty, bumpy dirt roads finished in an unexpected blizzard as the lorry negotiated an awe inspiring series of hairpin bends on a truly awful road. The expedition envied the stoical resignation of the Indian men, women and children crammed into the lorry. In Siberian conditions, as darkness fell and the snow laden wind whipped across the Altiplano, it became all too apparent that the holiday was over.

After another day of wheeler dealing, Andy miraculously persuaded a lorry driver, engaged simultaneously in several diverse and dubious missions, to drive the expedition to Lake Suches. On a perfect morning under a vast blue sky the lorry breasted the crest of a rolling hill. Suddenly, the horizon was filled with the white spires and domes of the Cordillera Apolobamba. Amazingly, the expedition had arrived. Tomorrow the team would make its first forays to explore the various approaches to Palomani Tranca. That evening as the tents were erected amidst snow flurries and a biting cold wind, Jim muttered that as this was the nearest he'd ever been to the Equator, he was glad he wasn't going any nearer!

PART TWO: FIRST FORAYS

A frozen lake, a thick coating of hoar frost inside the tents, and a temperamental petrol stove unused to Peruvian gasoline delayed the team's departure to reconnoitre the approach to Palomani Tranca, but having nearly lost a tent in one of Geoff Tier's frequently foiled attempts to become a pyromaniac, Andy Maskrey, Jim Curran and Geoff set out with light loads to find a site for an Advance base.

In Lima it had been impossible to obtain from the Army Authorities a good map of the area, situated as it is on the sensitive border with Bolivia. Indeed, we had been told at one stage that we had come to the wrong country! The lack of a map caused the team to fall back on its not inconsiderable combined mountaineering experience. As a result, they instantly got lost! Contouring around Lake Suches to gain height the views of the mountain opened up, but so did the view of an unexpected valley that had to be descended and laboriously reascended until a final descent could be made to a beautiful high pasture, inhabited by herds of grazing alpacas, immediately below Palomani Tranca. The loads, by now far too heavy, were thankfully dropped.

The way ahead seemed obvious: up a small innocuous glacier, its snout only twenty minutes away, then at its crest turn right and up a rocky ridge to the top. It all looked very straightforward. Leaving the loads at the site of Advance base, the three descended (the right way) and struggled back to the tents as night fell, having completed a 15-mile walk at around the height of Mont Blanc. Too tired to eat, cups of instant soup brought oblivion.

After a much needed rest day, a heavy carry of camping and climbing gear was made to establish Advance Base. Chepi, Andy's girl friend, had only intended to spend a day or two at Base Camp, but given the vagaries of local transport, she sensibly decided to stay and, in so doing, provided a welcome feminine addition to Advance Base.

At this stage, optimism knew no bounds: the following day should account for the ascent of Palomani Tranca and after that there were several other attractive looking climbs to be done. The only reservation was the weather.

Better than on their arrival, it was still bitterly cold at night with temperatures of at least -15c. Jim compared it with the coldest he'd ever been; on an expedition with Chris Bonington to Mount Kongur in north west China. Any deterioration, and life on the mountain could get very unpleasant.

Waking before dawn the next day, and suffering Geoff's latest terrorist fantasy with the petrol stove, it was a relief to leave the tent in the grey half light of dawn and reach the foot of the glacier. Here, given the choice of two routes, it was perhaps inevitable that the wrong one was taken, resulting in some horrifying climbing on loose slaty rock before the central section of the glacier could be gained. Once on the ice another nasty surprise. The glacier was covered with knee deep powder snow and was riddled with partially or wholly concealed crevasses. Progress became painfully slow and tense. With time slipping away, any chance of the summit by this route receded. Andy came to his senses first and suggested going down. Minutes later, Jim became an instant convert to the cause of caution. As Geoff probed an innocuous snow slope ten yards away, the sound of tinkling fragments of ice descending into unseen depths seemed to come from beneath Jim's boots. Like treading on eggshells, the three warily retreated. The glacier was dangerous, possibly unjustifiably so, for it was doubtful whether even during the intense cold of night the surface snow would ever consolidate enough to be safely ascended.

That night, gratefully drinking brews of tea and Cuppa Soup that Chepi thrust into the tents, the three realised that this mountain was to be no walk over. If a safer route was not forthcoming, thoughts of failure loomed into sight. Chastened by their first experience, it was obvious that a more thorough exploration of the mountain would be necessary before a further attempt could be mounted.

PART THREE: SUCCESS

After the first abortive attempt to climb Palomani Tranca, the team's impetuous rush of enthusiasm had to be tempered with rather more planning and foresight.

The day after the near fiasco on the hideous crevassed glacier, Geoff Tier decided to investigate the alternative possibility of climbing the West Ridge of the mountain, whilst Jim Curran set out to climb a nearby easy peak from which, with binoculars, he hoped to be able to unravel the complexities of the final section of this ridge. Meanwhile, Andy and Chepi nobly volunteered to return to Base Camp for more food and fuel.

Geoff had a long and exhausting day, involving a lot of climbing up a shattered pinnacled ridge. He finally emerged on the snow crest and judged that the way ahead was feasible, so long as the ridge itself was followed rather than the snowy flanks. Snow conditions in the Andes are notoriously unreliable with deep powder snow all too common, making any progress desperately slow and laborious. Another reward for Geoff's efforts was an excellent and prolonged view of a condor which he managed to photograph, much to Jim's ill concealed jealousy (though he did glimpse one himself later on).

On the opposite side of the valley, Jim could see that the final section of the ridge consisted of four potential summits: a steep ice dome and three rock pinnacles beyond, all encrusted in snow and ice. The furthest rock pinnacle appeared to be the summit, but it was by no means certain that the pinnacles were connected or whether they had enormous drops in between. Only by climbing the ridge (over a mile long) ^{and the ice dome} would the truth be known. On a more positive note, Jim also saw that Geoff's long roundabout route to the upper section of the ridge could be shortened by the ascent of a long scree slope cutting through a rock buttress. Both climbers arrived at the same conclusion: that at least two days would be spent on the climb, and that the final outcome would remain in doubt until the pinnacles were reached.

The following morning, while Geoff recovered from his efforts, Jim set out carrying a load of climbing gear and laboriously ascended the interminable scree slope. Thirty steps then a rest ... twenty then fifteen, then no point in counting. Three hours of misery brought him to the rock buttress

and to his delight a simple way through to the snow slopes from which Geoff had seen the ridge. Unladen, he descended in just twenty minutes!

The day after Andy and Chepi's return, the three set out with one small tent and food for two days on the mountain. As late afternoon rapidly turned to night, they camped in a snowy hollow between rock outcrops just below the crest of the ridge.

Endless brews of tea and Cup-A-Soup, a meal of instant potato flavoured with melted cheese and chillies, a shared tin of fish, then a few hours of troubled sleep. At 4.0 a.m. Geoff started the stove again. More tea and Ready-Brek, then up and out of the tents into the still dark night.

Only a faint red glow on the horizon, the light of the gold mine at Ananea, as the three fumbled and cursed with frozen fingers to adjust crampon strap and safety harnesses. Reluctant acceptance of the new day, then off into the grey half light, wishing to be anywhere but here.

As the crest of the ridge was gained, so the sun rose; suddenly all doubts and misery were dispelled by fantastic views into the Bolivian mountains while Lake Suches gleamed in the shadow far below.

At first, the ridge was easy & the three climbed unroped along its narrow crest, aware of a huge void down to the glacier on their left. With the sun straight ahead it was hard to gauge progress or see exactly what was coming next. For three hours they followed the undulating edge, gaining height slowly and aware that the first big obstacle was looming, the large crest of ice, like a frozen wave, overhung at the top with a large cornice. But on its left it seemed possible to outflank the overhang by climbing a steep ice slope. Time to rope up and Geoff took the lead, as he was to all day, and climbed two long ice pitches, split by a belay on a tottering rock pinnacle poised above the edge of all things.

Panting and gasping in the thin cold air, the angle eased off. The moment of truth had arrived.

Some two hundred yards to the left a black rock fang reared up like a disintegrating tooth. It was painfully obvious that it was higher than the ice crest, though probably by no more than twenty or thirty feet. But between lay another intervening pinnacle. Even now it was impossible to tell whether the fragments of knife edged ridge connected all the way to the furthest and highest summit, or whether there would be a final unclimbable section. Geoff's "mystery mountain" wasn't giving away any secrets even at this advanced stage.

Nervous, and aware of a "sting in the tail" the three left their rucksacks, food and spare clothes on the ice crest and set off unladen on the last stretch. Geoff produced three excellent leads up and down flimsy snow crests while Andy and Jim pretended to belay him from more or less useless stances, the rope providing only an illusion of security. As Geoff balanced precariously on the ridges, the other two prepared for the last ditch solution should he fall: to jump off the opposite side of the ridge! (This is actually a technique - if it can be called that, mentioned in climbing instruction manuals, unfortunately they do not explain what to do if the leader is out of sight, for then which way do you jump?!)

At last Geoff shouted back that between him and the summit lay one more descent to the final rock pinnacle. From the last gap Jim and Andy watched with mounting tension as Geoff tackled the final pitch. It was longer than it looked and all three gathered on a rock ledge, only seventy feet to go!

Geoff gingerly set off once more, clearing snow off rock, which got more and more broken and unreliable. Suddenly Geoff announced in a very matter of fact tone of voice that he was up. Jim and Andy following were glad of the rope from above, though they knew that a fall from here could well pull both Geoff and the summit down with them!

What a summit! Standing room for one only at its highest point, the three shuffled around, half elated, half frightened, cameras working overtime. Across in Bolivia, huge clouds were angrily gathering, no immediate threat but adding to the tension. For all three, the satisfaction of climbing a virgin peak was offset by the knowledge that the day was only half over. After only twenty minutes on top the descent had to be faced and after one last look around at the panorama of peaks, passes and glaciers, the descent began.

Just for once the way down provided only tension, no surprises and no epics. As the late afternoon sun sank through layers of boiling clouds, three shattered climbers retraced their steps to the tent. With an hour's daylight left, and already a thirteen hour day behind them, a final burst of enthusiasm was called for; packing the tent and groaning under the weight of the loads, they set off to make it all the way down to Base Camp. Clattering and stumbling down the long scree slope in the last glimmer of daylight, desperately trying to keep one foot in front of the other, they aimed for the small glow of orange below them that meant safety, food and drink, and, above all, the knowledge that at last they could accept and enjoy, in retrospect, one of the most fulfilling climbs of their lives.

Jim Curran

CORDILLERA APOLOBAMBA EXPEDITION: PERU 1985

Approved by:
Mount Everest Foundation
British Mountaineering Council

Patron:
Doug Scott

DIARY OF TRAVEL AND CLIMBING ACTIVITY

APPENDIX 2

This section includes a detailed travel itinerary, including times, distances and travel costs, and a summary of activity on the mountain. Duration of climbing trip; 31 days. Period from 29 June 1985 to 29 July 1985.

(1) TRAVEL TO PERU: STAY IN LIMA

- Day 1. 29 June. Left Heathrow 7.45pm. VIASA Airways.
- Day 2. 30 June. Arrived Caracas 5.00am. 12 hr delay in hotel. Left Caracas 9.15pm. Stopover at Bogota 11.30pm.
- Day 3. 1 July. Arrived Lima 4.00am. Met by Andy Maskrey. Stayed at Andy's flat. Sightseeing in Lima.
- Day 4. 2 July. Visited Embassy to arrange for documents. Visited Military Dept. to collect maps. No success.
- Day 5. 3 July. Re-visited Military. No success with maps. Contacted Cesar Moralis at I.P.D. about maps. Re-visited Embassy. Documents not ready.
- Day 6. 4 July. Re-visited Military for maps. No success. Re-contacted I.P.D. but no success with maps. Collected documents from Embassy. Met Vice Consul. Bought tickets for bus to Arequipa next day. Bought air tickets for later return from Cuzco.

(2) LIMA TO BASE CAMP

- Day 7. 5 July. Left Lima at 4.30pm on overnight bus to Arequipa. Cost £6 for 600 mile/18 hour journey.
- Day 8. 6 July. Arrived Arequipa (7,800ft) at 10.30am. Booked hotel room for the day to protect luggage; 60p. Bought Pullman train ticket for Puno immediately on arrival. Left Arequipa on overnight train to Puno at 10.00pm. Cost £5 for 10hr/180 mile trip.
- Day 9. 7 July. Arrived Puno (12,600ft) at 8.00am. Booked room at Hostal Los Uros; 35p per person/night. Excellent hotel, 100yds from station. Visited pre-Inca ruins at Silustani.
- Day 10. 8 July. Visited reed islands in Lake Titicaca. Andy tried to arrange taxi/van up to the mountains. Prices varied between £35 to £110. In the end, all drivers refused to go because they didn't know the road. Went to Juliaca by taxi; 30 miles, 1hr, £5.30. Overnight room at Hotel Victoria; 30p each. Visited Jose Maria, English speaking priest, friend of Andy, to get suggestions for transport to the mountains. Only option was to go by lorry, only form of public transport. Taxis & private lorries too expensive.

- Day 11. 9 July. Took baggage to lorry station at 6.30am. Should leave at 8.00am. Finally left Juliaca (12,550ft) at 10.30am. Lorry took western approach to the mountains, via Huancane and Putina, to Ananea. Map 2. Passed 3 customs posts; no problems due to letter from Embassy. Lorry cost £2 each for 80 mile/8hr journey. One stop only at 3.00pm for lunch at Putina. Dropped off in the dark at 6.30pm, 3 miles short of Ananea. Stayed overnight at the crossroads in isolated house. Owner; Felipe Mamani.
- Day 12. 10 July. Andy walked up to Ananea, a mining town, previously known as Poto. Arranged for lorry to collect us. Waited all day. Lorry arrived and we finally arrived at Ananea (15,200ft) at 4.00pm. Good views of Ananea (19,168ft) and Calijon (19,117ft), a few miles to the north. But we still had another 30 miles to travel eastwards across to the main range, No public transport beyond Ananea. Andy negotiated for a private lorry to take us to Lake Suches, via Trapiche. Stayed night at hostel known as Alojamiento for 30p each. Plenty of shops in the village and one eating house.
- Day 13. 11 July. Lorry due to leave at 4.00am. Finally left ANANEA at 8.30am. 30 mile trip across Altiplano on poor and non-existent tracks. Customs at Ananea and Trapiche; would have had serious problems without Embassy documents. Lorry owned by Miguel Lizanaga, very obliging and only man in Ananea who knew the tracks across to Lake Suches. Lorry cost £17. Took us to a good base camp, half way along north bank of Lake Suches. Arrived at base camp at 11.30am. Near to isolated farmstead, friend of Miguel's. Set up camp $\frac{1}{4}$ mile from farm, 100yds from lake. Spare baggage left at farm. Good views of mountains.

(3) ON THE MOUNTAIN

Base camp at about 15,000ft.

- Day 14. 12 July. Explored approach to mountain. No detailed maps. Could see Palomani Tranca about 7 miles away. Instead of following edge of Lake and then unknown valley, we did a carry of supplies across the undulating land in a direct line with the mountain. Wrong choice; we had to cross 2 intervening deep valleys. Left base camp at 10.00am and reached foot of Palomani Tranca at 3.00pm. Left dump of supplies for advance base camp. Returned via other valley and edge of lake. Quick and easy walk. Left at 3.30pm; arrived back at base camp at 5.45pm. Hard day; 15 mile round trip.
- Day 15. 13 July. Rest day. Packed up for carry to advanced base.
- Day 16. 14 July. Left base camp at 11.00am. Established advance base at 16,000ft. 4 hour walk. Camp at foot of peak.
- Day 17. 15 July. Explored glacier approach to peak; 1st attempt. Left camp at 6.00am. Chose to follow moraine on left bank of glacier to get above first ice fall. Wrong choice; involved rock climbing on loose rock and scree. Then followed gently rising middle basin; knee deep powder snow. Difficult traverse through second ice fall into upper glacier basin.

This basin had appeared to be a smooth snow slope but it was badly crevassed, many covered by a foot of snow and thus dangerously concealed. Retreated at 2.30pm. Returned by easier right bank. Arrived back at camp at 5.00pm. What seemed to be an easy approach to the col between Palomani Grande and Palomani Tranca proved to be difficult and dangerous due to soft snow and hidden crevasses. This route was abandoned.

Day 18. 16 July. Exploration of alternative routes.

- a) Geoff Tier explored the west ridge; starting up a subsidiary ridge and following this over very poor slaty rock and powder snow up to the west ridge proper. Could then see the west ridge; undulating snow/ice ridge. But couldn't see main summit due to steep intervening serac barrier. Also saw the south ridge but too remote from our base; would need approach from end of lake. Left advance base at 10.00am; returned at 5.15pm. Hard day in bad conditions. Reached height of about 17,800ft. A camp would be needed around this high point, from where the summit could probably be reached in a day.
- b) Jim Curran climbed a summit of 17,400ft behind advanced base with good views over the range and across the west ridge of Palomani Tranca. Agreed that west ridge looked feasible; suggested direct approach up scree slope, through rock barrier, and directly up to my previous high point. Also, saw beyond serac barrier and saw three rock pinacles behind, either of which could be the summit.
- c) Andy Maskrey explored the head of the valley beyond advanced base and looked behind Palomani Grande, another possible route for later. Large hanging glaciers and regular serac falls.

Day 19. 17 July. a) Jim Curran did a heavy carry up scree slope, through rock barrier, and left dump $\frac{2}{3}$ of the way up to the west ridge proper. 2 hours up and 15 minutes down.

b) Andy Maskrey and Chepi fetched more supplies from base camp.

c) Geoff Tier had a rest day.

Day 20. 18 July. Left advanced base for second attempt at 11.00am. Reached Jim's dump in 2 hours. Continued on over scree then steep powder snow slopes. Reached good camp site at about 17,500ft, just below the start of the main west ridge.

Day 21. 19 July. Up at 4.30am. Left camp at 6.00am and climbed snow arete to Geoff's previous high point. Then followed undulating ridge; some good snow but mainly deep powder. Surmounted serac barrier on the left side; 60 degree ice/snow; top about 18,400ft, only a few feet lower than the summit. The furthest of the 2 pinacles was clearly the highest; the 3rd pinnacle was an outlier. Dropped down from serac barrier; traversed the first pinnacle on very loose rock/powder snow;

ascended the summit pinnacle on equally bad rock and snow. Arrived at summit, 18,480ft, at 12.00pm. Left at 12.30pm and retraced route to camp, then down to advanced base by 6.00pm.

Day 22. 20 July. Rest day. Weather very cold and windy; appeared to be breaking. Supplies had virtually run out. To fetch more supplies from base camp and attempt the west ridge of Palomani Grande would need a further 4 days minimum. We were due back at Puno by about 26th July and we still had to find some transport so we decided against a further route.

Day 23. 21 July. Andy, Chepi and Geoff climbed Jim's summit rear of base camp in the morning for panoramic photo's. Incredibly cold; weather deffinatly changing. Left advanced base at 2.30pm and reached base camp at 5.00pm.

Day 24. 22 July. Stayed at base camp. Andy tried to arrange a lorry with the owner of the farm. No firm plans.

Day 25. 23 July. Had a visit from another farmer who had an old lorry. He agreed to take us down to Cojata for £12.

(4) RETURN TO LIMA

Day 26. 24 July. Left base camp at 9.00am. Arrived at Cojata at 1.00pm. Customs post. Told we would have to wait three days for a lorry to Juliaca. Andy managed to arrange a lorry for next day, taking a load of wool.

Day 27. 25 July. Left Cojata at 2.30am. Arrived at Huancane at 6.30am but delayed until 10.00am due to customs for wool. Arrived back at Juliaca at 1.00pm. Journey from Cojata cost £7. Much better road than the one to Ananea and more direct for the border peaks. Took taxi to Puno; £5.30. Arrived at Puno at 4.00pm.

(Two options for return to Lima.

1. By train to Arequipa and then bus to Lima.
2. By train to Cuzco and flight to Lima, which is more expensive but ideal if you want to visit Machapicchu / Inca trail etc.)

Assume quickest return is chosen. (We went to Cuzco)

Leave Puno at 8.45pm on overnight train to Arequipa. £5.

Day 28. 26 July. Arrive Arequipa 6.00am. Buses leave for Lima five times a day; 18 hour journey. £6.30. Leave Arequipa midday.

Day 29. 27 July. Arrive Lima. 8.00am. Stay in Lima for day.

Day 30. 28 July. Leave Lima 12.30pm.

Day 31. 29 July. Arrive Heathrow 4.30pm.

ROUND TRIP: 31 days

CORDILLERA APOLOBAMBA EXPEDITION: PERU 1985

Approved by:

Mount Everest Foundation
British Mountaineering Council

Patron:
Doug Scott

CORDILLERA APOLOBAMBA

APPENDIX 3

HISTORY OF MOUNTAINEERING

POSITION AT NOVEMBER 1985

The following 2 pages summarise the history of mountaineering in this range; part 1 dealing with the Peruvian side, including the border peaks; and part 2 dealing with the Bolivian side.

The data is compiled from notes on expeditions reported in the AAJ, AJ, Mountain World and Mountain Magazine.

During the early visits there was much confusion about mountain heights and names. The Italians in 1958, in particular, overestimated heights by some 700ft and gave their own names to the peaks - but failed to publish a map showing their location. Gradually, an accepted range of heights has been agreed, and also peak names, most of which were originally set down in the 1911-1913 RGS Boundary Commission Survey. Where conflicting details remain, the RGS data has been accepted as the authority.

In summary:

- 1) There are 48 peaks/spot heights over 5000m, of which 13 are over 5800m and 4 are 6000m+.
- 2) Prior to this expedition, the only major peak to remain unclimbed/unattempted was Palomani Tranca at 5633m. This has now been climbed by its west ridge.
- 3) 30 peaks have had only 1 ascent.
- 4) 9 peaks have had only 2 ascents.
- 5) 4 peaks have had only 3 ascents.
- 6) The other 5 have had between 4 & 6 ascents.

There appear to be unclimbed routes on all of the mountains, especially on the Peruvian side which has hardly been explored and in many cases not visited at all.

CORDILLERA APOLOBAMBA: PERUSUMMARY OF PEAKS AND HISTORY OF ASCENTSPART 1: PERUVIAN SIDE OF BORDER, INCLUDING BORDER PEAKS

HEIGHT		NAME	YEAR	ASCENT	CLIMBERS
6044m	19830ft	Chupi Orco	1957	1st	Germans
			1958	2nd	Italians
			1981	3rd	Italians
			1984	4th	Swiss
6000	19685	Chupi Orco North	1958	1st	Italians
6000	19685	Angelicum	1958	1st	Italians
6000	19685	Jorge Chauvez	1958	1st	Italians
			1979	2nd	French
5900	19357	Donegani	1958	1st	Italians
5842	19168	Ananea	1958	1st	Italians
		(e. ridge)	1972	2nd	Swiss
		(s.w. ridge)	1972	3rd	Swiss
			1974	4th	Swiss
			1874	5th	Swiss
		(s.face spur)	1984	6th	French
5827	19117	Calijon	1958	1st	Italians
5808	19056	Salluyo	1958	1st	Italians
			1979	2nd	French
			1979	3rd	French
			1979	4th	French
			1981	5th	Italians
5808	19053	Flor de Roca	1958	1st	Italians
			1979	2nd	French
			1979	3rd	French
		(e.ridge)	1984	4th	Swiss
5800	19029	Tres Mujeres	1958	1st	Italians
			1979	2nd	French
5800	19029	Chocnacota (CAI)	1958	1st	Italians
5768	18924	Palomani Grande	1932	1st	Bolivia
			1958	2nd	Italians
			1979	3rd	French
5710	18733	Denegani	1984	1st	Swiss
5700	18701	Desio	1958	1st	Italians
5640	18504	Vanelli	1958	1st	Italians
5633	18480	<u>PALOMANI TRANCA</u>	1985	1st	British
5629	18472	Palomani Cunca	1958	1st	Italians
			1979	2nd	French
			1979	3rd	French
			1984	4th	Swiss
5450	17881	La Sierra	1958	1st	Italians
5423	17791	Ichocallo	1958	1st	Italians
5400	17717	Huanchuchiri	1972	1st	Canadian
			1979	2nd	French
			1979	3rd	French
5264	17270	Ripa Pata	1958	1st	Italians
5030	17300	Rinconada	1958	1st	Italians
			1974	2nd	Swiss

CORDILLERA APOLOBAMBA: PERUSUMMARY OF PEAKS AND HISTORY OF ASCENTSPART 2: BOLIVIAN SIDE OF BORDER, EXCLUDING BORDER PEAKS

HEIGHT		NAME	YEAR	ASCENT	CLIMBERS
5916m	19408ft	Cololo	1957	1st	Germans
5816	19080	Huelacollac	1957	1st	Germans
5798	19023	Huanacuni	1957	1st	Germans
5710	18734	Nubi	1957	1st	Germans
5700	18701	Villasanta	1958	1st	Italians
5680	18635	Matchu Suchi	1959	1st	British
		Coochi	1981	2nd	Italians
5670	18603	Matchu Suchi	1959	1st	British
		Coochi			
5650	18537	Iscacucho	1957	1st	Germans
5650	18537	Pelechuco Huaracha	1959	1st	British
			1975	2nd	Germans
			1981	3rd	Italians
5640	18504	Unnamed	1959	1st	British
5640	18504	Soral West	1959	1st	British
			1981	2nd	Italians
			1981	3rd	Italians
5610	18406	Unnamed	1959	1st	British
5600	18373	Monza	1958	1st	Italians
5600	18373	Matchu Sachi	1959	1st	British
		Coochi Ridge			
5580	18307	Azucarani	1959	1st	British
5530	18143	Catantica	1981	1st	Italians
5500	18045	Mita	1957	1st	Germans
			1975	2nd	Germans
5500	18045	Manco Capac	1979	1st	French
5500	18045	Cerro Levisitio	1957	1st	Germans
5480	17979	Posnansky	1957	1st	Germans
5470	17946	Soral east	1959	1st	British
			1981	2nd	Italians
5430	17815	Chucuyo Grande	1959	1st	British
5430	17815	Pt. N.W.of E.Soral	1959	1st	British
			1981	2nd	Italians
5390	17684	Pt. N.W.of E.Soral	1959	1st	British
5380	17651	Pt. S.E.of E.Soral	1959	1st	British
			1981	2nd	Italians
5320	17454	Pt. S.E.of E.Soral	1959	1st	British
			1981	2nd	Italians

SUMMARY OF VISITORS TO CORDILLERA APOLOBAMBA

1932	Bolivian army captain	Bolivian side
1957	Germans; Richter	Bolivian side
1958	Italians; Merendi	Peruvian side
1959	British; Bratt	Bolivian side
1972	Canadian; Ricker	Bolivian side
1972	Swiss; Duttle	Peruvian side
1974	Swiss; Duttle	Peruvian side
1975	Germans;	Bolivian side
1979	French; Genand	Bolivian side
1980	Italians; Campese	Bolivian side
1981	Italians; Campese	Bolivian side
1984	French; C.A.F.	Peruvian side
1985	British; (Tier/Curran/Maskrey)	Peruvian side

8 expeditions to the Bolivian side of the border.
5 expeditions to the Peruvian side of the border.

CORDILLERA APOLOBAMBA EXPEDITION: PERU 1985

Approved by:
Mount Everest Foundation
British Mountaineering Council

Patron:
Doug Scott

MEDICAL SUPPLIES

APPENDIX 4

ANALGESICS

paracetamol; 100 tabs. 500mg.
solpadeine; 24 tabs.
D.F.118 100 tabs.
fortral 15 caps. 50mg.
temgesic tabs.
ativan tabs.

ANTIBIOTICS

ceporex; 3 courses. 250mg.
tetrabid; 3 courses. 250mg.
erythroped; 3 courses. 250mg.

ANTI AMOEBIC

metronidazole; 40 tabs. 200mg.

SEDATIVES

valium; 30 tabs. 5mg.
nitrazepam 30 tabs. 5mg.
trancopal

ANTI HISTAMINES

piriton 50 tabs. 4mg.
antihistamine cream.

LUNG RELAXENTS

salbutamol; 50 tabs. 4mg.

DIURETICS

frusemide; 50 tabs. 40mg.

ALTITUDE SICKNESS

diamox; 100 tabs. 250mg.

ANTACIDS

malinal

LAXATIVES

dulcolax; 50 tabs. 5mg.

ANTI DIARRHOEA

lomotil; 50 tabs. 2.5mg.

codeine phosphate; 50 tabs. 30mg. sterile swabs

EYES

blefcon
amethocaine drops

NOSE

dimotapp
bronchodil
dricol

EARS

otosporin

THROAT

dequadin lozenges
bon jela cream

COUGH

dimotame syrup
benelyn

ANTISEPTICS

detol cream
cicatrin cream

MALARIA

paludrine; 800 tabs
maloprim; 100 tabs

MISCELLANEOUS

melolin dressings
rolls of elastoplast
rolls of lint
assorted dressing packs
cotton wool
steristrips
disposable scalpels
sterile needles
crepe bandages
safety pins
thermometer

CORDILLERA APOLOBAMBA EXPEDITION: PERU 1985

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PERSONAL CHECK LIST - EQUIPMENT/CLOTHES

APPENDIX 5

1 large kit bag	1 pair trionic trainers & gaiters
3 pairs underpants	1 pair koflacs and yetti gaiters
2 vests	1 crash hat
1 damart long johns	1 ice axe
2 damart vests	1 ice hammer
1 fibre pile trousers	1 pair jumars
1 fibre pile jacket	1 harness
1 salopette	1 rucksack
1 wool sweater	crampons (2 spare straps)
1 duvet jacket	1 headlamp
1 overtrousers	batteries and bulbs
1 goretex cagoule	1 goretex bivvy bag
2 pairs gloves	5 pairs laces
1 pair finger gloves	1 karrimat
3 pairs large socks	2 pairs sunglasses
2 pairs small socks	lip cream (x 2)
1 pair jeans	sun cream (x 2)
2 tee shirts	plastic water bottle
1 pair shorts	4 disposable lighters
1 balaclava	can opener
1 sleeping bag & inner	pocket knife
1 pair normal shoes/gym shoes	compass/binoculars
1 towel	scissors
1 diary	knife, fork & spoon
	mug, plate & bowl
	7 shampoos
	toothbrush & paste
	2 bars soap
	razors & cream

CAMPING GEAR:COMMUNAL USE

1 tent
1 tent
1 small(store) tent
2 large water carriers
2 sets nesting billies
1 frying pan
1 optimus stove large
1 optimus stove small
2 tubes priming paste
3 boxes meta fuel
candles
2 funnels
2 drying towels
polythene bags assorted
roll of nylon cord
2 kitchen knives
sewing kit
scissors
can openers
screw driver
pliers
file

CLIMBING GEAR:COMMUNAL USE

climbing ropes;1 each,1 spare
tape slings; 5 each
abseil line; 10m
carabiners; 10 each
rock pitons; 4 each
dead men; 1 each
dead boys; 1 each
nuts; 4 each
friends; 2 each
snow shovel;1
ski sticks; 2 each

PHOTOGRAPHIC GEAR

1 OM1 camera & 35mm lens
1 telephoto lens;75-300mm zoom
cases and filters for each
1 Minolta lightweight camera
1 pair binoculars
1 tripod
15 films
(personal variations)

FOOD

Luxury items only taken; most food bought in Peru
large cheese
large salami
tins of ham
boxes of ready brek
packets of smash
200 Bachelor cup o soups
quality tea bags
tins of marvel milk powder
dextrasol tablets

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ACKNOWLEDGEMENTS: SPONSORSHIP

APPENDIX 6

The expedition would wish to thank the following for their much valued support, without which this venture would have not been possible.

A. OFFICIAL BODIES

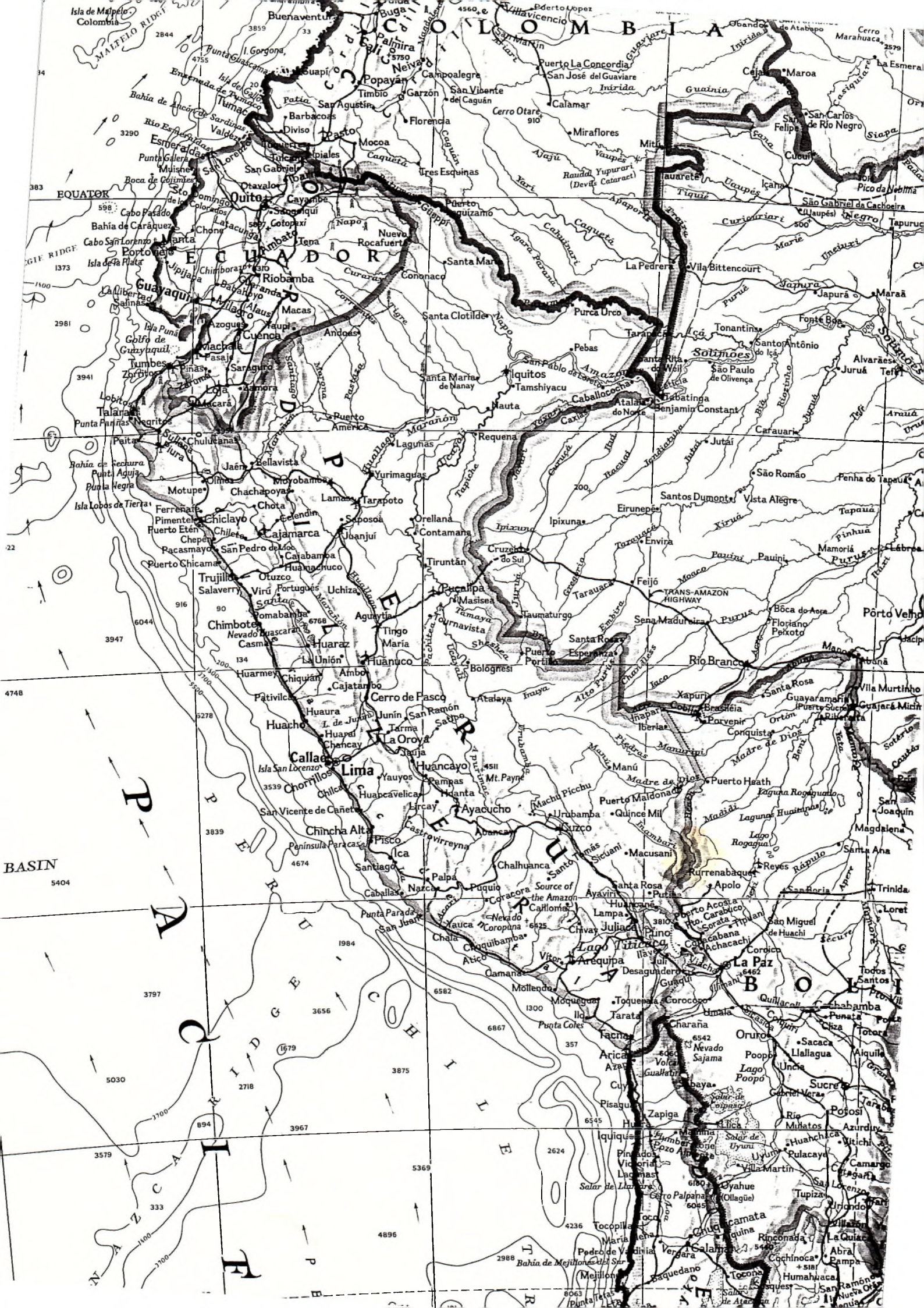
1. Mount Everest Foundation (grant aid)
2. British Mountaineering Council (grant aid)
3. British Embassy, Lima (documentation and advice)
4. Cesar Moralis, I.P.D., Lima (advice on climbing in Peru)

B. COMMERCIAL ORGANISATIONS

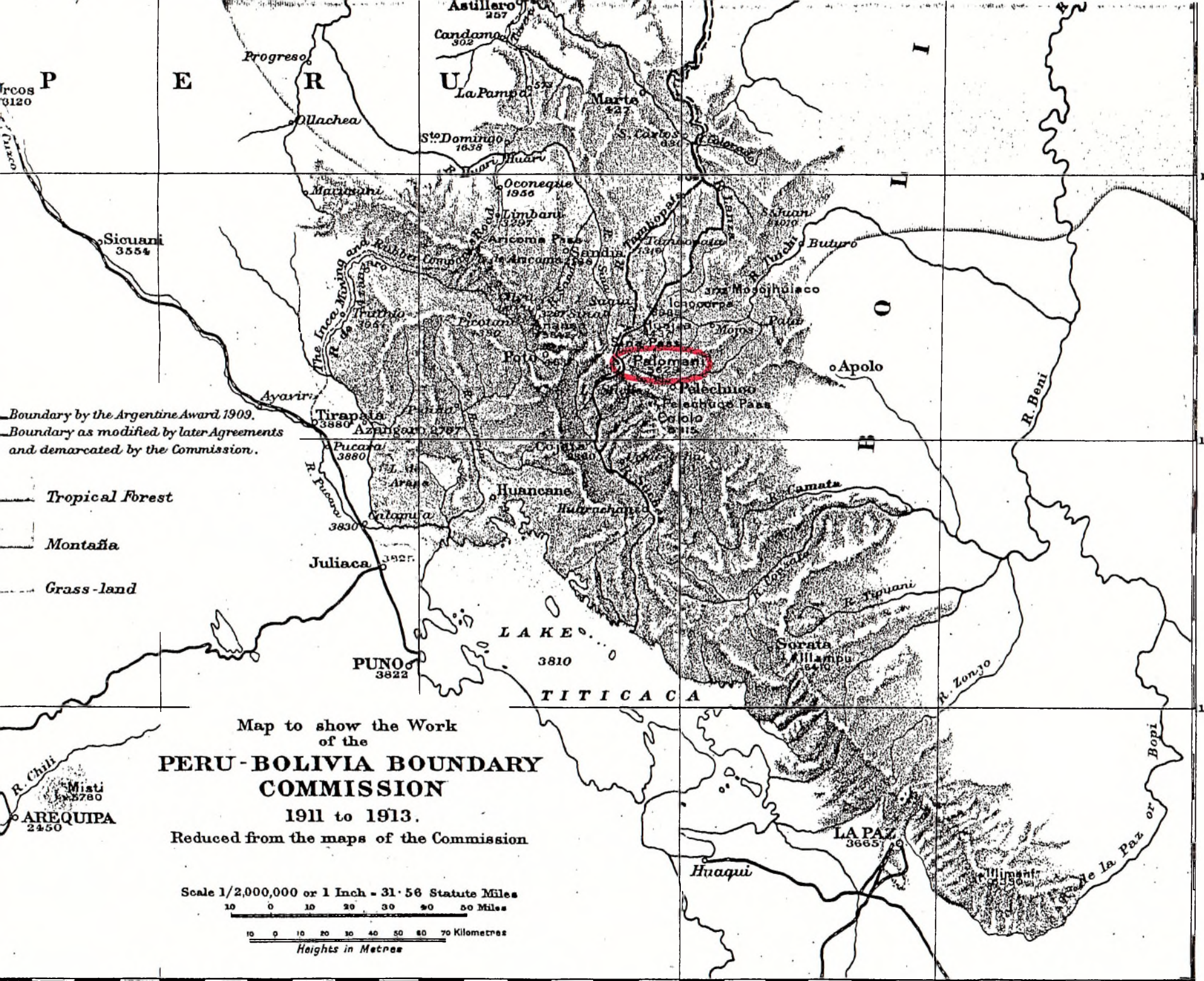
1. Berghaus, Newcastle (rucksacks, clothes, boots, gaiters)
2. Clive Rowlands Sports, Inverness (discount Koflac boots)
3. Carters Camping Centre, Reading (discount goods)
4. Europa Sport, Kendal (socks, sunglasses, discount rope)
5. Snowdon Mouldings, Llanberis (discount gloves)
6. Alcan Consumer Products, Amersham (polythene bags)
7. Carter Litho, Slough (letter heads)
8. Jessops, Leicester (discount film)
9. Pan Books, London (books)
10. Granada Publishing, London (books)
11. Prices Patent Candle Co, London (edible candles)
12. Reading Evening Post, Reading (donation)
13. Sony UK Ltd, Staines (discount Walkmen)
14. Wilderness Expeditions (AL Rouse), London (air fares)

C. OTHERS

1. Dr.M.Darlison, Wokingham (medical supplies and advice)
2. F.H.Bate, chemist, Wokingham (medical supplies)
3. Bankers; Midland Bank, Beaconsfield.

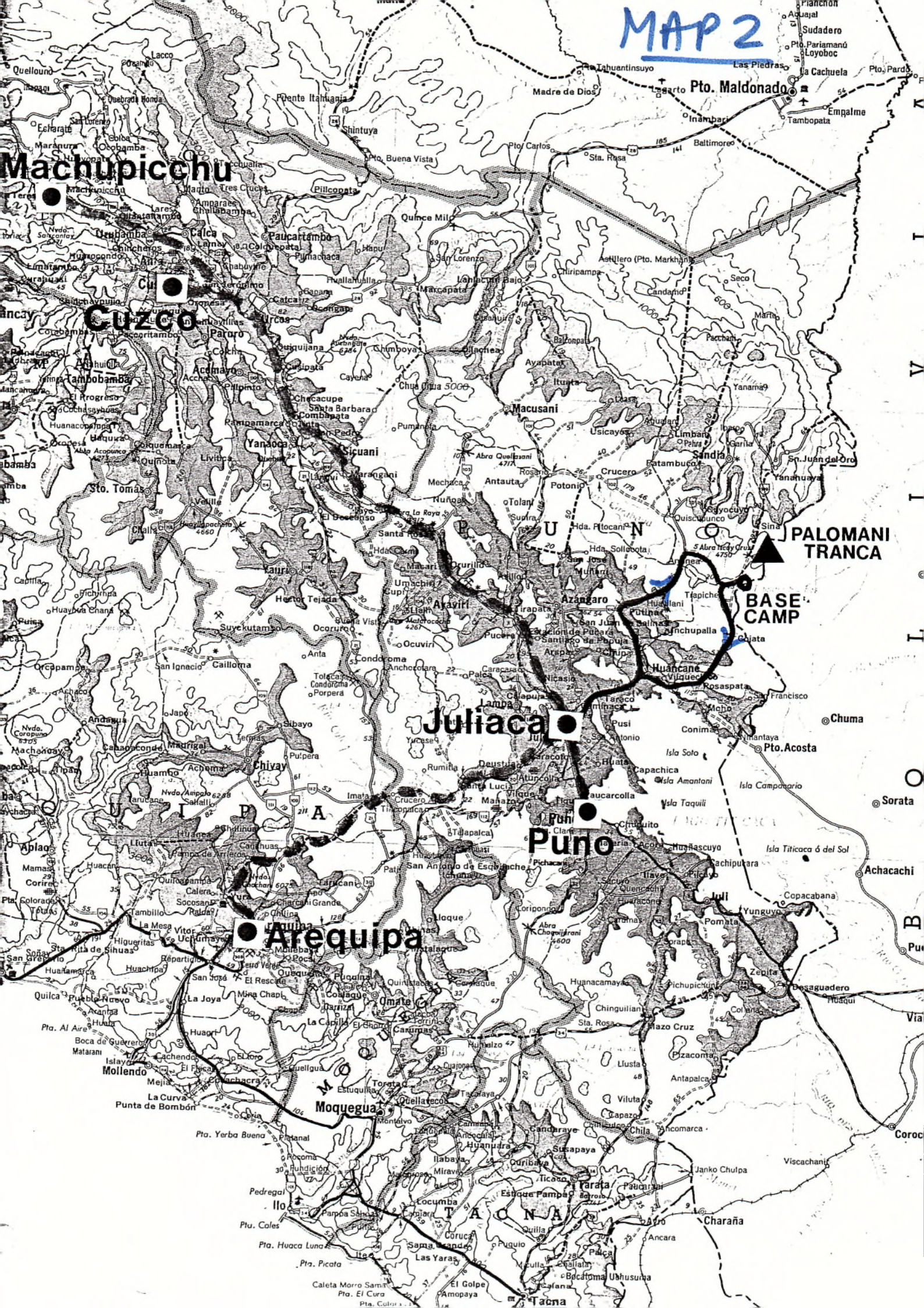


MAP 1



71° 70° 69° 68°

MAP 2



Machupicchu

Cuzco

Juliaca

Puno

Arequipa

**PALOMANI
TRANCA**

**BASE
CAMP**

Moquegua

TACNA

MAP 4

BOLIVIA

**PALOMANI
TRANCA**
18,480 ft.
5,633 m.

base

ANANEA

COJATA

PUTINA

HUANCANE

HUANCANE

JULIACA

PUNO

