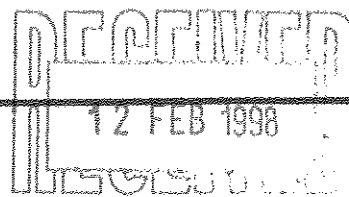


E.U.M.C.



**EDINBURGH UNIVERSITY
MOUNTAINEERING CLUB**

APOLOBAMBA EXPEDITION 1997

Approved by the University of Edinburgh

**Tom Bridgeland
Sam Chinnery
Rob Goodier
Jane Mckay
Paul Schweizer
Heather Smith**

Patron - Joe Simpson

Apolobamba Expedition 1997

Summary

The expedition spent almost 8 weeks in Bolivia from 3rd July to 24th of August. This period of time was spent in the Cordillera Real and Cordillera Apolobamba. In the Real the team managed repeats or first ascents of four major lines on peaks up to 6348m. In the Apolobamba several first and first British ascents were made including the first ascent of the beautiful Southwest face of Soral Este.

Introduction

The expedition spent July and August climbing in Bolivia's Cordillera Real and Cordillera Apolobamba mountains. The Cordillera Real mountain range is just north of La Paz and contains the country's highest peaks with several mountains reaching 6500 metres. In recent years it has become fairly popular due to the wealth of stunning routes up most of the mountains that are technically accessible for most people. Less well known about is the potential for very long, technically hard routes on some of the highest and most beautiful mountains in the country.

The Apolobamba, is still very much unexplored and there is potential for numerous new routes up peaks reaching 6000m. This range lies astride the Bolivia-Peru border, 50km north of Lake Titicaca, with most of the peaks either in Bolivia or on the frontier.

For a long time the only ascent in the Apolobamba area was that of Palomani Grande in the 1920s and the Apolobamba remained virtually unheard of until 1957 when a number of first ascents were made including Huellancollac, Cololo, Huanacuni and Salluyo by a German party. In 1959 members of London University's Imperial College travelled to the Apolobamba to climb and make topographic and geological surveys. The main climbing objectives were the Soral peaks and the Matchu Suchi Coochi group, making 14 first ascents. There have been no British expeditions to the Soral Oeste group since then, although a Spanish party made more ascents in 1969.

Our expedition originally aimed to spend a few weeks in the Real and then to move on to the Apolobamba. Due to information gained whilst in Bolivia Sam and Paul decided to stay on in the Real and explore the possibilities of new routes in the Illampu region. Jane, Heather, Rob and Tom aimed to explore the Soral Oeste group of mountains at the northern end of the Apolobamba, and to climb as many peaks as possible in the area, including new routes and first British ascents.

Personnel

Heather Smith: 1st year psychology.

Age: 20

Address: .

Experience: 1 year rock and ice climbing in Britain. Previous expedition to Guyana followed by 8 months travelling in South America. Speaks reasonable Spanish. Committee member of the EUMC.

Jane McKay: 4th year Chemistry

Age: 20

Address: Achnasilach, Seil Island, nr Oban.

Experience: Two previous expeditions: 2 months in Svalbard (Arctic circle), and six weeks circumnavigating the Vatnajökull icecap in Iceland on cross country skis. 3 years experience of rock and ice climbing in Britain. Committee member of the EUMC.

Tom Bridgeland - 2nd year Maths PhD

Age: 24

Address: 2 Shepley Road, Stocksmoor, Huddersfield, HD4 6XW.

Experience: 12 years experience of climbing in Britain. 4 Alpine seasons including ascents of the Walker Spur, Bonatti Pillar, North Face of the Dru and the Central Pillar of Freney.

Sam Chinnery: 3rd year Biology

Age: 20

Address: Lynwood, Eskdalemuir, Dumfriesshire DG13 OQH.

Experience: 5 years climbing in Britain leading up to E5, 3 Scottish winter seasons, climbing up to grade 8 and including Eagle ridge and Smiths Gully. Two Alpine seasons, including the Frendo spur and the Brenva spur on Mont Blanc. President of the EUMC.

Rob Goodier: 2nd year Maths PhD

Age: 24

Address: 27B, Bedford Av., Powis, Aberdeen .

Experience: Climbing for 9 years up to E5. 5 Alpine seasons. 3 Scottish winter seasons.

Paul Schweizer: Lecturer in Cognitive science

Age: 41

Address: 12 Pilrig Street., Edinburgh.

Experience: 23 years climbing experience. Two Alaskan expeditions including ascent of Cassin Ridge on Denali. Expedition to Mt. Waddington, 4 seasons in Canadian Rockies including north face of Mt. Fay and north face of Assinibone. Numerous Scottish winter seasons.

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Itinerary

Our team of 6 climbers spent 2 months in Bolivia from the 1st of July to the 26th of August.

The first week of the expedition was spent acclimatising in La Paz and making arrangements for the following weeks. The next 3 weeks were spent in the Cordillera Real, during which time the following ascents were made:

- 12/7 - group ascent of Alpamayo Pequeno (5330m) via the standard route.
- 14/7 - group ascent of Condoriri (5695m) via the standard route.
- 16/7 - Sam and Paul climbed left most of the four couloirs on Condoriri's east peak, Ala Drecha (5330m).
 - Tom and Rob climbed the 2nd gully from the left on Ala Drecha.
- 19/7 - Jane and Heather climbed Huayna Potosi via the standard route on the east side.
 - Tom, Rob, Paul and Sam climbed the west face of Huayna Potosi from a base camp below the glacier on the west side of the mountain.
- 24-27/7 - Jane and Heather climbed Illimani (6438m) via the standard route.

A few days were then spent in La Paz reorganising ourselves. Jane, Heather, Rob and Tom then travelled to the Apolobamba range for a 2 week trip. During that time the following peaks were climbed:

- 2/8 - Tom and Rob climbed A. Glacier (5350m).
- 3/8 - Jane and Heather climbed Mo. Alba (5525m).
 - Tom and Rob climbed the NW face of Katantica Oeste (5580) and then Rob completed a traverse of the Katantica group.
- 5-6/8 - Jane, Heather, Tom and Rob climbed the SW face of Sorel Este (5471m).
- 10-11/8 - Jane and Heather climbed Sorel Oeste (5691m) via the South ridge.
- 10-14/8 - Tom and Rob completed a 4 day traverse of the Palomani group.

We then returned to La Paz and spent the final 5 days exploring some other sites in Bolivia.

Concurrent with the Apolobamba trip Sam and Paul travelled to the Illampu region of the Real for three weeks.

- 3-7/8 - Sam and Paul (together with Jenz Richter) climbed East face of Pico del Norte (6045m).
- 18-21/8 - Sam and Paul climbed variation of the French Directissima on the west face of Illampu (6348m).

Route descriptions

Cordillera Real

Condoriri area

- Condoriri east – Ala Derecha (5330m)

The left most of the 4 couloirs facing the Condoriri basecamp was an excellent ice route reminiscent of a classic Scottish gully. Three sections of vertical ice and a hard mixed section where the ice was discontinuous. 450m, Scottish VI/6. Paul Schweizer, Sam Chinnery. This is possibly Gabarrou's 'Couloir Colibri' (Mountain info. HIGH 170).

The 2nd gully from the left was mostly neve with sections of steeper ice. Scottish III/4. Rob Goodier, Tom Bridgeland.

All the gullies on this face are exposed to stonefall as soon as the sun hits the face. Both climbs were done in a long day from Condoriri base camp.

- Condoriri main peak - Classic route (AD).

Possibly the best route of its kind in the Real. We did it a day from basecamp but it is also popular to bivi at the head of the initial gully, just before the high glacier. As this route is very popular route finding difficulties are minimal.

- Huayna Potosi - West face (1000m. D).

Variations on the French route were climbed from a base camp at the glacial lake below the face. The snow conditions were extremely good and the entire face was soloed by Tom and Rob. Descent was made down the SW ridge to drop back round to the base camp but it is usual to descend the normal route to the Zongo pass and walk back round the mountain to retrieve any gear.

Apolobamba

- A. Glacier (5350m)

At the south side of head of the Rio Sanches valley there is a path which leads up moraine. There eventually comes a point where it is possible to step on to the Sorel Oeste group glacier from the path. By walking north, the summit of A. Glacier is reached.

- South ridge of Sorel Oeste (5691m)

We camped on the Sorel Oeste group glacier to the NW of the summit of A. Glacier. This point was reached by the route described for A. Glacier. An hours walk from our tent was the start of the south ridge. This was climbed directly to the summit. We had intended to continue west to Sulika and complete a traverse of the group, but weather forced us to return to our tent via the south ridge.

- NW face of Katantica Oeste (5580m)

- SW face of Sorel Este (5471m)

The face was approached by ascending the west side of the glacier on the south side of Sorel Este. We camped on this glacier below the start of the face, but well to the west side to avoid some seracs and crevasses. Our route up this glacier was well

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chosen by viewing the area from the summit of A.Glaciär. The lower section of the face was about 300m and 50°. The upper section was mainly an icy runnel to the summit. This was about 200m of 60° ice. Descent was via the SE ridge.(D)

- 4 day traverse of Palomani group

Illampu region - Northern Cordillera Real.

- East Face Pico del Norte(6050m) - Austrian Route (900m. D+).

This is a rarely climbed snow and ice face to the NE of Illampu. No known recent ascents. We climbed the face from a high camp at 5100m on the East Illampu glacier. The face consisted of 600m of 60° neve leading to an upper rock band where a right hand exit was taken resulting in the steepest climbing of the route, 300m of 70° ice. The neve was excellent but the ice was old and very hard, difficult to place screws. Descent was same day down the normal route leading back to the glacier. This was difficult and tedious with loose rock, huge burgschrunds and seracs to contend with. Paul Schweizer, Sam Chinnery.

- West Face Illampu(6348m) - Variation Directisima (1200m. ED2. 95°).

In 1991 P. Gabarrou and Juan Villarroel climbed a directisima up the middle of the west face. This route had not been repeated in recent years and to our knowledge might not have had a second ascent. It was our intention to repeat this route but on arriving at the glacier high camp (as for the normal route) we discovered it was not possible to follow the original line as the face had altered considerably since 1991 and the bottom half of the route was badly melted out. We managed to climb a variation which took a very narrow ice couloir through a rock band to the left of the original route which it rejoined after 200m.

We left our high camp on the glacier below the face at 3.30am on the 19th of August and reached the bottom of the face at 5am. We were aiming to do the face in a single push and get down to high camp in the same day and so went very light with no bivi gear and minimal food and water. The start of the couloir involved a section a thin, overhanging ice followed by excellent lower angled ice. Most of the remainder of the face was 65° water ice, virtually no snow or neve, which proved to be extremely tiring and time consuming. The weather deteriorated badly in the afternoon with snow and spindrift pouring down the face. We reached the summit ridge in a storm at midnight after 20hrs continuous climbing on the face. Managed to dig a small hole in the cornice and had a cold bivi till dawn without any food or water. Descended normal route back to glacier camp the following day.

Suggestions for future expeditionsApolobamba

There are numerous possibilities for new routes in the northern Apolobamba. The SW face of the peak to the east of Sorel Este looked similar to and could be approached in the same way as our route on Sorel Este. We intended to attempt this, but could not because bad weather came in. A traverse of the Sorel Este group, via the ridge which runs from the SE to the NW, looked like it would be very long and exciting undertaking. A traverse of the Sorel Oeste group looked like it would be possible in a day from a camp on the glacier west of A. Glacier.

Cordillera Real

As far as we know there are few if any big summits of note left unclimbed in the Cordillera Real. However the majority of the Real's peaks have only had ascents by the line of least resistance. In the 70's and early 80's Alain Mesili and friends seemed to be the driving force in putting up challenging new routes away from the usual ways of ascent and as far as we can gather some of his routes still remain unrepeatable 15 years on. This demonstrates the lack of climbers going to the Real for technical ascents. The scope for new routes is definitely there on virtually most peaks in the Real. The problems occur with the general lack of ice due to environmental desiccation and the quality of the rock.

In the Condoriri area there are many 300-400m couloirs waiting to be climbed from the normal basecamp. The SE side of the peaks to the NE of Condoriri and Wyoming had many ice filled couloirs, some very steep (up to 90 degrees). The problem with this area is the poor quality of the rock.

Huayna Potosi has scope for new routes on the west and Northwest faces. The left hand side of the West face is mainly iced up granite with scope for 1000m long mixed climbs of a very high standard, possibly involving aid. Alain Mesili has done a route up the middle of this section of the face which is possibly unrepeatable. It is probably much harder than when it was first done due to a decrease in the amount of ice present but it is an excellent line and will no doubt provide excellent hard climbing. The NW face is accessible from the W face and is composed of granite buttresses and snow/ice patches. We do not know of any routes on it. The face is probably slightly less steep than the W face (60°). The face is possibly not popular because it is hard to get a good look at it.

Tiquimani (also called Cerro Illampu) (5550m) to the E of Huayna Potosi has a 1400 metre SW face up which an extremely hard mixed climb was done over three days by a party of Germans in 1973. We do not know of a repeat. This is the only route recorded on this very steep mountain which must offer other possibilities. Stone fall is supposed to be a problem on the SW face. Tiquimani is accessible from the Zongo pass (Bus from La Paz).

Illampu area.

Pico del Norte has several possible lines on its E face, snow couloirs leading to granite ridges. Probably TD or above, 2 days from high camp.

The East face of Illampu is composed of 5 huge granite pillars reminiscent of the Walker spur. They are up to 1500m long with an average angle of 60°. The first 3 pillars have been climbed. (First ascents took between two and three days.) Scope for routes on the remaining pillars. (Which are not quite as well defined.)

Pt. 5432 to the E of Pico del Norte has several 500m high granite faces on its S side. It looks like it could provide very long pure rock routes just half a days walk from the Illampu E face basecamp (Lago negra).

Area information;The Cordillera Real

Transport to the Condoriri area was arranged through Club Andino Boliviano. From where the jeep dropped us off it was easy to get muleteers to help carry our kit to base camp. We were then met by the same jeep driver 8 days later and he drove Tom, Rob, Paul and Sam to the west side of Huyana Potosi and continued with Jane and Heather to Zongo pass on the east side. We had difficulty in persuading our driver to take this road as it is often blocked by ice. A jeep to Illimani was again arranged through Club Andino.

There are detailed 1:50,000 scale maps of the Cordillera Real published by Alpenvereinskarte. These can be purchased in Britain (Stanfords) or for a better price they can be obtained from the Institute de Militar in La Paz.

Cordillera Real – Illampu region

You access this region from the sizeable jungle town of Sorata which we got to by catching the cheap public bus from La Paz (near the Cemetery). It is possible to buy most provisions in Sorata but expect higher prices and less choice than in La Paz. To get in to the mountains it is advisable to hire a four wheel drive jeep in Sorata. (We found the best and most reliable service from the Guides office opposite the Residential Sorata Hotel.) It is also best to arrange mules or llamas at the guides office.

For the E face of Illampu you get the jeep to take you to the tiny village of Cocoyo. (5hrs.) This area and this village in particular have been known to be quite hostile to foreigners, possibly due to multinational mining companies in the area. Due to this it is advisable to have some discretion and sensitivity towards the people who live here.

From here you have to find someone who is willing to take you to the basecamp at Lago Negra. (6hrs.) Due to the steepness of the ground only llamas are suitable.

For the W face of Illampu you take the jeep to the small village of Ancohuma (bread and food can usually be bought here.) where you can hire mules to take you up to the basecamp at 4500m. The high camp is a one day walk up the glacier to 5400m.

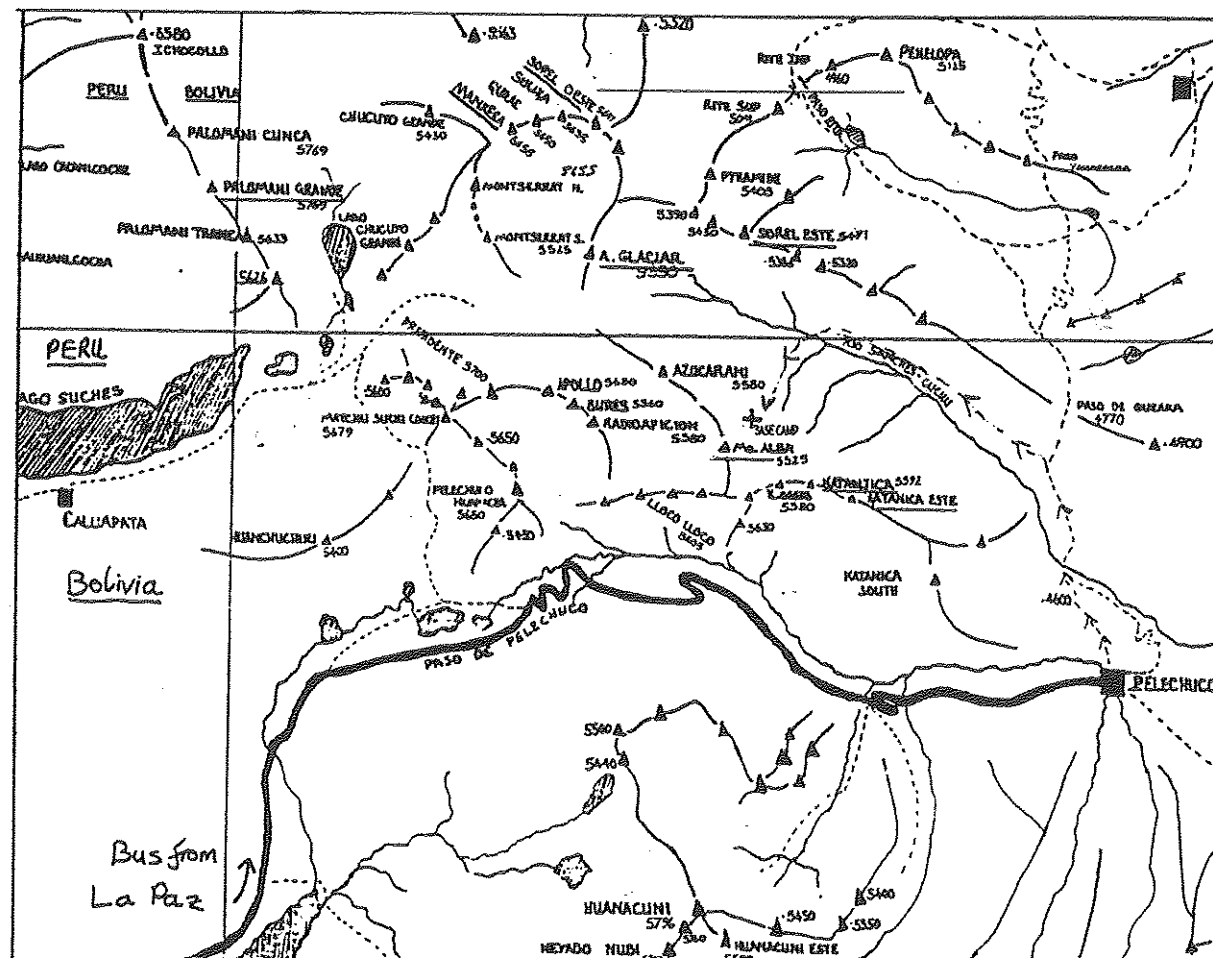
Excellent maps of the area are available from Stanfords Maps as before.

The Cordillera Apolobamba

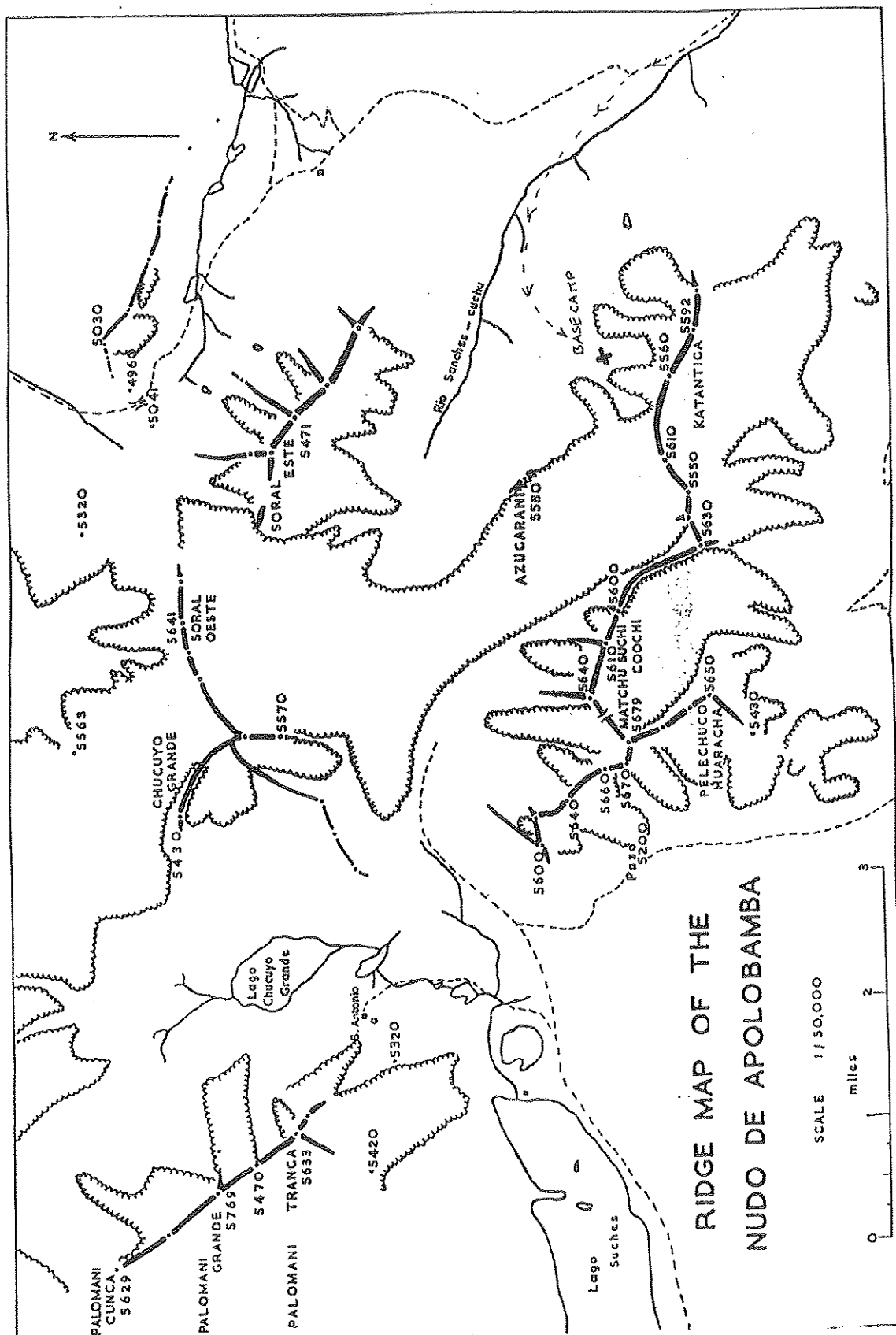
Transport to the Apolobamba was in a jeep arranged through Juan Villaroel (see acknowledgements). The local bus leaves from the cemetery in La Paz for Pelechuco on Wednesdays, takes about 24 hours and needs to be booked a day in advance. We returned on the local bus from Pelechuco to La Paz which takes about 18 hours (if you're lucky!). For the return journey tickets can be bought in Pelechuco on the Thursday night for the Friday night bus.

We purchased all our expedition food in La Paz, although some could be bought in Pelechuco. Pelechuco has a few very basic hotels and just this year there has been one telephone installed which can be used with a lot of bother! We paid for 4 mules, a muleteer and his companion to assist with carrying our stuff to base camp. This took two days but the journey can easily be done in a day. Our base camp was near the head of the Rio Sanches valley and is marked on the map below. We were told it is necessary to hire a camp guard, but we chose not to. In order to remain hidden we pitched our tent out of the main valley behind some boulders. We then discovered that we had camped next to a group of Bolivian miners. They were very friendly and certainly posed no threat to our belongings.

The best map of the Apolobamba region is Paul Hudson's map. This can be found in his Apolobamba 1993 expedition report (found in the RGS library in London). This map was compiled from information from previous expeditions. Below is an extract from that map with some additional information from our expedition.



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Apolobamba Expedition 1997

Health report

The first aid kit taken was compiled from information from previous expedition reports and advice obtained from the UIAA Mountain Medicine Centre. A vaccination programme was established before our departure. We had no major problems from altitude. Diamox was taken by some members of the team. Tom and Heather both suffered mild cases of frost bite. They both took a course of antibiotics to prevent infections.

Equipment

The weather in Bolivia during June to August is usually sunny and dry but above 3000m the temperatures can drop drastically during the night. Due to this the clothing we took was similar to that suitable for summer in the Alps except RAB down clothing was used by all members of the team at base camp and above. North Cape supplied us with some of their new Coolmax thermals which were used virtually non-stop throughout the expedition with great success, from La Paz night clubs to 6400 metres.

Shell jackets were essential for the wind encountered, less so for their waterproof capabilities. RAB Downpour salopettes were used by some of the team and proved to be excellent, extremely light weight with a very good fit.

Warm sleeping bags were essential with temperatures dropping down to -18°C when bivvying on glaciers. 900 gram down bags seemed to be fine. Several of the members used RAB's premier range of bags which proved more than warm enough. Two of the team used a combination of a RAB 300g micro bag inside a RAB 700g light bag. This proved very warm and highly flexible with the micro bag being also very useful as an emergency bivi sack whilst climbing.

Plastic boots were used by all members of the team. Scarpa boots proved to be definitely the warmest boot used.

As far as climbing hardware goes we took out a full rack of both rock and ice gear per pair. 2 ice stakes were taken but they were not used. Lots of ice screws were used particularly in the Real, up to 8 per pair. It is worth taking good quality screws due to the hardness of some of the ice. Some of the Russian titanium screws we took out just bent when placing them in the ice.

A light weight single skin tent would have been very useful for the highcamps on the glaciers above 5000m. We used goretex bivi sacks which although okay were very uncomfortable when cooking in strong winds.

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Budget

TRAVEL

Flights to La Paz (Iberia Airlines)	£3900 (6 x £650)
Travel to Apolobamba	£100 (Jeep + Public Transport)
Travel to Cordillera Real	£150 (Jeep)
Hire of mules / llamas (All areas)	£120

INSURANCE AND MEDICAL

Insurance cover (B.M.C.)	£840 (6 x £140)
First aid equipment	£170
Vaccinations	£240

FOOD AND STORES

Food - Britain	£110
Food - Bolivia(Mountains)	£720
Food - Bolivia (La Paz)	£750

EQUIPMENT

Tents	£420
Cooking equipment	£294
Climbing equipment (extras)	£1850

MISCELLANEOUS

Pre-expedition costs / preparation	£112
Accommodation in La Paz	£378
Post expedition - final report	£78
Photography	Personal costs

TOTAL COST £10,232

Total amount raised (Grants/ Awards.)

Mountaineering Club of Scotland	£400
Mount Everest Foundation	£500
Scottish Mountaineering Trust	£600
Liam Elliot Memorial Trust	£400
Edinburgh University Mountaineering Club	£420
<u>TOTAL</u>	<u>£2,320</u>

Research

BOOKS

La Cordillera Real - Bolivia. Alain Mesili. This is the best (and only) climbing guide to the Real. New edition out in 1996 but it is just a reprint of the 1984 edition. Do not know if it is available in this country. We bought a copy in La Paz from Los Amigos del Libro.

Mountaineering in the Andes by Jill Neate

South American Handbook : Trade and travel publications

Lonely Planet Guide: 3rd edition

Expedition Planners' Handbook and Directory 1993-94

ARTICLES

Several from previous High and Climber magazines

EXPEDITION REPORTS

1993 - United Kingdom Apolobamba Expedition

1992 - Southampton University Mountaineering Club Bolivian Expedition

1989 - Bath University Apolobamba Expedition

1989 - Loughborough Students Andes Expedition

1988 - Yorkshire Ramblers Club

CONTACTS / VISITS MADE

Mountaineering Council of Scotland

British Mountaineering Council

Yossi Brian - La Paz mountain guide.

British Embassy in La Paz

UIAA mountain medicine centre, London

Expedition Advisory Centre, London

RGS map room, London

Geography department map room, Edinburgh University

ExpED - Edinburgh University Expedition Society

Pete Marshall - Walsall Bolivia '97 expedition. (This expedition will be going to the Katanica group, Apolobamba in May/June. They intended to send us information from Bolivia before our departure.)

Acknowledgements

Many people made this expedition possible by providing not only funds but also a lot of crucial information without which we would have had a much harder time and probably not have achieved half as much we did so.

Neil McAdie from North Cape who first inspired us with his slide show of Bolivia to the club back in 1995. (Also for the thermals!)

Chris Minty from EXPED for providing us with basic information on how to go about setting up an expedition.

Mark Ryle for providing us with information and enthusiasm from his trip to Bolivia in 1995.

Joe Simpson for kindly agreeing to be our patron after only a very brief meeting on a certain Scottish sea stack

Juan Villaroel of Azimut Explorer La Paz for providing us with information and transport to the apolobamba.

SMC Mountaineering (RAB Down equipment) for providing clothing and sleeping bags at a reduced price.

TISO (Edinburgh Branch) for providing other essential gear at a reduced price.

We are especially grateful to those who thought our expedition was worth their financial support:

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The Liam Elliot Memorial Trust
The Mountaineering Trust for Scotland
The Edinburgh University Mountaineering Club

For further information all correspondence should be addressed to either:

Jane McKay OR
Achnasielach,
Seil Island,
Nr Oban.

Sam Chinnery
Lynwood,
Eskdalemuir,
Nr Langholm,
Dumfriesshire,
DG13 OQH