

Stoats

Apolobamba

2005



26th June 2005 – 23rd August 2005
Bolivia

www.apolobamba.com

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Everyone who supplied information, maps and other support to the expedition

Abstract

A team of 4, composed of former and current members of the University of Birmingham mountaineering club visited the Apolobamba region of Bolivia as an introduction to climbing in the Greater Ranges. The principal objectives were first British ascents of Canisaya and Casalala.

The trip was very successful, with all objectives completed. This resulted in 6 new routes at a range of standards, primarily in the southern Apolobamba, an area that has seen very little previous activity. The area around Cololo was also visited.

Expedition Members



Tom Bide

Tom is a 23 year old geology graduate and lives in London. He has been rock climbing all over the UK and France for 5 yrs, has been Scottish winter climbing for 4 years and has completed 2 Alpine seasons. His qualifications include SPA training and mountain first aid. He has trad climbed up to E1, in Scotland up to grade V and in the Alps up to D+.



Carl Reilly

Carl is a 22 year old student studying mechanical engineering at the University of Birmingham. He has been rock climbing all over UK and France for 6 years and been involved in Scottish winter climbing for 3 years as well as having been Alpine climbing in Chamonix for 2 seasons. He has climbed E2, in winter up to grade VI and climbed in the Alps up to D+, he also enjoys adventure racing and other such masochistic activities. His qualifications include BELA, WGL and ML training, SPA training and a Mountain First Aid Certificate.



Sam Walmsley

Sam is 26 and works as a joiner based in Devon. He has been rock climbing around Europe and France for 4 years and Scottish winter climbing for 2 years. He has also spent 3 summers in the Alps, based in Arolla and Chamonix. His qualifications include a Mountain First Aid Certificate. In the UK he has climbed up to E2, in winter up to grade VI and climbed in the Alps up to D+.



Graeme Schofield

Graeme, 24, works as a part time Geography Teacher based in Yorkshire. He has rock climbed all over UK and France for 5 yrs, and has been Scottish winter climbing for 3 years as well as enjoying 2 Alpine seasons based in Arolla and Chamonix. He has gained extensive British hill walking and scrambling experience over two decades, as well as trekking in the Tian Shan. He has climbed up to E3 on trad, V in winter and D+ in the Alps. His qualifications include ML, SPA, and a Mountain First Aid Certificate. He also has one years experience as a freelance outdoor instructor, predominantly climbing instruction and mountain leading.

Introduction

The 4 man team met through The University of Birmingham Mountaineering Club. Since then the group have climbed together in the UK, both rock and winter climbing; bouldered in Fontainebleau and spent 3 seasons in the French/Swiss Alps.

The next logical step was a trip to the Greater Ranges. The Andes were an obvious destination owing to the lack of bureaucracy involved in climbing there, easy access to mountain regions and the range of unexplored areas. After reading a copy of Yossi Brain's, "Bolivia; A Climbing Guide" which said that there are "still unclimbed peaks over 5000m" and "literally thousands of new routes remain to be climbed" in the Apolobamba area, this was chosen as a suitable destination for the expedition. However it was also noted that "the range is rarely visited" due to the "lack of maps and difficulties in getting there".

Expedition reports held at the Alpine Club library and Royal Geographical Society (RGS) contained more information. Of particular interest was a Cymru Bolivia Apolobamba 2001, who had been unable to travel to the Apolobamba as a result of political unrest in La Paz, Bolivia's capital. As far as we could discover their objectives of Canisaya and Casalala remained unclimbed, and the group decided that these looked like appropriate objectives for an expedition. Although they had both been climbed by the Japanese in 1957, they had never had a second or British ascent and were in area about which very little information was known.

The Apolobamba range is located on the Northern tip of the Bolivian Andes and crosses into Peru, as seen in Figure 1.

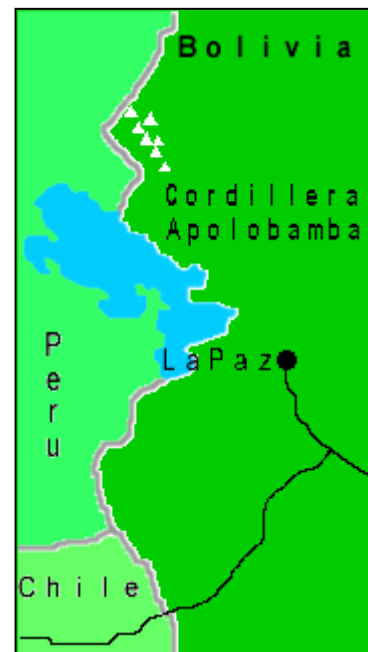


Figure 1 – The Apolobamba

Research materials

The main sources of information were expedition reports held by the Alpine Club, RGS and BMC and the two English language guidebooks to the area, see below for more information.

Other research included attending the Alpine Club's 2004 'Climbing in South America' symposium where talking to Paul Hudson, author of the most up to date map of the area, and Jose Carmalinghi, a Bolivian guide proved most useful.

Maps

Maps of the area are scarce and not of the highest accuracy. Both guide books for the area contain reasonable sketch maps, but the most useful map of the Apolobamba is the "Paul Hudson Map". This is based on a 1913 British survey of the area and although far from complete, it is being constantly updated.

Contrary to information in the Yossi Brain book, a 1:100,000 scale map covering the central and northern Apolobamba is available from the IGM. Either visit their office in La Paz, or ask round the more mountaineering orientated trekking agencies for more information.

If more detailed maps are required it may be worth future teams looking into satellite images and mapping. The author has seen and heard extremely good reports of this new technology.

Whilst in the area around Cocha Canuma we took the opportunity to update the Paul Hudson map. The principal change is the addition of a driveable road from Ulla Ulla to Mankha Canuma.

Guidebooks

The guidebooks we used were:

Bolivia A Climbing Guide; Yossi Brain. Published by Cordee; 1999; ISBN 1-871890-48-9

The Andes of Bolivia, Adventures and a Climbing Guide; Alain Mesili; Published by Producciones CIMA; 2004; ISBN 99905-79-08-03

Each book has strengths and weaknesses and we were glad to have both.

Permission & permits

30 day visas for Bolivia are granted to citizens of most nations upon arrival, these can usually be increased to 90 days, both easily and free of charge. Current information is available in 'Lonely Planet Guides' or from the British or Bolivian Consulates.

Climbing permits are currently not required for climbing in Bolivia. We were charged with a very small (£3 per person) 'trekking/ tourism charge' while in Mankha Canuma. We are still unsure as to the validity of this charge and how widespread it is.

Finances

Fund-raising

The expedition was granted BMC and MEF funding for which we were most grateful; more information is available from their respective websites. More grants are also available for expeditions, the Royal Geographical Society's website is probably the best reference for these.

We also managed to secure sponsorship from Smartwool Clothing to get discounted thermals and socks. These performed excellently throughout the expedition, we would like to thank the importers Anatom for their support.

Costs

The expedition set up a group account with which to pay all expenses, this worked well.

When in Bolivia the group used American Dollar Travellers Cheques and ATM's when in La Paz. Euro and Dollar Travellers cheques are changeable in most major tourist areas in Bolivia. There are ATM's in La Paz but as yet not in the rest of the country. The Lonely Planet and other travel guides are best consulted for up to date advice.

A summary of the groups accounts are shown below:

Income		Expenditure	
MEF Grant	£ 600.00	Transport	£ 600.00
BMC Grant	£ 950.00	Flights	£ 2,400.00
Personal Contributions	£ 3,000.00	Insurance	£ 860.00
		Food	£ 300.00
		Accommodation	£ 300.00
Total	£ 4,550.00	Total	£ 4,460.00

Insurance

Each expedition member arranged their own insurance through the BMC.

Food & Cooking

There is little point in bringing food from the UK to Bolivia, as most things can be obtained very cheaply in the markets and the others can normally be bought at European prices from the few supermarkets in Zona Sur, La Paz. The Yossi Brain guidebook give an address of a supermarket, however it appears that there are now more than just one in Zona Sur.

Tinned food, fresh fruit and vegetables, powdered soups, margarine, bread, jams, herbs and spices, stock cubes, pasta, rice, instant potato, corned beef, breakfast cereals, dried milk, coffee, hot chocolate, boiled sweets etc are easily available cheaply in the markets.

We used supermarkets to buy cakes and cereal bars as hill food; as only fresh cake and chocolate bars were available on the markets.

It is best to buy most food in La Paz, although many, but not all, villages have shops selling essentials.

Expedition's comments

- Tins of tuna (atun) were not always what we expected. It appears that the cheap tins are 'fish bits' whereas the more expensive tins are what westerners would expect.
- Chocolate bars are often a synthetic chocolate, which is ok but not quite the same. Snickers and Mars bars can be bought, but at a price.
- Buying a small quantity of food to sample before purchasing the expeditions supplies can pay off.
- To save weight we bought all batteries, cooking utensils, and wash kit in Bolivia. When buying batteries be sure to buy the brand names and be on the look out for fakes, which are easy to spot such as 'Durables' instead of Duracell's.
- Pans and cooking utensils were available easily and cheaply from markets. A very good investment was a pressure cooker which cost \$10-15, saved fuel and allowed us to cook rice and pasta at altitude easily.
- A pair of marigold gloves is a good investment to help reduce the pain of washing up in the cold glacial melt water.
- We invested in a tarpaulin from the market to make a cooking shelter. We made a small enclosure by constructing a dry stone wall and used guy ropes to secure the tarpaulin roof, a walking pole provided support for the centre of the roof, as shown in figure 2. This provided shelter from the wind and kept the heat in well when cooking allowing much more comfort.
- It can be beneficial to buy plastic bags and hessian sacks to bag or even double bag food stuffs for transportation. These can easily be bought from the market. Rope for tying the sacks and making guy ropes for the cooking shelter also proved useful.



Figure 2 - The cooking shelter which we constructed at Cocha Canuma Base Camp

Fuel

The expedition used 2 MSR multi-fuel stoves. These were run on gasoline purchased from petrol stations. A 5L plastic container in which to transport the gasoline to base camp. They worked fine, although white gas would have been cleaner and hotter. We did have to clean the stoves occasionally.

White gas is advertised in some trekking agencies, but is hard to get hold of. We were told by our jeep driver that this was not actually white gas, but filtered gasoline. Apparently white gas imports are very strictly controlled as it can be used in the refinement of cocaine.

The trekking agencies also stock screw thread gas canisters at European prices.

One evening we realised we had committed a grave and unfortunate mistake; not hiding our sausages from the dog belonging to the nearby shepherd's dwelling. We had put the remaining 1kg of sausages under a large flat stone inside the cooking shelter to shield them from the midday sun, stupidly not even thinking the dog may have its eyes on them. So it came as a surprise when they had gone, it even brought a tear to our eyes when we realised we would not be eating any more sausages until we reached civilisation.

The next day we returned from completing a route to find a trail of debris leading to the cooking shelter; pans and cutlery from breakfast, a chewed bottle of cooking oil, and a tub of hot chocolate powder. We had not thought a dog would be interested in such foodstuff, wrongly it appeared. So we had left them with stones placed on top to make sure they did not blow away. The most irritating thing was that we now only had a small amount of fat left with which to fry with. So that evening an intellectual giant put the food which was to remain in the shelter under a pile of stones thinking this would stop our canine friend.

The next day on returning from another route we discovered we were once again wrong in this assumption, when we discovered a large plastic container of jam, a tub of margarine and all the dirty cutlery were strewn around the immediate area of the shelter.

After this we decided to put everything in tied up hessian sacks either under the shelters porch or inside the tent porch.

Water

When travelling in Bolivia we drank bottled water.

On expedition we purified our water by filtering it through silk to remove any large particles and then treating it with iodine. We used a saturated solution of iodine and water, adding 10ml of saturated solution to each litre of drinking water (see 'Pocket First Aid and Wilderness Medicine' for further details. This worked well, the only problem we had was that even inside the tent the solution would freeze overnight, sometimes cracking the glass bottles it was stored in.

Water was collected from streams, and it was found that Nalgene bottles were best for scooping it up, as their wide mouths allowed water to be collected from shallow and partly frozen water supplies. It was also easier to use the silk on a wide mouthed container.

When at the Cololo base camp we could not find any clear water. The water was cloudy with very fine glacial sediment that would not settle even if left to stand. However it did not seem to cause us any health problems.

There were a couple of cases of suspected giardia, as we were very thorough in treating drinking water we suspect this came from pans that had been washed and then not dried properly.

Communications

Once in Bolivia we communicated with the UK via email and telephone. In La Paz these facilities are cheap and very widely available. Calls to the UK could be made as cheaply as 7p (1Bs) a minute. Internet access is available for about 3 Bs (25p) an hour, and is often quite fast. Some internet cafes can also burn CDs, useful for downloading photos from digital cameras. Telephones are available in Pelechuco and Ulla Ulla, although as far as we know these do not allow international calls. We took no satellite phones with us.

When on the mountain we had no communication, with the outside world. We regretted not taking 2-way radios with us when a team was late back one night, it would have been useful to have radios to confirm their safety. We bought a short wave radio in La Paz and used this to listen to the BBC World Service in the mountains.

Language

Travel in Bolivia is undoubtedly easier and more enjoyable if you have some grasp of Spanish. Learning from CDs is a good way to pick up the basics while still in England, and a good phrasebook will be invaluable once in Bolivia (it is cheaper and easier to buy these in England than South America). Accents and words vary from country to country, but it is generally not too difficult to adjust as you move around.

In more remote areas people speak Quechua and Aymara, traditional Indian languages. If you get really off the beaten track you will find villages where very few, if any people speak Spanish. When this happens you can either try and learn the language (hard) or smile a lot, and hope you don't accidentally agree to anything too awkward.

Medical Arrangements

Each member of the expedition consulted their doctor and received the necessary vaccinations (Rabies, Hep A, Typhoid, Yellow Fever and Tetanus).

Each member had a knowledge of mountain first aid, this was supported by the book 'Pocket First Aid and Wilderness Medicine' (Dr Jim Duff MBChB & Dr Peter Gormly MB FRCS; Published by – Treksafe; 2005; ISBN 0-9750731-1-7) which we highly recommend. The book is very small and light, well laid out, easy to understand, designed for expeditions and costs around £6. Profits go to the Kathmandu Environmental Education Project (KEEP). It is available from the BMC.

The expedition took first aid equipment as recommended in most mountain / wilderness first aid books and iodine crystals for water treatment. We also took out a sterile kit each.

Acclimatisation

The biggest medical problem for the expedition was illness caused by altitude. 3 of 4 members suffered from this, in spite of attempts to gain altitude slowly.

Flying straight to La Paz from the UK is very likely to cause illness, as the city sits at 3800m. In the event of severe problems it is hard to lose height quickly, although Zona Sur, the south of the city, is approximately 500m lower. With this in mind we flew to Lima in Peru, which is at sea level, then took a week to travel from here to La Paz by bus.

We then spent a few days in La Paz, before taking a trip to the popular climbing area of Condoriri. With a base camp at 4300m this allowed us to get used to altitude, as well as trying some popular mountains with well established routes. This turned out to be a very good decision, as everyone felt ill in Condoriri, but much better once we were attempting our main objectives in the Apolobamba.

Drugs

The expedition took the following from the UK, provided by a GP with a covering letter in case of trouble at customs:

Altitude Drugs:

Dexamethasone injections

Dexamethasone tablets

Diamox tablets

Pain Killers:

Nalbuphine Injections

Anti Biotics:

Amoxicilin

The following drugs and medical provisions we obtained in Bolivia, over the counter, without prescription:

Pain Killers:

Codeine

Nurofen

Paracetamol

Aspirin

Anti Biotics:

Ciprofloxacin

Other Medical Provisions:

Imodium

Sore throat sweets

Lip balm

Re-hydration sachets

Sun cream

Some pharmacies seemed more willing than others to sell us these drugs. Most were helpful when they knew we were on a mountaineering expedition

There are very basic medical centres in Ulla Ulla and Pelechuco but any serious injuries would need quick evacuation to La Paz for treatment. We estimate evacuation from base camp to La Paz would take a minimum of 36 hours. There are no rescue services or helicopters in Bolivia, so evacuation would have to be by alpaca and jeep, and would be totally reliant on expedition members and local people.

The only injuries suffered were a bruised thigh from a rock fall and a couple of cases of suspected giardia. The giardia cleared up quickly with rest and a short course of antibiotics (2mg metronidazole a day for 3 days. Available over the counter in Bolivia).

Specialist Equipment

All but one of the expedition members used plastic mountaineering boots for increased warmth and dryness. The ability to take the inners of the boots out and keep them within the sleeping compartment of the tent proved to be effective in keeping the inners dry over a long period of time. It is worth noting that the expedition member with leather boots had no real problems with cold feet.

We brought 11 ice screws to Bolivia between the four expedition members, this proved to be sufficient, although careful planning of routes was necessary. We planned on having some snow stakes made whilst in La Paz, however the icy nature of the mountain conditions made this idea redundant.

A set of 60 metre long, 8mm diameter, half ropes was taken for each climbing team of two. However, on a number of snow routes without abseil descents (or where both pairs were in close contact) each team would just take one half rope to save weight.

We brought a slimmed down rock rack for each team of two. This consisted of a full 1-10 set of wires, 2-3 hexes, three cams, and eight quickdraws (most being extendable) and a selection of slings and karabiners. We also had three 'ripper' slings for poor belays or run-out pitches. Rock gear was only taken on routes where it looked likely to be useful.

The constant high pressure of the weather system in the area (sunny, clear and dry through the day) allowed team members to climb in a relatively small amount of clothing, a thermal and thin mid-layer would normally suffice for the torso taking a down jacket for belay stations or any breaks.

Anatom very kindly supported the expedition by providing 'Smartwool' garments at reduced cost. These thermal tops and mountaineering socks, made with merino wool, were very highly regarded by all expedition members.

We brought a GPS unit to plot our co-ordinates for future reference.

A solar panel and battery charger was used to charge batteries for head torches and the GPS unit. The model we used struggled to fully charge the high capacity NiMH batteries we were using.

We had ordered two pairs of walkie talkies with long ranges whilst still in the UK, however our supplier let us down. We decided that we could do without the instruments, however in retrospect they would have been extremely useful considering that the remote environment meant that the only hope of rescue following an accident was from the other team of two.

Photography

The four members took two SLR film cameras, mainly used with slide film. We also had 2 digital compact cameras, and a compact 35mm camera. This combination worked well, with each member able to find a camera that suited their preferences. We had some problems with battery life in the digital cameras, but were able to use a solar charger to partially overcome this (the charger could not fully recharge high capacity batteries).

Slide film is available in La Paz at western prices, although it is hard to find more specialist film (Velvia 50 was very uncommon). There are numerous shops offering film processing in La Paz, including prints from digital. Quality seemed reasonable in the one shop that we used.

Risks and hazards

There were a number of potential risks the expedition faced, both through the inherent hazards involved whilst mountaineering in a remote area and the more general risks of travelling in an unfamiliar country. Below are a number of the key risks we identified on the expedition and how we aimed to limit these risks.

Risks in the Mountain Environment

We were aware of the potential health risks of drinking non-treated glacial melt water at base camp. As mentioned earlier water was purified with iodine.

Objective dangers such as rockfall, avalanches and serac collapse were all apparent in the mountain areas we visited. We limited the risk by choosing routes carefully and attempting to spend as little time as possible in zones susceptible to these potential dangers.

As there was no possibility of rescue from an external agency, an accident would have had to be dealt with by the expedition members. As referred to previously, walkie talkies would have aided us had an accident occurred.

Inherent risks whilst climbing in this environment such as falls, hypothermia, exhaustion and altitude sickness including pulmonary oedema were minimised through our previous experience and training, knowledge of our limitations and careful planning.

Political instability

Although we did not consider political instability to be a serious physical threat to ourselves it is worth noting that much of Bolivia was brought to a standstill only a month before our expedition. The political turmoil caused by the privatisation of Bolivia's natural gas resource meant that it was, for a time, impossible even to enter Bolivia from Peru. Any recurrence of this political instability could have resulted in an unsuccessful expedition.

Risk of crime

Despite warnings to the contrary we found Bolivia to be extremely safe for travelling. However as with all large cities there was a potential risk of theft in La Paz. This was made apparent when we were leaving La Paz for the Quimza Cruz with our equipment on the roof of a jeep. As we set off a drunk tried pulling a rucksack off the roof of the jeep. Quite how far he expected to get in his inebriated state with a 20-kilo rucksack is anyone's guess. He was, however unsuccessful at pulling

the rucksack off the roof. We always tried to be as vigilant as possible when we had all our belongings with us, as the amount of equipment we had in our possession probably made us an easy target.

Environmental and social impact assessment

It was an important objective of the expedition to have as little environmental impact as possible on the areas we visited. We used biodegradable soap for all our washing needs in an attempt to have a neutral impact on the water quality of the streams. Our toilet area was located a suitable distance away from the water source and all toilet paper used was burnt. Any packaging was carried back out from our base camps and taken back to La Paz. La Paz, it was deemed, had more chance of a reasonable waste disposal system than the Andean villages. It was noted that in many villages, both in the Apolobamba and the Quimza Cruz, rubbish was strewn across the banks and bed of the local river, with serious environmental and health implications. We kept all our used batteries in the hope of disposing of them suitably back in the UK, however this idea was abandoned in Lima due to far exceeding our weight allowance for the flight back home.

Many of the settlements we encountered on the expedition were remote and subsequently unused to western visitors; in view of this we aimed to have a sensitive and respectful attitude towards local cultures and lifestyles. The people we met in Andean villages were, without exception, friendly and welcoming. In Canuma, on the way to our base camp below Canisaya, we were given a room of the local school to sleep in overnight, having spent the evening conversing with teachers and trying (unsuccessfully) to fix the school computer. In Ulla Ulla we slept on a local woman's shop floor and then later in another shop-owner's shed for a small fee. For our part we relied to a large extent on local supplies, knowledge, vehicles and alpaca handlers. We found that a written contract was useful for both parties when arranging transport, avoiding confusion over dates and destinations. When employing local people we provided food, shelter and equipment as needed, on top of their normal payment. At our base camps we made a concerted effort to explain to any nearby dwellers why we were there and making sure they were happy with the situation. Upon leaving our base camps we always gave any surplus food or equipment to local people, although we did try and do this without giving the impression that foreign visitors had a limitless supply of money. We were asked to take pictures of the children at the school in Canuma and after transferring the photographs to CD in La Paz we posted them on to an address in La Paz where one of the villagers was able to pick them up.



The school we visited in Canuma, on the way to base camp below Canisaya.

Travel, transport and freighting

Further current advice on this subject is available in guide books and tourist/travel agencies once in Bolivia.

Flights

The expedition travelled with Iberia airlines to Lima, Peru (via Madrid outgoing, Madrid and Barcelona on return). Flying to Lima allowed us to acclimatize more slowly than if we had flown straight to La Paz, Bolivia's capital, which sits at 3800m. It took us approximately a week to travel from Lima to La Paz, using cheap and comfortable long distance buses.

The Baggage allowance was 20Kg in the hold and 5kg hand luggage; however the group managed to get more through. Although the expedition approached Iberia before the flight they were unwilling to give discounted excess baggage rates to the expedition. We are aware that other airlines have offered reduced rates or extra baggage allowance to expeditions.

Internal Travel

The internal coach network is cheap and reliable between all major towns and cities. Reasonable priced internal flights are available between major destinations and may be a good option for those on a tight schedule. These are usually available at short notice.

Smaller buses usually connect larger centres with smaller towns and villages and are commonly used by locals. They are very cheap but not always user friendly; with hard to find bus stops and ticket offices, irregular departure times and sometimes infrequent journeys. A reasonable grasp of Spanish will help. The comfort offered is often to be remembered. Having said this they are a fraction of the cost of jeep hire, are a good way to meet local people and offer some memorable experiences. Baggage allowance seems almost unlimited; however a small charge of around \$1 is made for each bag.

If based in La Paz there are ticket offices and buses departing from the Cementario (Cemetery) district and also El Alto. It should be noted that ticket offices may be in one district but the bus departs from the other.



Figure 3 – The bus to Ulla Ulla

Getting to the Apolobamba

There are two options for traveling to the Apolobamba, either public buses or private jeep hire. We chose to use the buses in order to save money. Tickets were bought in the Cemetery District a few days before departure, but the bus actually left from El Alto. It is possible to purchase tickets on the bus just before departure but seats should not be expected. The bus cost \$4 per person and took 7 hours to reach Ulla Ulla, Pelechuco is a further 5 hours (Figure 3).

Jeep travel is faster and more comfortable, but far more expensive. Many of the trekking agencies based around 'Sagarnaga St', in the middle of the main backpacker area, offer jeep hire. We used 'Saranani, Adventure Tour Operators' for an acclimatisation trip to the Condiriri, and a later trip to the Quimsa Cruz, choosing them principally as they were far cheaper than other companies. We can't recommend them highly enough. They were punctual, knowledgeable, and efficient; having an English speaking (but Bolivian born) driver and office staff made life much easier. At the time of our expedition a jeep would cost \$400 each way.

In the Apolobamba

Travel

As we had taken the bus we could not get dropped off near base camp, we arrived in Ulla Ulla (approximately 20Km from base camp) with no idea what to find here. There are 3 small shops at which the essentials can be purchased, a very basic medical centre and an army checkpoint.

There is no organized transport from Ulla Ulla into to the mountains. There are three options which could be pursued or combinations of these:

Hiring Jeeps

As of July 2005 it was possible to hire a jeep and driver. The owners of the small shop next to the Army Checkpoint own a Toyota Landcruiser, and may be willing to help providing the price is correct; Figure 4.

We hired them to take us to Cocha Canuma, it cost us 80Bs (£7/\$10) and 2 hours bouncing around in the back of the Landcruiser. The price increased dramatically to 200Bs (£17.50/\$25) on the return journey, but we couldn't be bothered to argue about it.

It may be worth checking out the Vicuna sanctuary.

This is staffed by park rangers who have access to vehicles. Even if they cannot provide a vehicle, they will know who can (we were put in contact with our jeep by the wardens). The wardens seem to have a great deal of knowledge of the local area.

If an expedition is considering heading along the road from Ulla Ulla through Pujo Pujo, over Paso Osipal and on towards Hilo Hilo (marked as driveable on the Paul Hudson map) it should be noted that we were unable to persuade the jeep owners to drive us there, due to the condition of the road. As we understood it the road was very steep and rough in one particular section after Pujo Pujo, and they seemed unwilling to take their vehicle over this.



Figure 4 – Ulla Ulla's only jeep

Hitching

It may be possible to hitch a lift on vehicles in the area, although this is very hit and miss owing to the lack of traffic. A small charge is usually made for a lift. This option is only really viable if the expedition is very small and has no time restraints. A huge amount of luck would be required to get into the remote villages.

Hiring Alpacas/ Mules and driver

It is possible to hire Alpacas and drivers for the walk in to base camp. It appears that most Alpaca owners will offer their services if approached as it is an easy way for them to make money. Alpacas are able to carry 20kg although some drivers will claim they take considerably less, presumably in the hope of charging for more animals. When challenged they agreed on the 20kg load limit. Mules can carry up to 40Kg and offer far better value for money but are not available in many high altitude areas; Figure 5.

The use of contracts such as those printed in Yossi Brain's book can save disagreements later. If asked to give a deposit up front, Yossi's book recommends no more than 25%. Local currency is generally preferred to US dollars and it would be unwise to expect the driver to have change.



Figure 5 – Walking in with mules

The welfare of the driver should be considered, it may be necessary to provide food and shelter for the driver on a multi day walk in. They often carry blankets for sleeping but may require tent space. We hired Alpacas and a driver from Mankha Canuma, these were arranged for us by the Vicuna Sanctuary warden; however we are sure that by asking around in the village it would be easy enough to do this on your own. The walk in from Mankha Canuma to base camp takes around 3 1/2 hours. If using a jeep to get to the Apolobamba it would be possible to get dropped off in Mankha Canuma. Buses pass through the Army checkpoint on their way to Pelechuco (5hours, \$2), it is possible to get on here. Asking the local people is the best way to find the departure times, then arriving early and expecting a long wait is the best policy. If getting on in Ulla Ulla do not expect a seat for a while, until other passengers have been dropped off. If aiming to access the mountains from Pelechuco mule drivers can be found by asking in the hostel. The mule drivers have a good knowledge of the area.

Accommodation

Further current advice on accommodation in most Bolivian towns and cities in is available in guide books such as the Lonely Planet.

When in La Paz we used a variety of hostels; there is a variety of prices although it seems that you get what you pay for.

Ulla Ulla

There is no regular accommodation in Ulla Ulla for tourists, but there are three possibilities:

- It would be easy to pitch a tent on the outskirts of town.
- The nearby Vicuna Research Centre appeared to have hostel type accommodation for research parties; however this is an hours walk from Ulla Ulla, and we are not sure if it would be possible to use this or its cost.
- We asked local people for help. This led to one night in what appeared to be an old bar, above a shop. The owner cooked us an evening meal and let us come and go as we liked. For the accommodation and meal she charges us 8Bs (£0.75/\$1) a head. On return to Ulla Ulla after being in the mountains, we were not able to find the owner of our previous accommodation so we spoke to the owners of the shop we had hired the jeep from. They allowed us to stay in their out house for the night at a cost of 5Bs (£0.45, \$0.80) a night (Figure 6)



Figure 6 - The Outhouse Which Provided 5 Star Accommodation

This was a most memorable night. The owner cleared us some floor space in the outbuilding by moving some bicycles and boxes outside. The room still had bikes, ladders and an Alpaca skeleton inside, we were also give 2 Alpaca skins to sleep on; although these looked very warm, we decided to uses our sleeping mats for fear of getting lice or ticks. We spent the evening stuffing our faces with bread, biscuits and bananas from the shop.

The most disconcerting thing was that the toilet was next to the dog kennel containing what we believe was a rabid dog. We were told it was “dangerous, much dangerous, keep away.” Its mouth appeared to be foaming when we saw it in daylight the next morning. The problem was that its chain was too long so it was not possible to get to the toilet. So we had to crossover the road outside the house to go to the toilet. This meant walking across the road with a head torch on which inevitably looked suspicious to the personnel on the army check point. So they started to shine torch beams at you.

The other things to note about the night was; the constant blowing of whistles from the army barracks next door due to a night exercise, being woken by Graeme being sick in the middle of the night and the dew dripping on my face from the corrugated iron roof waking me up in the morning. But as I said a memorable night.

Mankha Canuma

Mankha Canuma is a small village 2 hours jeep ride away from Ulla Ulla. No formal accommodation exists, but the local teachers were happy for us to sleep and cook in one of their classrooms. The school has electricity from solar panels, and a computer in one classroom. It would be possible to connect a digital camera to the computer, and the local kids (and adults) would love to see themselves on screen.

There are no shops in the village, but it is possible to hire llamas.

Pelechuco

Accommodation in Pelechuco is easier. In the main square there are two hostels. We used the hostel at the higher end of the square, it cost £2/\$3 and was friendly and clean. Hot showers were available. This hostel can put you in contact with mule drivers if required.

As it is the start of a popular trek, the shops in Pelechuco offer a range of luxuries such as chocolate, as well as the usual basics.

Expedition Log - 26th June – 20th August 2005

28th June

We Arrive in Lima after a being delayed in Madrid for a day and leave for La Paz by bus the following evening, the journey takes 4 days stopping for a day in both Puno and Cusco to try and acclimatize.

3rd July

The expedition arrives in La Paz and spends the next day organizing our acclimatization trip to Condoriri, finding it very easy to organize transport but much harder to gather the supplies needed in La Paz's busy and crowded markets.

5th – 12th July

After a short 4x4 drive and a few hours walk in, with donkeys and well organized locals carrying our equipment, we arrive at Condoriri base camp and are instantly impressed with the cold night-time temperatures. Unfortunately less impressive was the lack of snow and ice, leading to many of the routes being out of condition and indeed many of the mountains being “tottering piles of choss with sketchy ice” according to TB's diary.

On the 6th GS and CR complete the direct route on Ilusion but find themselves victims of climate change on the descent, where the lack of snow cover forces them to down climb very loose rock. TB and SW go on an acclimatization walk up nearby glacier and view the range. Everybody (except CR) feels the effects of altitude, but nobody is seriously ill. The Following day SM and TB completed the Normal route on Pyramida Blanca and GS and CR explored some short ice climbs on the lower rocks of the NE side of the valley

On the 8th the whole team set off for the Normal route on Pequeno Alparamayo with the descent proving harder then the ascent due to the effects of altitude. Once again CR feels no ill affects and drags everyone back to base camp, where we found the local dog has eaten much of our already meagre supplies. The 9th was designated a rest day with several members of the expedition finding recovery difficult and not acclimatising well. On the 10th TB and CR completed a route on an unnamed 5300m peak to the W of the range CR describing it best with the word “effort”. A great deal of scree and snow plodding. On the final day of the Condoriri trip everyone feels slightly demoralized due to altitude, cold and lack of anything but dry nuts, semolina and undercooked carrots to eat. TB's diary states “currently bored, I can't help but feel I'd rather be in the Alps but this could be due to trying to eat several kg of excess nut supplies – a lost cause”. The following day the jeep took us back to La Paz where we enjoyed returning to civilization.

13th -16th of July

We spent the following 4 days regrouping in La Paz arranging transport to the Cordillera Apolobamba, enjoying being tourists and gathering supplies – with many lessons learnt from Condoriri and finding the only place to buy decent hill food (not involving dry nuts) was in the supermarkets of the richer south side of the city.

17th -18th July

On the morning of the 17th we left for the Cordillera Apolobamba. This was quite eventful, with an attempt to steal our bags before we even reached the bus station in El Alto. Once there we had an argument with the bus driver over what bus we had booked, our lack of Spanish meaning that we carried on arguing happily oblivious to the fact that we were clearly wrong. Eventually we found our rightful place, the special “Gringo” seats at the back of a very dilapidated bus. Things proceeded to not go as planned as upon reaching the settlement that we had planned to use as a hub to get to base camp we found it was a semi deserted ghost town with nothing in the way of accommodation or motorized transport. After much discussion with the local residents we were allowed to stay in a disused meeting area. On the 18th our luck changed and the park rangers at the nearby vicuna

sanctuary told us where to find a truck to Mankha Canuma, the closest settlement to our base camp. Canuma which turned out to be a small but friendly settlement of mainly llama herders, we managed to find accommodation in their surprisingly well developed school, as well as local farmers willing to hire out their alpacas to ferry equipment to base camp.

19th-27th July

On the 19th we trekked into base camp and set up camp in a good position on the east side of the valley, not far from a small alpaca herders settlement, with clean running water and a good view of the mountains. Unfortunately our luck changed again in the night with first dogs from the nearby farmstead raiding our food supplies and then heavy snow which continued for most of the night.

On the 20th, with the weather still poor, we only managed a reconnaissance trip but occasionally glimpses of the mountains through the clouds showed potentially good lines on our objectives. Fortunately the warm daytime temperatures caused much of the new snow to melt. The following day, the 21st, saw the team complete two routes, possibly new, on Canisaya. TB and SW climbed the SW Spur of the mountain, while CR and CS climbed the SW face, with both teams meeting on a false summit and then traversing a ridge to the true summit. Descent was via GS and CR's route on the SW face, one abseil and a two short sections of down climbing. By now everyone was feeling the benefits of our acclimatization trip to Condoriri, and coping well with the altitude. In fact everyone was feeling so good that on the following day of the 22nd our second objective of Casalala was completed, again with two teams attempting different lines on the south face. Unfortunately due to the presence of an intensely seraced middle band on the mountain both teams were forced onto one route which, although technically easy, was very objectively dangerous, offering difficult route finding through the serac barrier. This saw some spectacular but misguided steep ice climbing attempted by CR in a failed effort to climb the seracs direct, TB's diary records the route as "a ridiculous and scary crevasse and serac minefield with added soul destroying snow slopes". Now we understood what was meant on our very badly translated description of the mountain by the 1st Japanese ascent when they described "hideous death ice formations". After summiting the mountain we traversed to the east and descent was again made on the SW face of Canisaya, making use of the ablakov thread placed the previous day. The 23rd was designated a rest day with some effort put into restoring order to base camp after more unwelcome visits by the alpaca herders dogs.

On the 24th the teams attention was turned on Huelancalloc with GS and TB completing a route on the south face and CR and SW completing a route on the SE spur and ridge of the mountain. Only CR and SW summited, with GS and TB choosing to not continue to the summit, instead ending their route where it met the SE ridge of the mountain. Both teams descended the SW ridge with some very exhilarating scree running back down into the valley.

The 25th was another rest day the only activity being CR and SW completing a rock route on the glacially polished slabs on the NE side of the valley. The rock was compact meta-sandstone with lots of scope for bold slabby routes however the two chose a route "something akin to a classic vegetated lakes V Diff" in CR's words.

The 26th saw a new short new route up a mixed gully on the rocky buttes below the SW face of Huelancalloc by GS and CR. Whereas TB and SW opted to go for a trek round the range to the village of Calaya which turned out to be far more exhausting than doing the routes they were trying to avoid!

The team managed to fend off the scavenging dogs for one more night, and in the morning a small herd of Alpacas were herded into base camp to carry our equipment back down. After a short trek and a long wait a truck picked us up as promised and took us back to Ulla Ulla. Due to the lateness of the hour the limited accommodation options became even more limited, and the night was spent in the truck owners shed being chastised by our host's children, rabid dog and soldiers from the nearby barracks. The night was further disturbed by GS loudly vomiting after gorging himself on biscuits.

28th July-5th August

The 28th was spent trying to persuade the local jeep driver to take us to areas in the more central area of the Apolobamba. However he assured us the roads were too dangerous, so we made plans to head to Pelechuco on the bus. From there we could walk to the Cololo area, where our maps promised many possibly unclimbed peaks. The 29th was spent in Pelechuco arranging porters to base camp and restocking supplies, as well as enjoying the local bars and a hostel with hot water! Pelechuco is a bustling metropolis compared to Ulla Ulla and seems quite set up for tourists. Unfortunately GS became ill and agreed to stay an extra day in bed in Pelechuco, trekking up to meet us at base camp when he recovered.

On the 30th, TB, SW and CR trekked into base camp on the south side of Lago Kotani and set up camp. Unfortunately there was no place to construct our usual dry stone cooking shelter and the water was very cloudy with glacial dust, once iodine had been added it resembled orange juice!

The 31st saw CR complete a traverse of K8-K9 while SW and TB sat in camp experimenting with making chapattis. GS showed up in the afternoon having made a recovery and located our base camp after meeting our porter on his way down.

Everyone had a very eventful day on the 1st with CR and GS completing a technical and objectively dangerous serac threatened ice and mixed gully line on the SW face of Kotani North. Where both were hit by falling debris and CR dropping an axe on his descent. TB and SW had opted for a easy route up the SW coloir of Cololo, the ascent being uneventful but on descending the NE ridge the pair opted for a direct descent of the north face which turned out to be dangerously loose. This eventually resulted in TB being hit on the head by a falling rock, leading to some concussion and a broken helmet. The two didn't reach the base of the mountain until almost sunset. Due to the failing light and extremely crevassed glacier (the most technical climbing of the day) they were forced to climb K4 to gain the ridge soloed by CR two days previously. The pair eventually crawled back into base camp 24 hours after they had left, much to the relief of the other members of the team who were not looking forward to launching a rescue mission. All this excitement lead to the 2nd being a rest day, the only activity being CR and GS searching for CR's lost axe.

The 3rd saw the irrepressible CR and GS complete an easy rock ridge on the east side of the valley whilst TB and SW were still recovered from there exertions on Cololo.

On the 4th the team returned to Pelechuco, CR and GS planned to complete a ridge traverse of some impressive rock peaks on the west side of the valley but unfortunately GS became ill again. The same day the team caught a late night bus back to La Paz arriving on the afternoon of the 5th.

5th-12th August

The following days were spent in La Paz resting and restocking for our next trip, to the Cordillera Quimsa Cruz. The team also kept themselves busy by going on the tour of the Uyni salt plains for 3 days. We tried to find the bus to Quimsa Cruz, but due to very vague guide book instructions as to where the bus company was located and the very fluid nature of El Alto, we failed to get bus tickets and so opted for the easier option of hiring a jeep.

13th -18th August

We travelled to our Base camp near the mining town of Viloco on the 13th. The journey was uneventful, and the local miners at the closest village to our planned camp were more than willing to porter our equipment with their llamas to our base camp.

On the morning of the 14th CR and GS went on a reconnaissance trek of the range hoping to climb some of the lower peaks while TB and SW completed setting up base camp and explored the bouldering potential around camp. Unfortunately GS was hit by rock fall while on step scree and after a dramatic incident which saw CR clinging to an upside down GS, who was in turn pinned in a small

gully by large boulders, the two made it back to base camp. Unfortunately GS had sustained heavy bruising to his leg which meant the end of his climbing for this trip.

On the 15th CR and TB set off for a granite spire with three distinct summits (name unknown) not far from base camp. Only the first pitch of this was completed due a catalogue of disasters where the climbing was “a vegetated horror” our newly acquired peg hammers from La Paz promptly fell to pieces leading to TB “suffering from a severe loss of psyche” and since CR was feeling ill a hasty retreat was made. On the 16th morale was low and no climbing was attempted. It was agreed that everyone had had enough and 6 weeks of mountaineering and mixed climbing was not conducive to granite crack climbing. This meant that on the 16th SW headed off with TB to Viloco to arrange for the jeep to pick us up earlier than planned. GS stayed at base camp, still finding walking painful, and CR went for a trek to the east of our base camp. So on the 18th we traveled back to La Paz having achieved little in the way of climbing but being content on visiting a beautiful and interesting area.

19th-20th August

The following days were spent enjoying being tourists in La Paz and sorting our gear out after 8 weeks of abuse. The team left La Paz and Bolivia on the morning of the 20th although escaping the country was not easy after TB nearly threw up on a border guard having overindulged the previous night. The team split up in the Peruvian border town of Puno with GS heading back to Lima and then the UK, SW heading off to the Amazon Basin and TB and CR heading off backpacking found S America for a month.

Routes

Grades

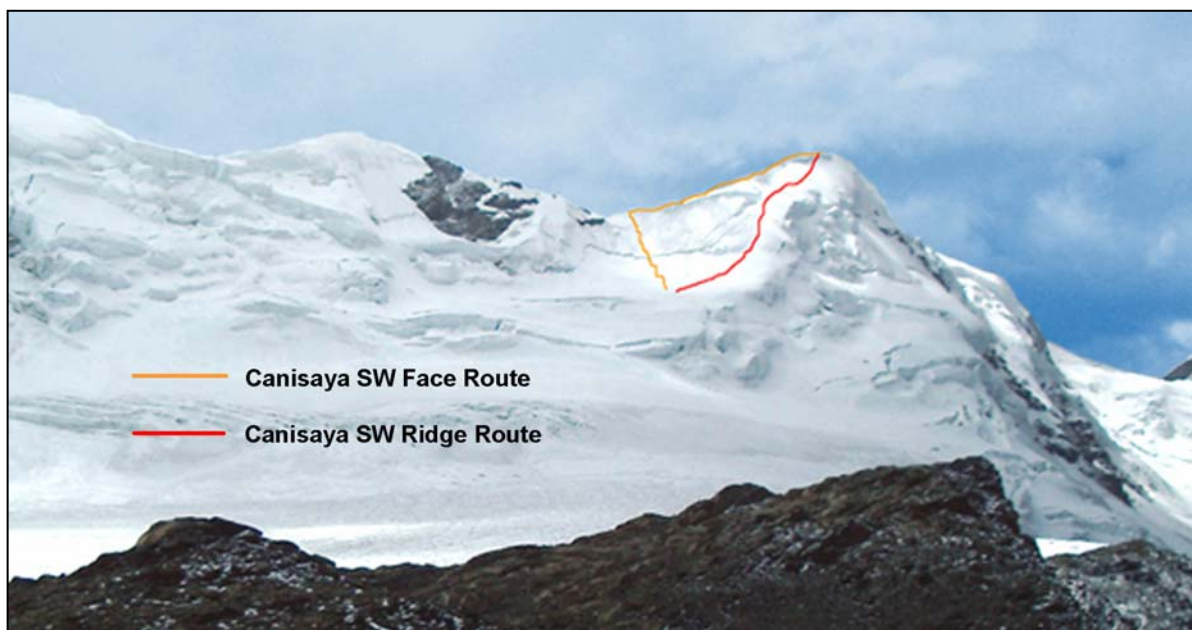
All routes are graded relative to the normal route on Pequeno Alpamayo, which is given AD in the Yossi Brain guidebook. Technically the routes were much easier than those of a similar grade in the Alps (where Pequeno Alpamayo would probably merit PD), but are at high altitude and with very little chance of rescue in the event of an accident. We have tried to grade conservatively, but would be very happy to hear how other people find our routes.

Mankha Canuma Area

The following routes were all completed from a base camp at S15°00'39.5" W69°05'21.4", approximately 3 hours walk from Mankha Canuma. Camp is at 4700m, and teams would need to be well acclimatised before staying here

Canisaya: South West Ridge

FA	Tom Bide and Sam Walmsley, 21/7/05
Grade	D-
Length	500m
Time	4hrs



NB Summit shown is a false summit. about 300m in front of the true summit

Summary:

The route is straightforward. After crossing the bergschrund head rightwards (facing the mountain) until you reach the crest of the obvious snow and ice spur. Follow this up 50-60° ice and snow moving around the serac barrier to the left to a false summit and the SW ridge of the mountain. Follow the ridge for another 45 minutes to the true summit, a broad snow platform

Descend using SW Face Route, see below

Canisaya: South West Face

FA	Carl Reilly & Graeme Schofield, 21/7/05
Grade	D
Length	500m
Time	4hrs

Summary:

The SW face route climbs the obvious snow face to the left of the SW ridge. The face offers a wide choice of lines, all offering sustained climbing on 60⁰ good quality snow and ice. From the top of the face a relatively easy ridge leads to the summit of Canisaya. Descend via the same route.

Casalala: Traverse

FA	Carl Reilly, Graeme Schofield, Tom Bide and Sam Walmsley, 22/7/05
Grade	D
Length	600
Time	7hrs



Summary:

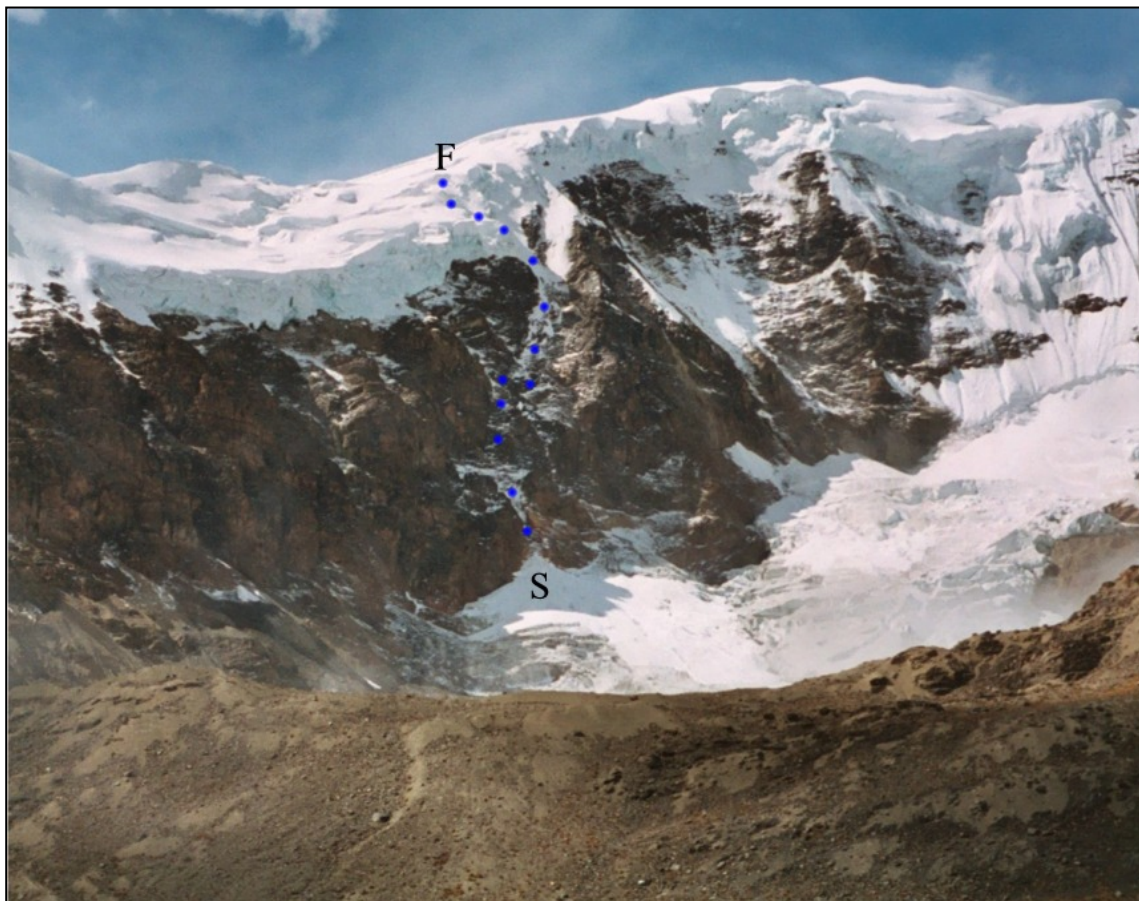
The route on Casalala was exceedingly convoluted in the middle section and will change regularly due to the positions of crevasses and seracs, but this is the route we took:

Head for the rock buttresses on the left side of the mountain (facing) and cross the various crevasses and bergschrund wherever possible. Traverse back right to a narrow ice and snow ramp at 60°, continue up this for around 100m until a large crevasse bars the way. Next head right through a narrow corridor between seracs into the main serac field. Negotiate this as best you can, trying to head up ramps and bridges between the seracs, trending back towards the right hand side of the mountain. Eventually exit the serac field and gain the upper snow slopes. Head up this on the left of the summit cornice to the summit ridge. Follow this to the summit.

Descent – Follow the summit ridge eastwards for 200m until it's possible to climb back down onto the south face through a gap in the cornice. Continue traversing the face until the ridge is once again reached, continue down the ridge on snow and rock bands UIAA 3-4 until the south col of Canisaya is reached – descend this to the glacier.

Huelancalloc: South East Face Route

FA	Tom Bide and Graeme Schofield, 24/7/05
Grade	TD-/TD
Length	600m
Time	8hrs



South East face of Huelancalloc. Route marked in blue dots

Summary:

This is a fairly serious route up the South face of Huelancalloc. It is roughly 600 metres from the top of the snow cone to the summit ridge. Pitches of Scottish 4/5, Alpine IV+ (made more difficult because of covering of snow and ice) and long sections of moving together over Scottish 3. The route is in a remote area and is threatened by large seracs all along the summit ridge.

Account:

After eating our daily ration of porridge we left the comfort of our tarpaulin shelter and began the familiar moonlight march towards the glacier above our camp, it was around 5:30am. Upon arriving at the snout of the glacier we made a traverse just above its left hand edge allowing us to carry on without the use of crampons. Our day did not start particularly emphatically when, after reaching the bottom of the snow cone, we were delayed by my loss of a Dachstein mitt. The subsequent search thankfully proved fruitful in retrieving my glove but managed to lose about 45 minutes of valuable time for the ascent. The first pitched climbing began from the apex of the snow cone on a thin slither of ice cutting down a weakness in a small cliff protruding out from the main face of the mountain. This pitch proved to be rather delicate and tenuous mixed climbing on small edges and thin, poor-quality ice (Scottish 4/5). Tom led this with minimum fuss despite the lack of decent protection; it did however provide us with a good measure of what was to come further up the climb. From the top of this pitch we were able to move together for around 100 metres on easier-angled neve and ice (Scottish 2) leading us to

the steep looming rock band threatening to block our progress. The first 20 metres of climbing was easy enough to move together over, it soon steepened however, forcing us to begin pitching the climb again. The first rope length involved steep, enjoyable corner climbing (Alpine IV+) over rock that was anomalously stable for the surrounding area. It was however noted that many of the holds seemed to be relying on thick ice holding them in place. Despite the pitch having a fair covering of snow and ice I climbed the pitch without axes and found that the footholds were such that crampons could be used effectively. The second pitch began in much the same vein but soon called for a more mixed approach, typically axes would be used in icy cracks but would then have to be stashed away for following moves, better suited to bare hands (Alpine IV+/Scottish 3/4). This rope length brought us to the top of the rock band, but it was immediately apparent that from this position we would have to traverse a long way (roughly 80 metres) over to the right of the face to avoid menacing seracs lining the bottom of another rock band. We moved together over this section, it did however provide difficult sections of mixed traversing on loose rock and ice (Scottish 4). During this traverse we had to downclimb at least 30 metres to access the snow/ice gully, which we believed would lead us to the top. Time was ticking, it was already 2pm when we reached the gully, and from our previous views of the face we realised we were probably less than half way up. Due to our awareness of the vanishing time we moved together from this point onwards. The ground was of a fairly consistent steepness but varied in its nature. Sections of thin ice veneered over rocky slabs would give way to deep snow, in turn giving way to steeper ice and mixed pitches. The majority of this climbing was effectively protectionless as any effort to find runners was too time-consuming (and marginal once found) that it was simply a case of trusting one another's ability to negotiate the ground. There were sections of tricky steeper mixed sections (Scottish 3/4) where sitting belay's were employed where possible. A ten minute break on a welcome platform at the side of the gully after about 200 metres enabled us to get re-hydrated before committing ourselves to the final 200 metres of upward slog. We were relatively confident after previous viewing that our gully led to a break in the ice cliffs at the top and thankfully, after rounding the final corner this was revealed to be the case. We topped out at around 4:30pm, not at the top of Huelancaloc but on the summit ridge. After a brief stop to refresh ourselves we began our walk down the west ridge, eventually reaching our base camp at 7:45pm after a long tiring scree descent.

Huelanccaloc South East Buttress

FA	Unknown (Carl Reilly and Sam Walmsley, 24/7/05)
Grade	D+
Length	800m
Time	7hrs



Summary:

Easy snow slopes lead to the bottom of the obvious rock section at the right hand side of the South Face of Huelanccaloc. Initially the rock here is solid, but soon changes to a more interesting consistency. After 2 pitches, trending rightwards, the rock improves and forms a short chimney, which leads to a snow slope. From here approximately 200m of climbing on snow and ice between 50° and 70°, and of varying quality, holds the attention until easier angled slopes are gained to lead to the top of Huelanccaloc. Descend via the SW ridge.

Although we approached this as a new route, we found a very rusty peg shortly before the technical crux, at the rock chimney. We have given its placers the benefit of the doubt and assumed that they completed the route.

Account:

Another route, another early start. The normal early morning cold was heightened by a steady wind blowing up the valley, an added incentive to walk quickly over the familiar scree slopes below the glacier. As we climbed higher, to a point where the crevasses shrunk to nothing and the glacier would allow us to cross, we glanced across to the moonlit snows of Huelanccaloc's South Face. Soon we stood at its foot, as the sun started its daily takeover from the moon's night watch. Easy snow slopes led to the foot of the buttress. From here easy ground took us to the bottom of the rock buttress.

A fine tongue of rubble licking the ice at the bottom of the buttress had left us concerned about the quality of the rock. Carl took the first lead of the day, but found reasonable gear and reliable footholds allowing him to make quick upward progress. I belayed, curled in a ball in an attempt to get out of the wind. The rope soon went tight and I set off. Small edges and a smattering of jugs gave good but

finger numbing climbing, crimping in big gloves too much of a challenge. It quickly became apparent where the big rocks on the snow slope below had come from, as the angle lessened and the amount of choss increased. Carl sent the gear down the rope, warning that his belay was 'Not the best'. Heading right to what looked like more promising ground, an occasional runner on a loose block helped psychologically. At least I wasn't worried about the cold anymore. Eventually I came to a boulder that looked like it might have enough inertia to work as a belay, and I squirmed down behind it, a bum cheek half buried in gravel providing the all important second anchor. Carl soon appeared with a smile on his face and headed back left, disappearing around a corner leaving me with nothing to do but wait for the rope to come tight. It did, and I followed in his footsteps, stepping round the corner to find the rock improved enough to be able to form itself into a short chimney. At the bottom of the chimney a peg was hammered deep in a groove. A quick prod caused it to disintegrate as quickly as our claim to a new route.

From here on the ground was easier. Above the chimney a short ice slope led to a snow ridge that would dictate our route to the top. The ground now easier (Scottish II/III, occasional steps of IV), we could move together, our pace slowed by the need to stop and draw breath every 5 minutes. A brief snack break and we were on the easy snow slopes leading to the summit plateau.

Descent was via the SW ridge, obvious from the summit, although some care was needed to find a route through the crevasses. Lots of fun scree running.

Huelancalloc: South West Gully

FA	Carl Reilly and Graeme Schofield, 26/7/05
Grade	D-/D
Length	500m
Time	3-4hrs



Summary:

This is a relatively short route up the western edge of the South face of Huelancalloc. The route leads on to a low point on the summit ridge of Huelancalloc. The route is roughly 500 metres from the start of the climbing to the summit ridge. Moving together over Scottish 2, Alpine V and IV. The route is in a remote area but is not particularly threatened by seracs.

Account:

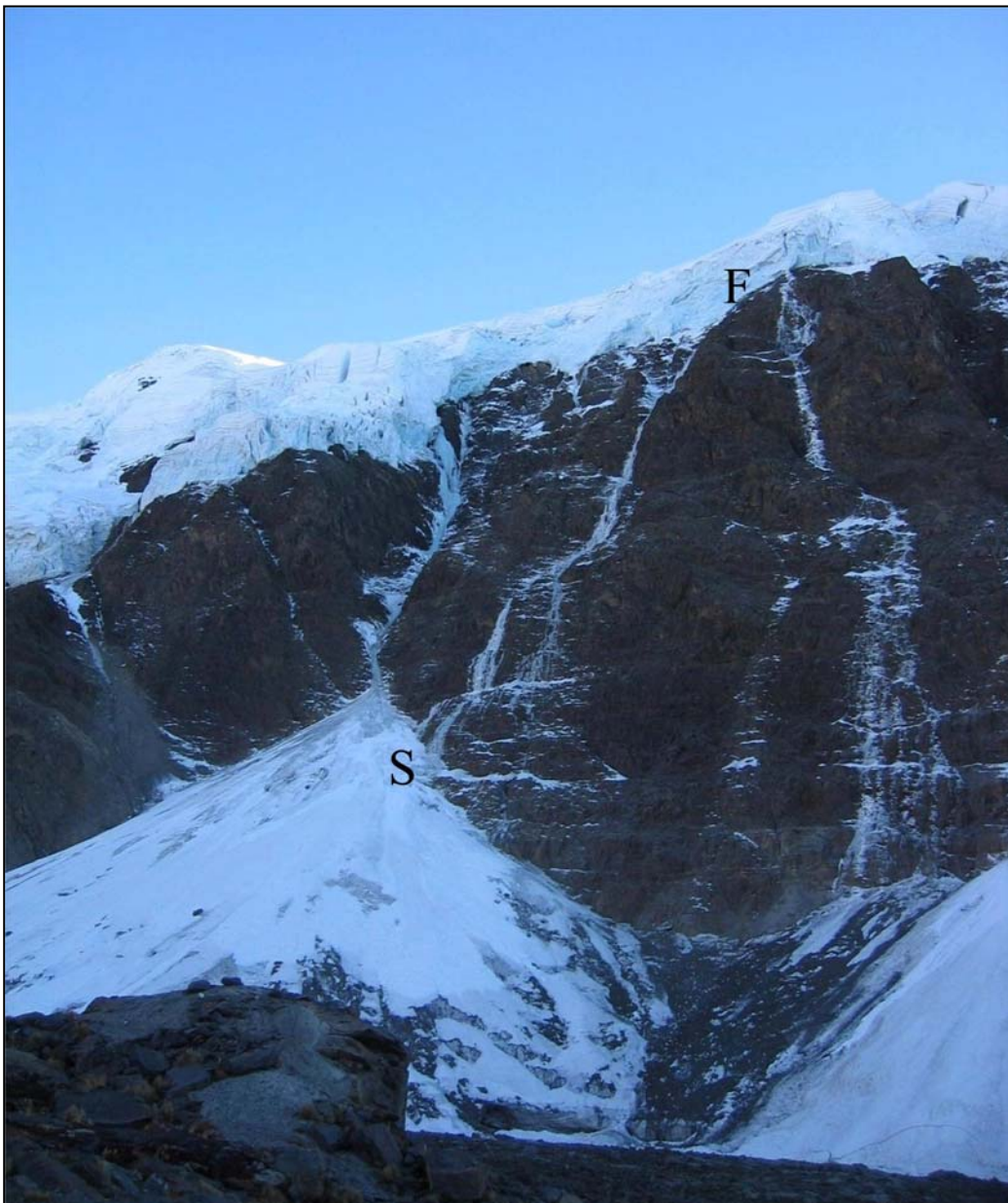
Despite this being the shortest of all the approach walks it proved to be the most arduous as steep scree slopes and awkward boulder fields had to be traversed to reach the foot of the route. The beginning of the route was enjoyable Scottish II gully climbing on good ice and neve. After managing to negotiate the first 150 metres relatively quickly moving together our progress was blocked by a fork in the gully. We followed the right-hand fork but were immediately presented with a steep rock pitch (Alpine IV+/V) providing enjoyable climbing on reasonable rock. This was followed with a 100-metre stretch of easy neve before we were given a choice between following a steep snow slope to the side of a rock buttress or ascending the buttress itself. We decided upon the rock buttress and began to work our way up through the various chimneys and ridges. It was soon realised that the rock was of horrendous quality, crampons could be kicked into the crumbling shale and no handhold could be trusted. Thankfully the ground was not excessively steep but care had to be taken to limit the volume of debris kicked on to the rope and the second (Alpine 4+). We reached the top of the ridge leading to Huelancalloc after 200 metres of climbing unconsolidated choss. It is worth noting that the steep snow line to the right of the rock buttress would have made a more fitting second half to the climb. From the top we descended down the West ridge and down the steep scree slopes back to base camp.

Cololo Area

The following routes are all approached from the normal Cololo base camp at the edge of Lago Kotani, at S14°52'59.4" W69°03'48.1", 4732m.

Kotani North: South Face Ice Line

FA	Carl Reilly and Graeme Schofield, 1/8/05
Grade	TD
Length	700m
Time	8hrs



South face of Kotani North showing the start and finish of the ice line.

Summary:

This route follows a thin ice line up the south face of Kotani North. The route is roughly 480 metres from leaving the snow cone to the bottom of the serac band and then roughly 200 metres of snow

climbing from the top of the serac band to the summit. At least four sustained pitches of Scottish 4/5 and 5 ice interspersed with short stretches of Scottish 2/3 + sections of Alpine IV rock. The route is in a remote area and climbers are faced with serious objective dangers from the bottom of the snow cone onwards due to the danger of collapsing seracs.

Account:

We set off from our base camp at the relatively late time of 6:30am so to avoid climbing the start of the line in the dark. However, the approach walk took over an hour and dawn broke over the valley well before we reached the foot of the face. In retrospect the late set-off was a mistake as we lost valuable daylight hours for the ascent. The day before, when eyeing up the line, we had made a mental note of the ominous nature of the main gully feeding the snow cone. Perilous, unstable ice cliffs loomed over the sides of the gully; it was a clear hazard and dictated our keeping to the right-hand edge of the snow cone on our march upwards. Our fears were realised as upon reaching the genesis of our intended route, we watched, as a furious white mist burst out of the main gully and spewed debris out over the snow cone. Our position, braced against the rock buttress, was thankfully out of the line of fire.



Carl on the third ice pitch. From here he had to traverse right and over the vertical ice formation at the top of the picture.

Pitch 1 provided awkward mixed climbing on thin ice and compact rock (Scottish 4/5) and having trended rightwards, it ended, perched on a rock ledge just to the right of the main line. From this position a short 10-metre stretch of laybacks and positive rock holds funnelled us back into the main ice line. The ice on this section was superb, giving good ice screw protection and enjoyable climbing on steep ground. My positioning at the top of this pitch was dictated by my running out of rope, the subsequent barrage of ice debris as Carl climbed above me proved that it was by no means an ideal location. After a brief interlude in the steepness of the route the next section proved to be the crux, a vertical chimney, which succumbed to bridging between rock and ice, was followed by a steep section of magnificent, chandelier ice. This section had a more sustained section of vertical climbing compounded with ice, which proved to be rather brittle and unstable. Whilst kicking his crampons into the ice, Carl detached a large glistening chunk, leaving his leg swinging in mid-air. The loss of

temporary balance was followed by a sudden lurch to one side as I braced myself to hold his fall. However, the fall was not forthcoming and after somehow regaining his equilibrium, Carl steadied himself and finished up the pitch in good style. The section that followed provided steep, high-quality ice climbing, which ended with a dash through rushing melt-water in an enclosed funnel. The belay station was not very roomy and Carl climbed quickly past myself so we could find a place to prepare to move together on easier ground above. As I climbed I heard a shout from above and with a glance I saw a football-sized stone skimming its way over the ice towards me. Sinking my axes and lowering my head I tensed up as it missed by a narrow margin, it did however act as an effective catalyst for our racing up the rest of the route. We could see from our position that roughly 40 metres of more gentle ice remained; however the overhanging seracs above looked entirely impassable. In an attempt to find a way through the seracs we trended off to the right, moving together over reasonable rock (Alpine 4) and then proceeded to traverse the slope to find a way through. Time was passing, the seracs looked incredibly steep and unstable, we knew from our reconnaissance that no easy way off the top of the mountain existed and it was therefore decided that this was to be our high point. The rock was so broken and loose on the face that it was unlikely that we could find reasonable blocks to abseil all the way to the bottom, leaving the only option of retreating back down our route using abaklov threads. By the time we were back at the top of the ice line with the first abaklov in place it was 5pm. We made as rapid a retreat as possible, the last three 60 metre rope lengths were done in the dark, managing to get back to the snow cone at around 7:15pm after 8 full abseils, 480 metres of descent and a dropped ice axe (subsequently found the following day). We carefully wound our way back down the 250 metres of snow cone to reach the bottom of the face, from where we steadily made our way back to base camp.

Traverse of Peaks K8 (5240m), K7 (5215m), K6 (5250m), K5 (5310m), K4 (5535m)

FA	Unknown
Grade	AD-
Length	1000m
Time	8hrs

Repeated Carl Reilly 31/7/05

Description:

Set off from base camp at 5:00am and ascended the broad rocky East Ridge of Peak K8 to its summit at which I arrived at 07.30. After a rest I traversed North Westwards over peaks K7-5.

The ascent of peak K4 was tiring due to large penitentes, up to 0.75m in height. The summit was reached around 12.00.

The descent from Peak K4 was down its west face, once the ice line was reached it was easiest to remove crampons and scramble down the easy angled rock until it was possible to scree run to the bottom. A foot path back to the vicinity of base camp was then found. Base camp was reached after a leisurely day at around 14.30.

Cairns were found regularly on ascent of E Ridge of Peak K8.

Traverse around Peak K9 (5100m) and over other un-named Peaks

FA	Cordillera Apolobamba 97 Expedition
Grade	PD+
Length	700m
Time	5hrs

Repeated Carl Reilly & Graeme Schofield, 3/8/05

Description:

After an 8:00am start the col between K8 and K9 was gained using a shepherd's path. We then headed north east along the ridge, going over small peaks one by one. We skirted around the south side of peak K9 and did not go to its summit as the rock climbing looked loose and dangerous, although not hard.

We carried on along the ridge and descended a broad gully near the end of the ridge at around 11.00. We arrived back in base camp at around 12.30.

The rock on most of the traverse was loose and friable, however the ridge was generally wide and easy angled. There was no snow or ice.

Cololo: Traverse

Summary:

Cololo is one of the most popular mountains in the Apolobamba, with a number of ascent routes described in guidebooks. Generally thought of as fairly easy and safe, Bide and Walmsley decided to see if they could overcome these hurdles to have the biggest epic of expedition.

Account:

A 3:30am start should have been sufficient to allow return before night fell the next evening. The approach was straightforward until the very heavily crevassed glacier was reached after about an hour and a half. Using steep scree slopes to stay off the glacier for as long as possible, vertical and loose rock faces eventually forced us into the maze of ice cliffs. Crossing the glacier proved to be the technical crux of the day, involving ascent of overhanging ice walls and some crevasse leaping a la *Vertical Limit*.

Eventually the terrain became more reasonable and our chosen route up Cololo came into view. We never did work out what we climbed, but it was probably the SE couloir, followed by some steep snow slopes covered in fairly deep soft snow to the summit.

The initial couloir was threatened by extremely large seracs, which helped focus our minds in moments of tiredness. Once past these the route was objectively safe, with astounding views. The summit ridge was made up of alarmingly rotten ice, passed with some caution. We summited shortly before midday, more or less on time.

We decided to descend via the north ridge, unappealingly described by Brain as 'an exercise in descending multi-towered loose rock'. Unperturbed, we pushed on, finding the guidebook description to be accurate. On encountering a gravity defying overhang of choss, which would require abseil descent, we decided to drop down an easy looking gully on the E side of the ridge. This turned out to be an error, as any loose rock unhappy with its position atop the ridge would descend the gully at speed. The gully became too steep to descend on foot, and TB was hit on the head by a large rock, smashing his helmet and leaving him alarmingly disorientated. The preferred option of abseil to the glacier was impossible, foundering on both the lack of suitable anchors, and a lack of rope (a single 60m half rope had been taken). As a result we were forced to traverse the face, on relatively easy and safe ground, to a deep gully at its far end.

Hopes of simple descent were dashed when it became apparent that the rock was of exceptionally poor quality. TB went first, finding that by driving his arms directly into the rock enough support could be gained to make some progress. SW belayed from a bucket seat dug in gravel, psychologically valuable, but of little practical use. After further adventures which resulted in the loss of a quickdraw and wire (a reward for anyone who repeats this route), we reached the glacier in time for a beautiful sunset. We did appreciate that this was not entirely a good thing.

Crossing the glacier we discussed the 3 possible descent routes. SW felt that a col to the east side of K4 offered was the best option (this turned out to lead to large ice cliffs with further difficult terrain beyond), TB felt descending the glacier was the best option (this turned out to involve walking amongst large creaking seracs and getting lost). TB and SW both realised that climbing K4 was the only guaranteed way of getting down, but neglected this option as it looked very high and they were very tired. TB summed up the situation with the explanation 'We're fucking fucked, completely and utterly fucked', then fell in a crevasse to prove the point.

Eventually, after a brief attempt to bivi on the glacier which resulted in numb extremities after 10 minutes, it was decided that we would have to climb K4. As always, this turned out to be quite easy, much easier than the other descent routes we had attempted. On the summit ridge TB's headtorch batteries died, which did complicate matters somewhat. Progress was not helped by a lack of drinking water, which had frozen solid hours before, giving heavy but useless water bottles. This resulted in mouths so dry we were unable to eat our remaining snacks, although compared to the hallucinations it was a minor problem. Once off snow, tension eased and a pattern of walking for 10 minutes, falling over, then sitting for 5 minutes was established.

We were relieved when we reached base camp at 3am, 23 and a half hours after leaving.



Conclusion

All the team members agree the expedition was a great success especially considering that it was the first time in the Greater Ranges for all members. All the objectives were achieved by every member of the team. As well as this new technical routes were achieved on several other mountains. Illness was minimal although at first the affects of altitude were greatly felt and every member of the team was bedridden for a few days with various illnesses at one point. Both TB and GS were injured by rock fall although not badly and recovery was made after a few days rest.

Everyone was shocked by the amount of glacial retreat and lack of snow cover. This was particularly noticeable in the Condoriri region, as it is well covered by guidebooks, including photos indicating normal conditions. This meant that loose rock was often a problem and snow protection (deadmen and snow stakes) remained unused. Conditions will be a major consideration before attempting any route - we found the guiding agencies in La Paz were able to provide useful information.

There is still a lot of scope for new routes in the Apolobamba, especially harder lines on south faces. There is less potential for climbing virgin peaks, but we are confident there are some to uncover if the necessary research is undertaken, although lack of information on what has and has not been climbed will be a problem for expeditions for many years to come.

Our base camp near Mankha Canuma gave us a good look at several unclimbed lines on the south face of Huelancallo, while the camp near Cololo looked onto many fine looking mixed lines on the SW face of Kotani North (although it is worth noting that these are seriously threatened by large seracs). There are also a number of fine looking rock peaks around the Cololo area although we cannot vouch for the quality of the rock.

The Quimsa Cruz also offers a lot of potential for exploratory climbing, with a wealth of untouched rock. The rock is excellent granite, with some fantastic looking lines on it. La Paz based activists are hard at work in the area, but are generally happy to share their knowledge with visitors.

Contacts

We found the following people and places useful for planning and carrying out the expedition

Useful map of the area:

Paul Hudson, 88 Ash Road, Leeds, LS6 3HD, UK, mad.mountainer@btinternet.com

Archive expedition reports:

BMC – www.thebmc.co.uk

Royal Geographical Society – www.rgs.org

Alpine Club – <http://www.alpine-club.org.uk/>

Grants:

BMC – www.thebmc.co.uk

MEF – www.mef.org.uk

For Smartwool thermals:

Anatom – www.anatom.co.uk

Small but comprehensive first aid manual (profits to charity):

Pocket First Aid and Wilderness Medicine; Dr Jim Duff MBChB & Dr Peter Gormly MB FRCS;

Published by –Treksafe; 2005; ISBN 0-9750731-1-7

(available from BMC)

Jeep hire (also useful for general climbing information):

Saranani, Adventure Tour Operators; Sagarnaga St, Doryan Tourist Shopping, 2nd Floor, Office 30, La Paz, Bolivia; Tel-++591-2-2379806; sarinani@entelnet.bo; www.saranani-tours.com

The information in this report, along with many more photos is available on the internet at www.apolobamba.com

Appendix A – Useful Grid References

GPS Settings

North Ref Mag	Variance	Units	Map Datum	Position format
	005°W	Metric	WGS84	hddd°mm'ss.s"

Waypoint	Where	Elevation	Grid Reference		Notes
Waypoint 001	Accommodation, Ulla Ulla	4354	S15°03'36.3"	W69°16'14.8"	Not permanently open
Waypoint 002	Junction N of Ulla Ulla	4357	S15°02'13.4"	W69°15'33.4"	
Waypoint 003	Road junction	4371	S15°02'05.4"	W69°15'08.4"	
Waypoint 004	Road junction	4380	S15°02'05.2"	W69°14'44.9"	
Waypoint 005	Vicuna Centre	4406	S15°03'00.7"	W69°13'35.8"	Rangers may help arrange jeep hire
Waypoint 006	Small hut at west end of Lake Canahuma	4433	S15°03'00.9"	W69°12'32.3"	
Waypoint 007	East end of Lake Canahuma	4485	S15°03'54.9"	W69°10'39.2"	
Waypoint 008	Road turns (not junction)	4503	S15°03'58.2"	W69°09'37.5"	
Waypoint 009	Unnamed hamlet	4506	S15°02'53.4"	W69°08'39.8"	No facilities as far as we know
Waypoint 010	Mankha Canuma	4531	S15°02'08.6"	W69°08'03.0"	No accommodation available, we slept in school
Waypoint 011	Cocha Canuma (Hamlet)	4566	S15°01'28.0"	W69°06'52.5"	
Waypoint 012	Base Camp	4730	S15°00'39.5"	W69°05'21.4"	Water available from aqueduct below camp
Waypoint 013	Summit, unnamed peak	5095	S15°00'56.3"	W69°04'08.1"	
Waypoint 014	Lowest edge of glacial lake	4898	S15°00'28.4"	W69°04'30.4"	
Waypoint 015	False summit on way to Canisaya	5561	S15°00'45.8"	W69°02'51.1"	
Waypoint 016	Summit, Canisaya	5652	S15°00'41.0"	W69°02'31.0"	
Waypoint 017	Summit, Casalala	5650	S15°00'16.4"	W69°03'16.3"	
Waypoint 018	Col (abseil descent possible)	5423	S15°00'39.4"	W69°03'00.6"	
Waypoint 019	Summit, Huellanacalloc	5847	S14°59'47.7"	W69°03'32.4"	
Waypoint 021	Snow ridge, Huellanacalloc	5537	S14°59'52.6"	W69°03'56.2"	
Waypoint 022	Bottom of small crag	4857	S15°00'47.5"	W69°04'33.5"	
Waypoint 023	Col (en route to Calaya)	4914	S15°01'00.7"	W69°04'17.0"	
Waypoint 024	Photo stop en route to Calaya	4686	S15°01'20.4"	W69°03'48.5"	
Waypoint 025	Calaya	3766	S15°05'14.6"	W69°02'21.0"	
Waypoint 026	Cololo BC	4732	S14°52'59.4"	W69°03'48.1"	
Waypoint 027	Pass between Pelechucco and Cololo	4761	S14°52'58.7"	W69°03'47.6"	
Waypoint 029	Pelechucco	3596	S14°49'09.9"	W69°04'15.0"	