

72

86/38

Janka Raju 86



*expedition to
the Peruvian Andes*

+
533

*Janka Raju 86
expedition
report*

a.c. 23979

CONTENTS

<u>Item</u>	<u>Page</u>
INTRODUCTION	1.
1. General outline	
2. Aim of the report	
PREPARATION AND PLANNING	1-3.
3. Background	
4. Cordillera Blanca	
5. Aim of the expedition	
6. Preliminary administration	
7. Team composition	
8. Expedition Chronology	
U.K. TO BASECAMP	4.
9. Movement to Peru	
10. Movement from Lima to Huaraz	
ASCENTS OF NEVADO PISCO OESTE AND CHOPIKALKI	5-6.
ATTEMPT ON CARAS II	7-12.
Route diagram	
ASCENTS OF PT. 5420 AND NEVADO CAYESH N.W. FACE	13-15.
Route diagram	
APPENDIX A: AREA MAP	16.
APPENDIX B: FINANCE	17-18.
APPENDIX C: FOOD	19.
APPENDIX D: EQUIPMENT	20.
APPENDIX E: MEDICAL REPORT	21-23.
ACKNOWLEDGEMENTS	24.

Janka Raju 86

INTRODUCTION

1. General Outline: Janka Raju '86 was organised as a flexible lightweight venture, adopting an alpine-style approach to the mountains. Six mountaineers took part, climbing in the Cordillera Blanca range of the Peruvian Andes from June to August 1986. The Expedition successfully completed a number of mountaineering objectives selected after reconnaissance of the range during a visit in 1985 (see section 3 below).
2. Aim of the Report: The aim of the report is to record the climbing achievements of the Expedition, and list administrative arrangements that may be helpful to organisers of similar expeditions.

PREPARATION AND PLANNING

3. Background: During the months of June to August 1985 Jerry Gore led an expedition to the Cordillera Blanca, primarily to make a climbing documentary. During this venture a number of detailed reconnaissances and climbs were completed, providing the incentive for a return trip in 1986.

After a meeting at Plas-y-Brenin in November 1985, Mike Sheldrake and Jerry Gore decided to combine forces. There seemed then, and it was subsequently proved, that there are a lot of advantages financially, administratively, and logistically for large expeditions going out to the 'Blanca. What is important, however, is that a flexible approach is maintained, i.e. each rope team takes enough gear to support itself independently of the main body, should the need arise.

4. Cordillera Blanca: This mountain chain (literally "White Range") is one of the few ice-clad regions within the Tropics. It exceeds the mountains of New Guinea, Africa, Ecuador and Columbia in altitude and extent, and is more extensively ice-covered than other ranges in the Andes, including Aconcagua. Yet the range is extremely accessible. The heads of most valleys can be reached by a two day walk-in from the road. Transport, food and accommodation are usually cheap. Peak fees and liaison officers are unknown, which means that expedition expenses are minimal. The Cordillera Blanca represents, consequently, one of the most attractive high-altitude mountain areas in the world.

5. Aim of the Expedition: The main aims of the Expedition were three-fold:-
 - a) To complete the first ascent of the N.W. Face of Nevado Cayesh (5721m.)
 - b) To complete the first ascent of the S.E. Face of Nevado Caras II (6020m.)
 - c) To complete a traverse of the connecting ridge between the twin peaks of Chakraraju (6001m.)

In order to attempt these diverse mountain objectives, and because work commitments dictated different return dates for members, it was decided that Fisher, Sheldrake, Wingfield and Ravey depart for Peru ahead of Gore and Moore, and attempt Caras II. Gore and Moore, after attempting Cayesh, would subsequently join up with them, and the entire body would then attempt the Chakraraju Traverse as a combined tour de force.

6. Preliminary Administration: Planning and preparation took place between November 1985 and May 1986. A summary of procedures and results are included as Appendices in the hope that they will be useful to future expeditions. These are:

- | | | |
|----|------------|----------------|
| a) | Appendix A | Local Area Map |
| b) | Appendix B | Finance |
| c) | Appendix C | Food |
| d) | Appendix D | Equipment |
| e) | Appendix E | Medical |

7. Team Composition:

Jerry Gore	23	Student
Mike Sheldrake (Shell)	28	Civil Engineer
Julian Fisher	23	Dentist
Terry Moore	30	R.A.F.
Peter Ravey	30	Mechanical Engineer
Andrew Wingfield	24	Civil Engineer

8. Expedition Chronology

- June 21st Fisher, Shelldrake and Wingfield depart Heathrow for Lima, joining Ravey in Venezuela.
- June 25th Arrive at Llanganuco valley base camp (4000m). Ascents of Nevado Pisco Oeste (5752m), and Chopikalki (6354m).
- June 26th Gore and Moore depart Heathrow.
- July 1st Gore and Moore arrive at Q.Cayesh base camp.
- July 4th-5th Gore and Moore climb P.5420 to the south of Nevado Cayesh (first ascent). Fisher, Shelldrake, Ravey and Wingfield leave Llanganuco.
- July 7th-8th Fisher, Shelldrake, Ravey and Wingfield establish new base camp at Laguna Paron.
- July 8th-13th Gore and Moore complete the first ascent of the N.W. face of Nevado Cayesh (also first British ascent).
- July 9th Ravey departs Laguna Paron due to work commitments.
- July 9th-11th Fisher, Shelldrake and Wingfield climb S.E face of Nevado Caras II (unclimbed) reaching east ridge 300m from summit. Time, fatigue and lack of bivouac gear forcing descent.
- July 12th Fisher, Shelldrake and Wingfield leave Laguna Paron.
- July 16th Gore and Moore leave Q.Cayesh base camp
- July 19th Fisher, Shelldrake and Wingfield return to Heathrow.
- July 24th Moore returns to Heathrow.
- August 16th Gore returns to Heathrow.



The twin peaks of Chakraraju
from Pisco Oeste

U.K. TO BASE CAMP

9. Movement to Peru: Open-ended tickets (£500 per person) were obtained from VIASA (Venezuelan Airlines) and these included a baggage allowance of 40 kg. per person (20 kg. on return). The flight and passage through customs was relatively straightforward. Though, on our return to the U.K. some members did experience problems and were strip-searched at the airport. Beware attempted drug frame-ups!

10. Movement from Lima to Huaraz: After a short overnight stay in Lima, where accommodation was found at Hotel San Sebastian the team variously moved up to Huaraz for acclimatisation and preparation. Huaraz (3048m., 8° South of the Equator) is the principal town of the Cordillera Blanca, and has established itself as the mountaineering centre of Peru. The town has been largely rebuilt since the catastrophic earthquake of 1970. It offers an almost comprehensive range of food and secondhand climbing equipment (at a price).

We stayed at the Hostel Llandauro for approximately £1.00 a night. This hotel is run by Lola and her husband Guy. Both speak French and passable English. They provide first-class hospitality and very useful local information. We used their hotel off and on during the expedition whenever we were in Huaraz.



Huaraz - Bizarre, crowded and esoteric, the centre for mountaineering in the 'Blanca.

ASCENTS OF NEVADO PISCO OESTE AND CHOPIKALKI

On Sunday the 22nd of June, Shell, Ju and Andy arrived in Lima having met up with Pete en route in Caracas. After watching England's ignominious defeat in the World Cup and a lightning tour of Lima's grot spots and girlie-bars, the first of many rip-offs occurred as a result of not agreeing exact hotel charges with the owner "before" accepting a room, no-one was sorry to leave for the hills.

The coach journey to Huaraz is pleasant and cheap, (about £4 each including extra baggage charges) and takes eight hours. The following two days were spent in Huaraz sunbathing on the balcony of the Hostel Llandauero, acclimatising, buying food and taking on practically every kid under the age of 12 at football (all at once). The result, Peru 7, England 4.

With it's easy access and varied peaks we chose the Llanganuco Valley as our first base. The minibus, which was supposed to take us to the accepted base camp position, refused to drive beyond the upper lake. No-one showed interest in staggering any further up the valley, so the meadow was quickly transformed into a mini "Snell's Field". Our later discovery of the normal camp site revealed it to be a far better spot and easy to get to.

A day was spent wandering up the nearby hillsides to catch our first glimpses of Chopikalki and Chakraraju. The weather was unsettled and everyone, with the exception of Pete, was suffering from diarrhoea. In our eagerness to get started we hired a couple of donkeys for the following day, with the intention of climbing Pisco Oeste (5752m.). Unbeknown to us, this must be the Blanca's most popular peak, with about a dozen ascents each day.

After a three hour walk to the foot of Pisco's glacial moraine, we collapsed beneath a perfect bivi boulder for the night. Appetites hit an all-time low at dawn the following morning, forcing Andy to eat everyone's breakfast!

We split naturally into two pairs on the glacier - the slow and the very slow. A thousand feet above the bivi, Ju and Pete were forced to turn back due to a combination of illness and lack of acclimatisation. Unfortunately, Shell had to do likewise a thousand feet from the top, leaving Andy the last half mile of ridge to do alone.

We returned to the valley the following day, collecting our tents and extra kit from a nearby shepherd's hut. Being so near to the track we didn't trust leaving the camp unattended and this seemed a cheap and safe way around the problem. It worked well the first time, though later events were to prove this a mistake.

A. Wingfield

After two days rest the four of us set off up the valley again to Chopikalki Base Camp. We hired two donkeys and Carlos, a local Indian, to help ferry the gear and left the rest in his hut at Base Camp (this later turned out to be a bad mistake, having a rope and various other articles stolen during our absence).

We took the walk at a leisurely pace and everyone arrived feeling better than after the walk up to Pisco Base Camp. Tents were set up and Andy "brewed" some oxtail soup.

The walk up the moraine to Advanced Base Camp was straightforward but hard work. On reaching the bottom of the glacier Andy and I decided to press on and bivi on the glacier whilst Shell and Pete made camp at the head of the moraine.

After a cold bivi we set off early, passing German and Japanese encampments just below the col. On the col we had to bypass a steep snow/ice pitch on the arete taking a route through a crevasse which was then followed by other parties that day.

Apart from a few stops to warm our feet and to negotiate awkward crevasses we kept going and made the top at 1.30 p.m. The cloud had descended so after a couple of photos we set off down again.

We passed Shell and Pete digging a snow cave just below the col, wished them good luck for the next day and left for our bivi.

The following morning whilst Andy and myself set off for Huaraz, Shell and Pete had set off up the ridge at first light. After five hours climbing Pete who had suffered with altitude the previous day could go no further and a joint decision was made to retreat. They almost managed to make Base Camp that evening, exhausted and separated during the descent.

During the day Andy and myself had picked up our gear and caught a "collectivo" to the valley and back to Huaraz leaving Shell and Pete to settle up with Carlos for minding the gear. It wasn't until we were all in Huaraz that it was discovered a new rope had been stolen whilst in the "safe keeping" of Carlos.

A couple of days rest and we were collecting provisions for our attempt on S.E. Face of Caras II in the Laguna Paron Valley.

J. Fisher

ATTEMPT ON CARAS II

The road up to Laguna Paron was long, rough and impressive. We unloaded the truck around 4 o'clock at the bottom of the lake. It was supposed to be beautiful, "not to be missed" said Jim Bartle but we were not impressed. We had come up in shorts from the hot sun of Caras, now at 4000m. we were freezing cold, the workings of Electroperu scarred the scene and the turquoise waters of the laguna had been largely drained leaving a bouldery edge surrounding a chalky white puddle. All our gear took two carries to the end of the lake, the first completed just before darkness that night, the second carried out with much lethargy the following morning. Base Camp had little to recommend it. Clouds of horseflies annoyed all of us except Pete who instead of seeking sanctuary in the tents killed 108 with a snow-stake.

Late in the afternoon we wandered further up the valley to make a reconnaissance of the face and it's approaches. At this stage we were particularly concerned that it would be virtually impossible to find any access point since a continuous band of 500' cliffs had separated us from the upper glaciers all the way along the valley. However, a half hour stroll took us to an excellent viewpoint which revealed a fairly straightforward approach to the ice fall at the base of the face and filled us with optimism about our chances of climbing the route, though inwardly we had our doubts about an apparently overhanging rock wall of maybe 100m. at the top of our chosen line. This was to be via a huge couloir reaching almost directly to the summit. There were two further gully lines to the right and the second of these appeared to offer another chance of success. We were excited and optimistic.

That evening the Base Camp made up for some of it's initial failings. Dead wood from some nearby trees provided a superb bonfire that resulted in our first social evening above Huaraz and further raised morale. Andy produced his speciality, Raven instant potato mixed with grated cheese and onion. The empty valley echoed as we sang along to Cliff Richard on the cassette player. Occasionally an over-enthusiastic member poured petrol onto the inferno threatening to end the entire expedition in a dramatic fireball. We drank vodka mixed with boiling water and flavoured sugar crystals, as well as finishing all but four of the cans of beer we had carried in. It was a memorable night all the more so since work commitments meant Pete must leave us the following day.

In the morning, and with much lethargy, we sorted and packed the bivouac and climbing equipment for the route and finally left Base Camp at about mid-day. Pete accompanied us until halfway when we bade our farewells. He returned to Base Camp and eventually Huaraz, we (Julian, Andy and Shell) continued across moraine and finally sloping rock slabs to the base of the Caras II glacier/ice-fall.

We had a frightening reminder of mountaineering dangers when we found ourselves resting directly in the line of a rockfall. Andy shouted and we all scattered, seeking cover. I pulled a rucksack over my head as boulders larger than footballs whizzed past, miraculously missing the three of us.



Andy beginning the long haul through the Caras icefall.



Andy prepares breakfast in the bergschrund.

Further on we excavated a bivy platform from an earth and boulder ledge just 50m. below the glacier. The plan was to spend the night here away from the cold of the glacier and with an early start reach the bottom of the face around 8 o'clock next morning giving us the rest of the day to make upward progress. The bivy was spacious and comfortable, marred only by the performance of the stove. The only stove we had with us was an "Optimus Climber" which had proved troublesome throughout the trip and now gave us its worst hour coughing and spluttering inefficiently. A Raven meal was finally prepared and we all slept soundly.

So soundly in fact that the early start wasn't. Andy set off first with Ju and myself about five minutes behind, it was already 7.30 a.m. Almost immediately we lost each other in the early folds and ice walls of the glacier rejoining after a shouting match comparing the merits of our chosen routes. The ice fall was a chaos of ice cliffs, crevasses and steep slopes, often covered with soft snow and often the equally frustrating nevé penétenté (collapsing spikes of ice shaped by the sun).

It was a maze of great beauty and equal frustration. We wove in and out, up and down. At the top of each slope, around each corner, new options presented themselves. We simply chose the route that looked most likely, it was never clearcut but gradually we moved towards the bottom of the face. Sometimes we roped together, crossing crevasses and snow bridges, sometimes we dispensed with the rope entirely, other times we belayed while climbing an awkward pitch. At one point we descended a vertical 10' tunnel into a crevasse and then onto the snowslope beyond.

After 5½ hours we finally emerged onto the flat glacier below the face: we were very tired. Ju was exhausted and by the time we had rested and prepared a brew it was mid-afternoon. There was no point going onto the face that day so we decided to find a bivy site at its foot and then to travel light the next day in an attempt to reach the summit.

Studying the face at close hand it became clear that the left hand couloir, our chosen route, would not go easily, if at all. The rock wall at the top looked even more unlikely and near the bottom the couloir narrowed to a short overhanging section of bare rock. We altered our plan again and decided to switch to the right hand of the three couloirs running up the face.

In the late afternoon we cut out three platforms on a ledge inside the Bergschrund just below our chosen line. We crawled into our bivy-sacs, belayed to snowstakes to avoid falling deeper into the Bergschrund. Ju sealed up his bag and crashed out for the night. Andy battled with the almost non-functioning stove to try and prepare a meal. Spindrift began to pour intermittently over the Bergschrund lip burying us rapidly and forcing regular excavation. At one point Andy decided to strip the stove right down whilst I cradled a luke warm pan of Raven. Eventually after several hours of anger and frustration the meal was produced. It was a low point and we began to feel that descent the next morning was our only option. I spent the night waking to push off the spindrift that piled up on top of me and by morning I was almost in a sitting position, the snow having built up behind me. At 4.00 am Andy began the near impossible task of boiling water for breakfast and eventually produced an unappetising and meagre bowl of porridge. We excavated our kit and moved out into the early morning sunshine at 6.30 a.m.



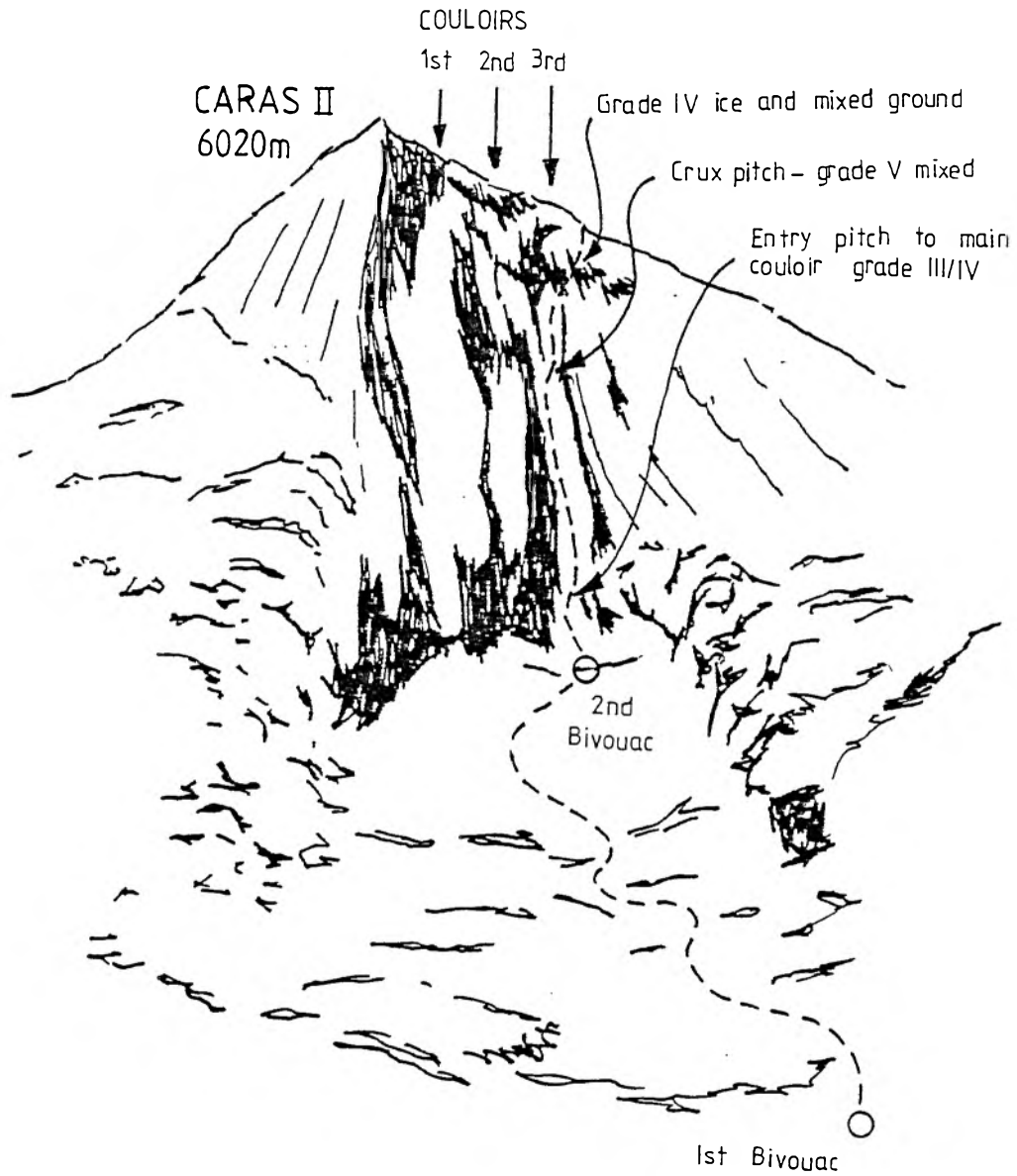
Ju on "hollow ice"
leading into the main
couloir on Caras II.



Shell above the crux
pitch on Caras II.



Route Diagram - South East Face Caras II



We planned to leave everything where it was and just take climbing kit, go as far as we could by mid afternoon and return to the bivy for darkness. Hopefully we could achieve the summit. We soloed up the avalanche cone below the couloir to a rock wall which ran across the base of the face. A 30m pitch of steep hollow ice gave access to the lower reaches of the couloir. Ju led while Andy and I snapped the obligatory photos of his disappearing backside. We then entered the couloir proper and moved together up good snow towards a fork above half height, occasionally the odd rock hummed menacingly past. We roped up for one pitch up some ice-bulges and then belayed at the foot of a rock buttress where the couloir forked. It was 11 o'clock (?) and we were already feeling tired after the 300m of front-pointing up the lower part of the couloir. From below the right branch appeared to offer the best prospects but access to this was barred by a steep pitch of water-ice and rock. Ju led again and the pitch proved to be the crux of the route. It took him an hour, teetering across and up the hollow ice and rock before Andy and I followed on jumars. Above this I led another pitch up steep water-ice and then the climbing eased again for a couple of runouts. This brought us to the foot of a rock wall we had noted as a possible obstacle on our reconnaissance. Andy led up the angle between the rock and the ice ridge on the right hand side of the couloir. Beyond a couple of pitches across snow and rock led to a final steepening and onto the snowy shoulder of the East ridge, first climbed in 1955.

It was now late afternoon and past our time for turnaround. In the last hour late afternoon cloud had built up on the summit and ridge and we were extremely tired. There was no option but to go back down. After a short rest we began a series of 14 abseils back to the Bergschrund. Remembering multi-pitch abseils in the Alps we all feared complications but things went unbelievably smoothly, many of the abseil points had been fixed on the ascent. We abandoned five of the six snow stakes we had brought with us as well as a number of pegs and wires.

We reached the bivi site with time to spare before darkness and immediately made up our minds to carry on down the glacier. The prospect of another night in the Bergschrund did not appeal. It took us only an hour to follow our trail back through the ice fall despite Andy falling, unroped up to his neck into a crevasse and Ju's crampon breaking. After this surprisingly fast descent we had no inclination to bivy in the moraine so we blundered on each following our own pool of headtorch light down the moraines to base camp. We arrived one by one utterly spent. I felt nauseous through sheer exhaustion. The greatest pleasure and first priority was a can of beer followed by food and another bonfire, less wood this time but still plenty of petrol!

The next day we planned to laze around at base camp but by mid-morning the flies had driven us to breaking point. We packed the largest heaviest loads any of us had ever carried and splent 2½ hours each in his own personal agony staggering along the rough boulder and shale bank of the lake to the pick-up point, dreaming of pizza, cheeseburger and apple pie. By 8 o'clock that evening we were back in Huaraz, good food and a proper bed.

M. Sheldrake

ASCENTS OF Pt. 5420 AND NEVADO CAYESH N.W. FACE

Terry Moore and I left Huaraz for the mountains on 1st July, after a few days worth of frantic preparation. Our objective was the N.W. Face of Nevado Cayesh, lying in the Southern region of the 'Blanca (See Map at Appendix A). We reached Base Camp (4100m) that evening, after a pick-up truck to Pitec, the road-head, followed by a 12 mile hike up through the Quelcayanka Valley to the Cayesh Valley itself. We used two burros with sufficient food for three weeks.

We then spent five days acclimatising. During this period we made an ascent via the long S.E. Ridge of the previously unclimbed Peak 5420 to the South of Nevado Cayesh. The North West face of this peak was then attempted. The ascent took six days, Base Camp to Base Camp. The climb involved sections of vertical and mixed ground, Alpine V Sup./A2 rock, and some very intricate route finding. Sacks were hauled on various sections. Route finding was complex because of the very steep and friable nature of the rock, together with huge free-standing icicles that characterised the face.

The key to the upper part of the climb was found after the discovery of an ice "staircase" that wound round and through the barrier of overhanging seracs that guarded the summit snow slopes. Descent took one and a half days and 14 abseils and was completed just prior to a period of storm and heavy snowfall. The climb is a first British ascent and the fourth overall to reach the summit.

After the descent we returned to Huaraz. After subsequently liaising with Sheldrake and Co. it was clear that due to a shortage of time, and because of various injuries, the traverse attempt on Chakraraju was no longer feasible. So, after enjoying the wonders of Huaraz night life to the full, we all made our way back home.

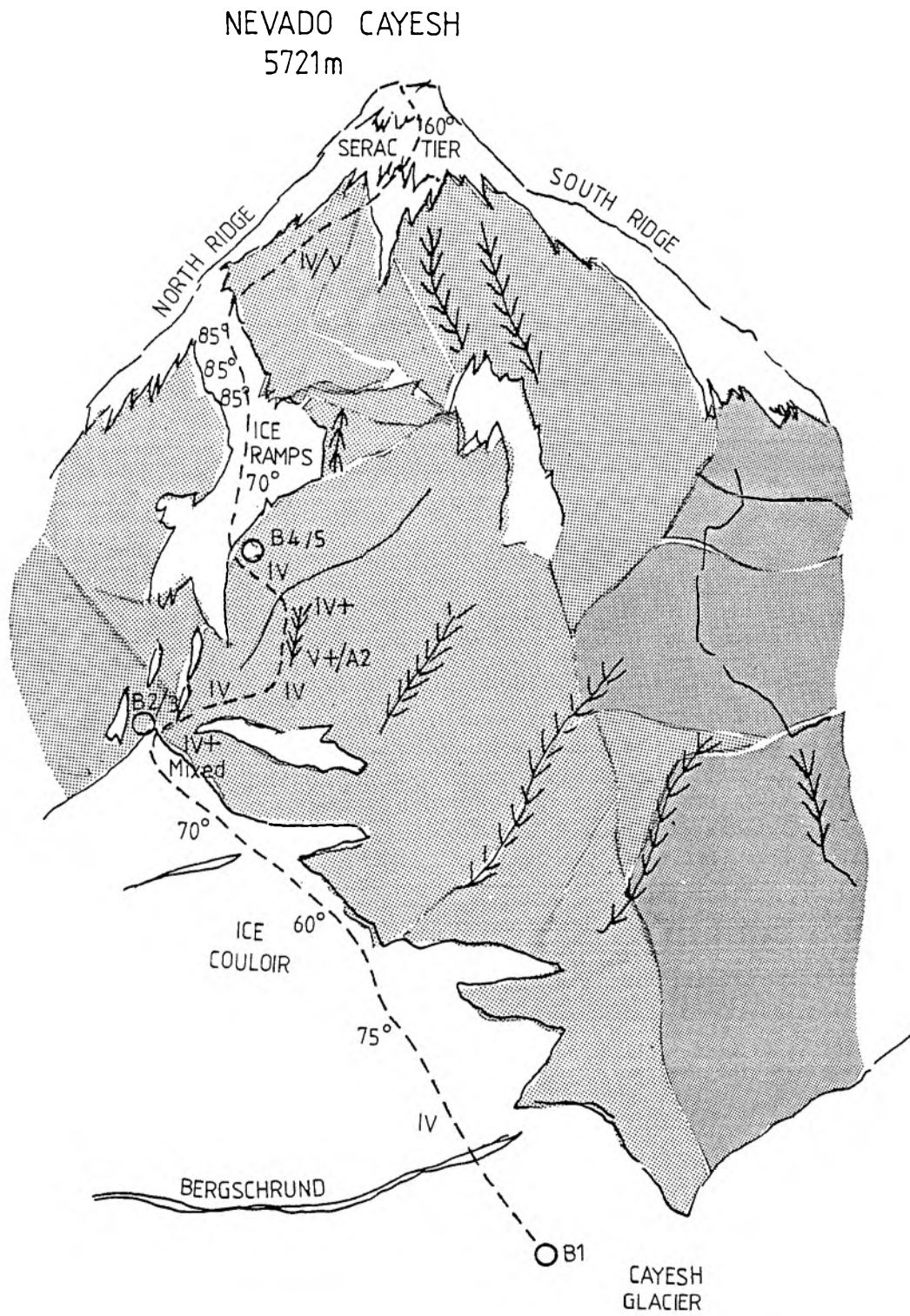
J. M. Gore

(For a fuller account of the important ascent of Nevado Cayesh see "Mountain 113").

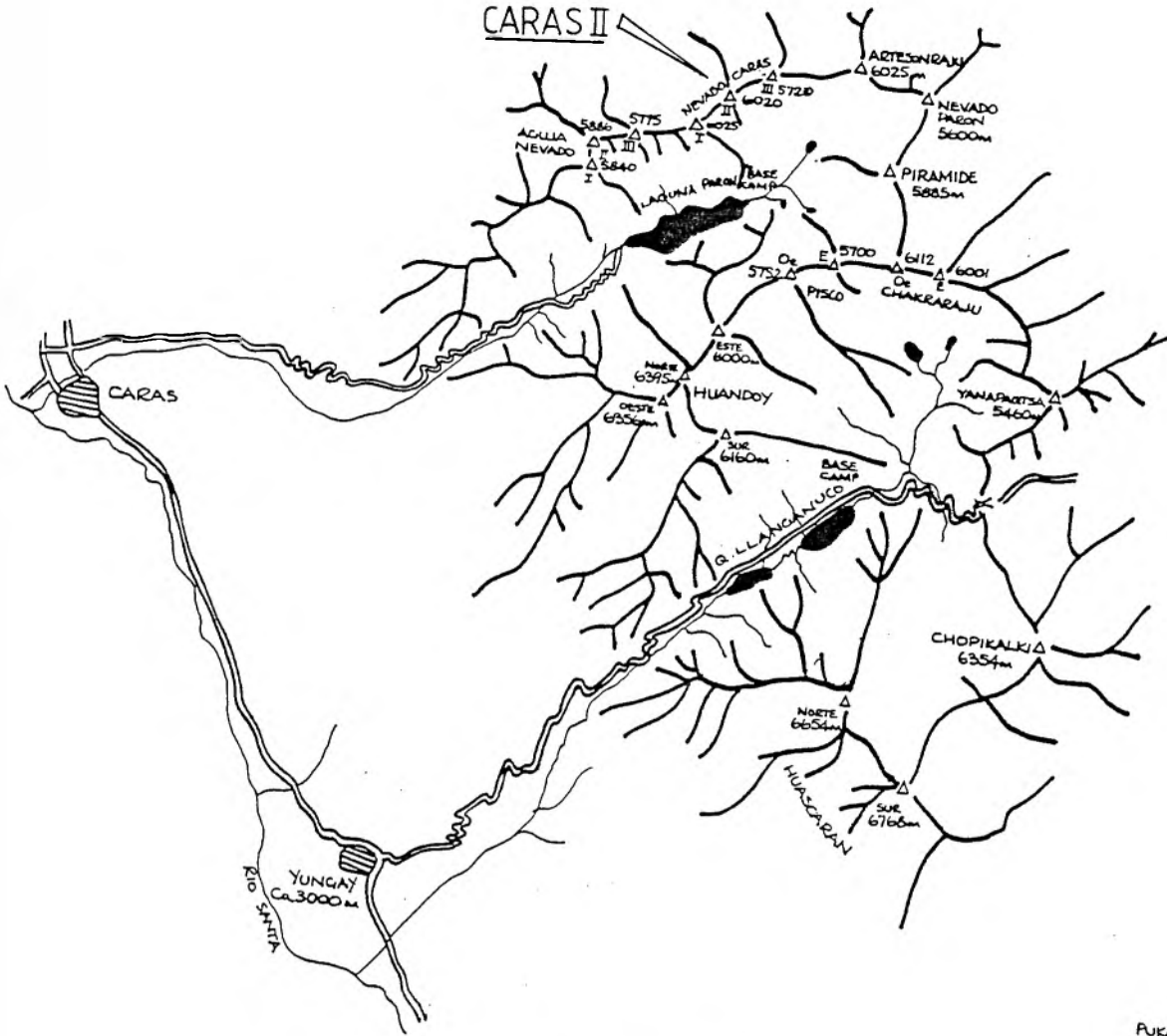


Terry Moore leading on Cayesh Nw face

Route Diagram – North West Face Nevado Cayesh



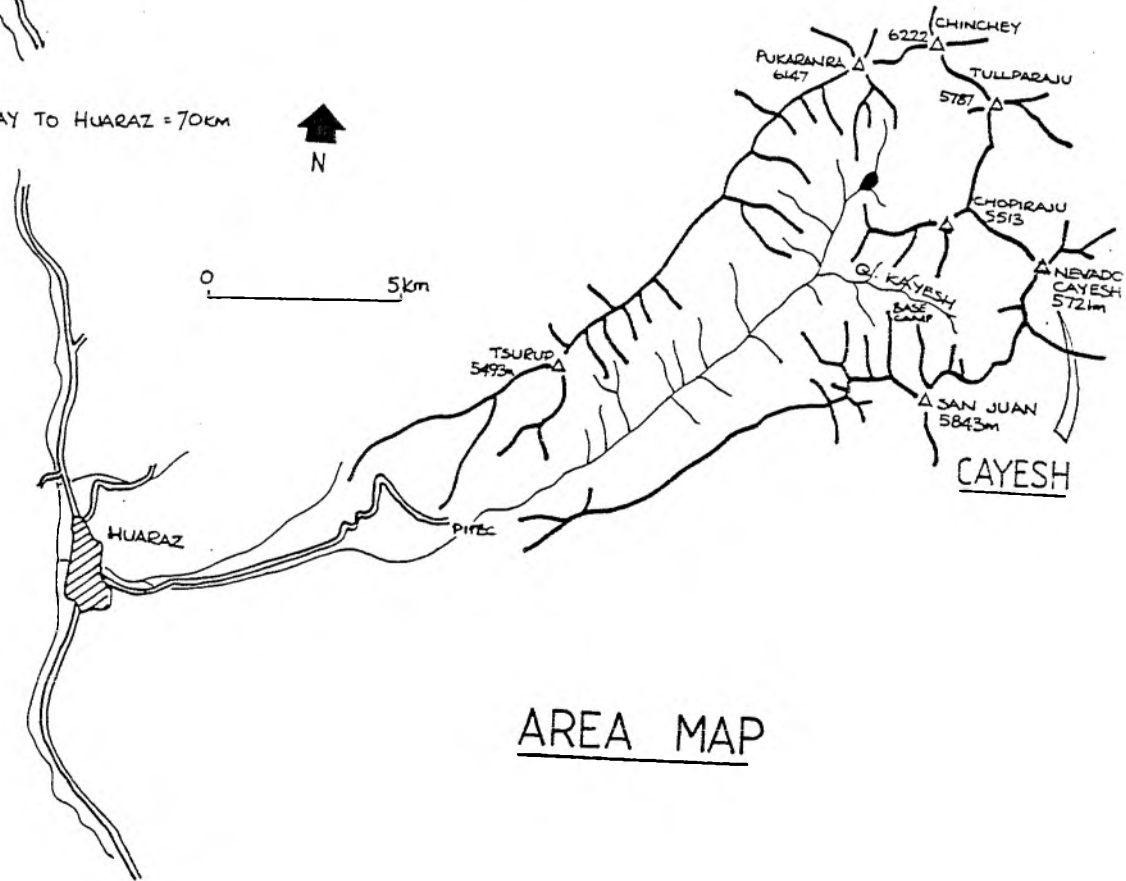
CARAS II



YUNGAY TO HUARAZ = 70km



0 5km



AREA MAP

FINANCE

The cost of the trip was met largely from individual members' pockets. However, we are grateful to the Mount Everest Foundation and the British Mountaineering Council who made grants of £300 and £150 respectively.

A number of firms supplied food, equipment and medical supplies either without charge, or at a reduced cost, for which we are also very grateful. Without this kind of assistance we would have been forced to compromise our preparations particularly in respect to medical supplies.

Below is a summary of the main costs incurred by the Expedition. This is followed by some examples of prices met by us whilst living/travelling in Peru which will be of interest to anyone visiting the country for the first time.

NOTE ON CURRENCY

Peru is currently undergoing a transition from the old unit of currency (The Sole) to the new unit (The Inte) 1000 Soles = 1 Inte (1/s) and in Summer 1986 25 Inte = £1 sterling.

Inflation is rife so the U.S. Dollar is a welcome and frequently used third currency. Money is best carried as U.S. Dollar Travellers' Cheques and can be easily changed in the main street of Huaraz.

BREAKDOWN OF COSTS

<u>ITEM</u>	<u>COST</u>
1) Expedition Preparation:- Headed notepaper, postage, phone calls, travel to A.C. Library and MEF Interview, maps and guidebooks.	£150
2) Flight: London to Lima Return	£480/man (£2880 total)
3) Insurance	£80/man (£480 total)
4) Photographic film/processing	£120
5) Medical	£50
6) Freeze dried food	£50
7) Internal transport (excluding donkeys)	£252
8) Donkeys and arrieros (handlers)	£16
9) Hotel accommodation (Lima and Huaraz)	£97
10) Safekeeping of baggage	£6
11) National Park fees	£11
12) Basecamp/mountain food	£192
13) Food/beer in Lima and Huaraz	£424
14) Expedition T-Shirts	£100
TOTAL	£4828 (£805/man)

In addition all members purchased new kit before the expedition adding a further sum of up to £500/man to the final cost.

ADDITIONAL NOTES ON THE BREAKDOWN OF COSTS

Item 2) The flight was with VIASA (Venezuelan Airlines) booked through the "London Flight Centre".

Item 3) Through the RGS Expedition Advisory Service.

Item 5) Many drugs etc. were kindly donated. The costs were largely due to prescription charges.

Item 7) Some typical examples are as follows:-

Taxi from Airport to Hotel in Lima 60 i/s (four people and kit)

Bus from Lima to Huaraz 180 i/s (per man)

Huaraz to Yungay 10 to 25 i/s (per man) (by bus, taxi or truck)

Yungay to Llanganuco Base Camp 200 i/s (four people and kit in 4WD truck shared with ten others)

Caraz to Laguna Paron 350 i/s (four people and kit in 4WD truck)

Prices were very variable. Always haggle and shop around.

Item 8) 20 i/s for one donkey/day carrying 2 rucksacks.
90 i/s for one arriero/day

Item 9) In Lima we stayed in the Hotel Eiffel and the Hotel San Sebastian. Both were comfortable and friendly. However the first charged \$7 US/night while the second charged 45 i/s/night and is recommended. In Huaraz we stayed in the Hostel Llandauro for 20-25 i/s/night - also recommended (haggle for the price).

Item 10) In view of the risk of theft we paid a Peruvian to guard our Base Camp in the Llanganuco Valley. However he finally stole a new 50m climbing rope!

Item 11) We only incurred these on entering the popular Llanganuco Valley 14 i/s/day for each person, but with some ingenuity this can be avoided.

Item 12) All purchased in Huaraz approximately £2/day/person.

Item 13) Usually meals in the Hotel, restaurants, burger bars of Huaraz and beers in the "Bar Tasco" (recommended). Typically £6/day/person (Extravagance!)

Item 14) These were made in Huaraz by Lucho Olaza who owns Bar Tasco.

FOOD

Raven dehydrated main meals and puddings which were used on all the bivis remained popular throughout the trip. This is more than can be said for the instant porridge and dried egg mix which was met with universal disapproval on dawn bivis. Bachelors Cup-A-Soups (with croutons!) were amongst the most popular food at altitude. During our last few days in Huaraz we were reduced to Shepherd's Pie three times a day; with at least one person unable to eat at any one time this lasted fairly well. However when finally faced with the choice of egg-mix or starvation we opted for cheeseburgers (accept no less than three burgers for 2 karabiners!)

Through the day Shepherd Boy fruit bars and Dextrosol were supplemented by local sweets and nuts and chocolate. Contrary to what we had heard before leaving, chocolate is widely available in handy sized packets at no greater expense than in the U.K.

A fruit juice powder called "Tang" is worth trying. Served hot with the local "Pisco" it makes an effective nightcap (particularly when taken with two Temazepam) and is just about the only way of getting rid of this foul Peruvian spirit.

Fresh milk is scarce and the local powdered milk useless but evaporated is readily available and well worth carrying up to Base Camp. Condensed milk can also be bought in Huaraz as can such items as instant mash, packet soups and peanut butter!

Our enthusiasm for "mate de coca" rapidly waned. Despite it's reputation for helping acclimatization, our experience of these tea bags made with coca leaves was that the taste put you off drinking altogether.

Duocal High Energy Supplement by Dietech Ltd. was used throughout the Expedition. Being a white tasteless powder* it could be dissolved easily in any form of food or drink such as mashed potato, soup or tea. A high carbohydrate diet is essential. Staples such as rice or cereals are far too bulky and heavy to carry when climbing so we needed a concentrated source of carbohydrate, lightweight and in an easy to carry and prepare form. For this purpose Duocal was used on the Expedition. It was found to be extremely compatible with individual's constitutions and seemed to provide a vital source of extra energy to the diet we were following. It was agreed by all that the energy powder definitely contributed to sustained performance during the climbs.

* The powder is roughly comprised of 70% carbohydrate and 30% fat.

EQUIPMENT

In general the equipment used was similar to that for an Alpine route of equivalent duration. Several items were made by team members including Goretex salopettes and bivi-bags, rucksacks, down jackets, snow stakes and shovels which doubled as deadmen. All performed well, the salopettes proving particularly successful.

Grivel Modular Axes were used by some members with great success and a trial of the Grivel 2F step-in crampon proved very successful. These crampons were found to be very good on mixed ground as well as steep ice being easy to put on and take off, secure and light, they are highly recommended.

One item of equipment we regretted not having was a pair of ski-sticks each. These were used by most other climbers and would have taken a lot of strain out of glacier and snow-slope plodding.

Epigas very kindly supplied most of our cooking and lighting requirements for which we were most grateful. However, due to the varied travel arrangements in reaching Peru, one half of the expedition was forced to take Optimus Climber petrol stoves onto the mountain. Considerable problems were experienced with these stoves at altitude. They were used with Emery Tower System billys and fitted with two-way valves and mini-pumps for pressurising. Meta fuel was used to prime them. They were first used with lead-free petrol (at £4 per gallon!) but spluttered ineffectively at 13,000 feet. 2 star petrol gave an improvement but above 17,000 feet the petrol was unwilling to vaporise and the safety valves blew on both stoves. The Emery Stoves were useful but restricted the air supply to the stoves on the odd occasions when they were working properly. This contrasted with the stoves supplied by Epigas which gave excellent service. These were the Epigas "Backpacker" fitted with their new "Stormproof" hanging billy system. These proved reliable, efficient and robust at all altitudes.

Crompton-Vidor very kindly supplied us with all our battery requirements in the form of alkaline pencils and headtorch flats. The alkaline pencils performed at least as well as Duracell equivalents and were used with Petzl adaptors to provide long hours of strong headtorch light. Low temperatures did not appear to affect them adversely. A headtorch battery adaptor is recommended since pencil batteries are available in Peru though they are of poor quality and expensive. The batteries were also used to power personal cassette players, a base-camp ghetto blaster and an electric razor!

The ghetto-blaster was bought for £30 on the morning of the flight out and proved to be the most essential piece of expedition equipment providing hours of entertainment. At the end of the trip we sold it to Pepe at the Hotel Barcelona for £50 and he was happy to buy it thinking he had managed to rip-off another Gringo! (It is worth noting that all goods imported into Peru have a 100% tax levied. Hence money can be made on the sale of the odd electrical item, Nike running shoes, audio cassettes, etc.).

Selling climbing equipment is possible through the Trekking Agencies in Huaraz but do not expect to receive a fair price.

MEDICAL REPORT

As a dentist I was given the dubious task of compiling a "Fools (for there were many) Medical Kit" for the Expedition.

All the members of the Expedition were fit and healthy prior to departure and had not previously suffered from any major illness.

VACCINATIONS

Yellow Fever
 Typhoid
 Cholera
 Polio
 Tetanus
 Malaria tablets

(Due to the recent controversy of Aids transmission, choice of hepatitis vaccination was left to the individual members but nobody [vaccinated and non-vaccinated] contracted the complaint.)

MEDICAL ITEMS AND EQUIPMENT TAKEN (for six members)

<u>DRUG</u>	<u>AMOUNT TAKEN</u>	<u>USE</u>	<u>COMMENTS</u>
<u>Gut Problems</u>			
a) Septrin	20 tabs	Persistent and severe G. I. T. problems	Good if full course taken
b) Arret (supplied by Jansen Pharmaceuticals)		Diarrhoea	Excellent. Most frequently used medicine.
c) Fybogel (Reckitt & Colman)		Diarrhoea	Good (especially when living on dehydrated food)
<u>Anti-Biotics</u>			
a) Amoxycillin	100 tabs	General infection	Good
b) Metronidazole	100 tabs	General infection	Good
c) Erythromycin	30 tabs	General infection	NOT USED (taken due to Andy's allergy to Penicillin)
Chloramphenicol	10 ml	Eye infection	NOT USED
<u>Pain killers</u>			
Codis	50 tabs	Headaches	Excellent (for initial problems of altitude)
DF 118	30 tabs	Mod/mild pain	NOT USED
Temgesic	20 tabs	Very severe pain	NOT USED
<u>Sleeping tablets</u>			
Temazepam	70 tabs	Short-acting	Good (see notes)
Nitrazepam	30 tabs	Long-acting	Good (see notes)

Miscellaneous

Fruzemide	20 tabs	Water retention	NOT USED
Chlorpheniramine	20 tabs	Allergic reaction	NOT USED
Asprin	50 tabs	Mild headaches	Good
Vermox (Brand name Jansen Pharmaceuticals)	18 tabs	Worms	NOT USED
Daktarin	Powder	Fungal infections eg. Athletes Foot	NOT USED
Amethocaine	10 sachets (1 mls)	Snowblindness	NOT USED
Lignocaine	1 bottle (20 mls)	Local anaesthetic	NOT USED
Bandages	2		NOT USED
Sterile Swabs	30		NOT USED
Sterile Gauze	5		NOT USED
Sterile Eye Pad	1		NOT USED
Syringes	5		NOT USED
Needles	10		NOT USED
Micropore Tape	1		NOT USED
Surgical Tape	1		NOT USED
Elastoplast	1		NOT USED
Sutures	5		NOT USED
Mosquito Cream (Jungle Formula)	1		Good
Surgical knife and blades	1		NOT USED
Dental temporary filling	1		NOT USED
Pile cream (Anusol)	1		Good

Things that would have been useful not taken

Lozenges - sore throats
Vic - blocked noses
Indigestion tablets
Plastic skin (especially good for blisters)
More Codis
Bromide for one member's early morning tea!!

MOST USEFUL ITEMS

Arret
Amoxycillin
Codis
Temazepam
Nitrazepam

MOST COMMON COMPLAINTS

Altitude sickness	Mild	4
Mosquito bites	Mild	1
Blisters	Mild/Severe	1
Diarrhoea and vomiting	Severe	1
Diarrhoea	Severe	1
	Mild	2

NOTES

There was a great deal of individual variation in susceptibility to altitude sickness and the various stomach bugs. There seemed to be no effective drug regime - prevention was the best cure. Also the eventual acceptance by the stomach of the local food made life easier at the end of the trip.

Headache tablets were very useful in the initial stages of the trip and the effectiveness of the sleeping tablets was again prone to individual variation.

It is best only to take those drugs which you are familiar with or "simple" ones for accidents.

ACKNOWLEDGEMENTS

The expedition was assisted by many agencies and individuals. In particular the members would like to record their gratitude to:-

The Mount Everest Foundation, The British Mountaineering Council and The Sports Council for their financial assistance

Allen Fyffe and John Codling for agreeing to act as our referees.

Al Rouse who was an inspiration and source of help and information.

Alpine Sports

Batchelors foods

C.P.C. UK Ltd.

Crompton Vidor who supplied the expedition with batteries at very short notice.

Dietech Ltd.

Detrey Division, Dentsply Ltd.

EPIGAS for supplying our lighting and heating requirements.

Hoechst (UK) Ltd.

Janssen Pharmaceuticals Ltd.

Jessop of Leicester who supplied all our photographic requirements at a generous discount.

Jim Ballard of The Bivouac, Matlock.

Kall-Kwik printing of Leicester who supplied us with headed notepaper.

Karrimor

Loughborough University

North Cape

Raven Foods who gave a generous discount on supplies of their specialist meals.

Reckitt and Colman

Roger Turner

Royal Navy and Royal Marines Mountaineering Club

Shepherd Boy who donated a supply of fruit bars.

Troll Safety Equipment.

Tinnings of Andover who supplied us with essential supplies of their unique blend of teas.