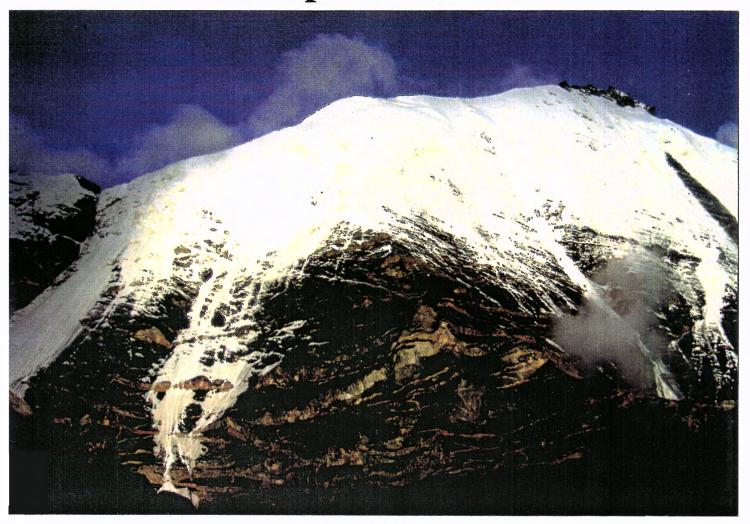
Cambridge Himalayan Expedition 1992

An attempt on Manda III



Manda III

Expedition Report

Abstract

Cambridge Himalayan Expedition 1992

Region: Gangotri, Garhwal.

Country: India.

Peaks: Manda III, Jogin III, Peak 6050, (alpine-style).

Date: 20th August to 26th September 1992.

Patrons: Dr. Charles Clarke,

Dr. Lew Hardy,

Prof. Anthony Snodgrass.

Climbers: James McElwaine,

Richard Viney,

John Carey,

Anthony Moody.

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Many equipment and food manufacturers donated or supplied vital items at reduced prices which greatly decreased the overall budget. We are particularly grateful to the following:

Phoenix for Phusion Extreme mountain tents. Sprayway for Goretex waterproofs, Fairey Industrial Ceramics for water filters, Camera Care Systems for camera cases, North Cape for Rhovyl Modal thermals, Allcord for Camp glacier goggles, Nikwax for TX10 waterproofer, Jessops for film and photographic equipment, Agfa for professional film, Weetabix for 200 breakfasts of Alpen, Burtons Biscuits for life-saving shortbread, Jordans for many crunchy bars, Tunnocks for their caramel wafers, Golden Wonder for a range of Pot Noodles, Knorr for vast amounts of vegetable and beef soup, HP Foods for Lea & Perrins chili & garlic sauce, Phileas Fogg for a sample of their tasty snacks, Yeoman for instant mashed potato, Staminade for their sports drink.

Many other companies also kindly offered discounts on their products of which we did not ultimately take advantage of.

We would like to extend our thanks to those who gave advice on the area and suitable tactics. They include Professor Snodgrass, Dr. Lew Hardy and Dr. Charles Clarke, our patrons; John Peck, leader of the 1986 Manda III expedition, who helped us with photos and gave much advice and background information; Roger Payne, expeditions officer of the BMC, who provided a wealth of information about obtaining permission and getting to base-camp; and, from Poland, Jan Babicz who was extremely helpful in producing photos and maps of the Kedar Valley and a guide book to the Garhwal. Martin Moran's 1991 expedition report helped us through all the bureaucracy in Delhi.

The Expedition Members

Jim McElwaine - Expedition Leader - 22 years.

Recently graduated in mathematics from Clare College and continuing his studies there. He is hoping to start a PhD next year at Imperial College. He is an enthusiastic climber and has spent three seasons in the Alps, both in summer and winter. He is a keen rower and coach.

Richard Viney - 23 years.

Graduated from Clare College in 1990. He has worked for the Law Commission, and is currently at Bar School completing his legal training. He has been to the Alps for three summers, and is another keen rower and coach.

John Carey - 22 years.

Recently graduated from Clare in Engineering. He has been to the Alps once in winter and once in summer. He is currently travelling around the world, a rather extreme way of avoiding helping to write the report.

Anthony Moody - 21 years.

Tony graduated from Clare College in 1992 with a degree in Natural Sciences. He has now started a D.Phil at Department of Zoology, Oxford. He is keen to return to Gangotri in the not too distant future, although would prefer to try a more light-weight approach. In the mean time, his attraction to warmth is strong, and he intends concentrating on rock-jocking both in Europe and the States.

Others

William Osborn and Clare Ashton (Tig) were friends from Clare College, who travelled to India independently. They shared the costs of transport, food and porters in India with the expedition.

George Haffner and Mick Mallory were two Australian climbers, who had also planned an expedition to Kedar Tal.

Summary

The Cambridge Himalayan Expedition aimed to make the first ascent of Manda III (6529m). This British expedition comprised six members of Clare College, Cambridge University.

After more than a year of planning, the expedition left for India on 19th August 1992. Despite plans to leave New Delhi for the mountains as quickly as possible, a week was spent there collecting air freight and completing the formalities at the Indian Mountaineering Foundation (IMF).

Late on 27th August the expedition arrived in Gangotri, a road-head in the centre of the Garhwal Himalaya. The following day marked the start of the walk-in to the Kedar Valley. Three days later base-camp was established beside Kedar Tal lake (4800m) in brilliant sunshine. We expected such post-monsoon weather to continue and even improve. In reality, this was virtually the last time we saw the mountains without a thick shroud of cloud.

Our first tentative venture onto the mountains was a reconnaissance of Jogin I and III, two of the most frequented peaks in the range. After a two-day wait for clear weather at the foot of the mountain, we began tackling the large ice fall to the right of the rock spur. This looked as if it would give access to shallower snow slopes above. It was the route mentioned in the Polish guide book, but obviously things had significantly changed. After a steep ice pitch up an ice flake, it was clear that further progress would be extremely difficult. The way was blocked by dozens of enormous crevasses in between giant ice flakes. We retreated from this point as bad weather started to draw in. Jim and John stayed on another night and investigated a ramp to the left of the central rock spur. They reached an estimated height of 5800m before returning to base-camp.

On 8th September we attempted our main objective: the north-west face of Manda III. This consists of a 1000m ice face which gradually steepens to 70 degrees. We hoped the face would be in reasonable condition after two days in which little snow fell on the peaks. After pitching camp at the bottom of the face the day before, we set off at 3am. All too quickly we found the slope covered in deep soft snow with an unstable crust, making it extremely avalanche-prone. We returned to base-camp, leaving a large supply of food and equipment, planning to return when the face was more consolidated.

A second attempt on Jogin was planned in the interim using the left-hand line. Progress was hampered by deep, wet snow, but by the end of a long first day we had climbed to around 5700m. We sat the next day out rather than flounder in the new snow which fell overnight. An early start on 12th September saw us within 50m of the summit of Jogin III by midmorning, though visibility was down to 20m and it was snowing heavily. As we tackled the final short slope our party was hit by a deep slab avalanche burying Jim. Unable to see anything, we could not retrace our steps down the ice fall and were forced to camp on the slope. The white-out continued all that day and the next two nights. It snowed continuously burying the tent. With no food left and the snow getting ever deeper, we decided we had to get down. We packed everything up except the tent and waited for a break in the cloud. Eventually it cleared for a few minutes, enabling us to see our way down. As we descended the cloud closed in again but, fortunately, only after we had descended the worst section.

We returned to a base-camp dusted with snow. For the next few days, instead of constant

rain and drizzle, more snow fell. Overnight temperatures started falling to below minus 12 degrees celsius. With the present conditions, we felt that no attempt would be safe on Jogin or Manda for at least a week. Rather than sit it out, Tony, Tig and Will returned to Delhi, and sent the porters up.

The following day Jim climbed a high point (approx. 6050m) on the ridge between Jogin II and peak 6014 by the 1000m south face with two Australians, Mick and George. After a forced bivouac on the ridge, they descended the next day before returning to Gangotri the day after.

We had had high hopes yet achieved so little. Frustratingly, the principle player in this, the weather, was beyond our control. Yet we were all so pleased just to arrive at base-camp with our kit and take in the amazing views that, despite our lack of mountaineering achievement, we judged the expedition a success and all hope to return to the greater ranges. Perhaps the most disappointing occurrence was the betrayal of our trust by the liaison officer when he attempted to blackmail us in Delhi. Throughout the trip he had been very helpful, and we had come to regard him as an expedition member.

Planning and Fund Raising

We first considered the idea of an expedition to the greater ranges when a group of our friends successfully completed an expedition to Mount McKinley. A year later we started to make our first, tentative, plans. We wanted an unclimbed peak to facilitate fund raising and to provide a greater challenge. Most of the remaining unclimbed peaks that are not too inaccessible or difficult are in the Himalaya, and, of the Himalayan countries, India is the cheapest. Our destination chosen, we turned to the map room of the University Library at the beginning of the Easter term.

We read a lot of expedition reports and climbing journals, and a term later, we picked on Manda III (peak 6529) as a target, after reading the *British-Indian Police Himalayan Expedition (1986) Report* in the *Alpine Club Journal 1987*. Manda III was unclimbed and within our ability. Moreover, the Police Expedition had climbed a large part of the route and could provide information about it.

Our target chosen, we got to work over the summer planning the expedition. We wrote to the IMF, and John Peck (the leader of the police expedition) was tracked down. He proved extremely helpful, and even managed to fit a slide show into his busy schedule. Roger Payne, the BMC's national officer, and John Peck both recommended Mandip Singh of Ibex Expeditions as a reliable Indian agent, and we sent a fax to him.

In the Michaelmas term, a reply was received from Ibex. They offered to organise everything in India for £875 each. Although in the past most British expeditions have employed agencies in India, Roger Payne thought that it was quite possible to manage without one, at the cost of a little time. We decided that there was no way we could afford to pay the amount Ibex were asking, and that we would go it alone.

The next step was applying to the Cambridge Expeditions Committee (CEC) for official university status. This gave us charitable status, a great aid to fund raising. Our first patron was Professor Snodgrass, fellow of Clare College, Alpine Club member and senior treasurer to the Clare Rats, the Clare College climbing club. He approached Dr. Charles Clarke, Everest expedition doctor in 1975 and 1982, who also agreed to act as our patron. Dr Lew Hardy, a lecturer in psychology of sport and the climbing leader of the police expedition, was our third patron.

Over the Christmas holiday we produced a prospectus, and started applying for funds. After persistently writing to the IMF a reply was finally received with the booking forms at the end of November. The forms were rather intimidating. They requested all kinds of information that we did not know: exact dates for the expedition, lists of equipment with weights, etc. Fortunately, the IMF does not appear to take much notice of what one writes on the forms, and we filled them in with rough estimates.

Originally, we had all intended to climb together in the Alps that winter. Unfortunately, Richard could not spare the time from work, but Jim, John and Tony still went. We had hoped to try out the equipment that we intended to use on the expedition, but we still had not even decided what we were going to take, let alone bought any of it.

In the Lent term, we applied for more grants and the first money started coming in, and the

first refusals. The main problem we encountered was that very few grants are available for purely "adventurous" expeditions. Fortunately, there are several wide-ranging funds available in Cambridge, as well as the Donald Robertson fund which is purely for mountaineering. The Mary Euphrasia Mosley award is for travel to Commonwealth countries. In the application to them we stressed how we hoped to have close relations with our liaison officer (L.O.) and not that we would be employing porters. We also wrote to a lot of food and equipment manufacturers. We stressed how we would send them photographs after the expedition and give them a report on their equipment. To convince them of our good intentions and photographic abilities, Tony assembled a portfolio of decent mountaineering photos. Most of the food companies offered us a dozen packets of dehydrated super-widgets, but few equipment manufacturers would actually give us anything free.

Originally we had only sent \$900 to the IMF, as we had hoped that we would get away with paying the 6000-6499m peak fee. Unfortunately, the IMF were not having any of that and we had to pay for the extra thirty metres. The extra \$450 worked out at \$15 a metre.

In the Easter term we tried to finalize our plans. Food lists were drawn up, argued over, amended and thrown away. None of us had ever organised food for such a long period of time. Eventually, a plan was drawn up for twelve days of hill food for only four people, as from past expedition reports it seemed that the chance of the L.O. actually doing any climbing was minimal. This realization also enabled us to annihilate the budget for the L.O.'s kit. Only £18 was actually spent on the L.O., the rest of the kit being borrowed.

Two other friends from Clare College, Clare Ashton (Tig) and William Osborn, decided that they were interested in coming on the expedition. They were less experienced climbers and wanted to go as trekkers, separate from the main expedition.

We spent a week dashing about from shop to shop, buying food and equipment before packing it up and freighting it out. When we finally left, staggering under the weight of our luggage, we had not heard anything from the IMF for six months.

We had continued to write to the IMF every month since we sent them the last money order, courteously enquiring about our application, but we did not get a reply until after we returned to England, confirming the booking and giving permission for the expedition to go ahead. In the end we applied for tourist visas from the Indian High Commission at £16 each. Noone in India cared that we did not have mountaineering visas.

Itinerary

Day 1	20th August	All 6 fly to Delhi at various times.
Day 2	21st August	Public holiday in Delhi, nothing can be done.
Day 3	22nd August	Day spent waiting at the IMF.
Day 4	23rd August	Sunday, another public holiday.
Day 5	24th August	Air freight cleared, IMF formalities completed.
Day 6	25th August	Drive to Uttar Kashi buying supplies en route.
Day 7	26th August	Shopping and organizing porters.
Day 8	27th August	Travel to Gangotri by jeep, foot and bus.
Day 9	28th August	Walk to Kedar Kharak.
Day 10	29th August	Walk to Kedarganda Kharak.
Day 11	30th August	Walk to Kedar Tal and base-camp established. LO left behind ill.
Day 12	31st August	Organizing food and base-camp.
Day 13	1st September	LO walks to BC. JM ill, preliminary reconnaissance of Manda III postponed.
Day 14	2nd September	AM, CA and JC walk to Jogin I ABC.
Day 15	3rd September	Bad weather. JM and WO join others at ABC. RV ill.
Day 16	4th September	Attempt on icefall right of rock. WO, CA and AM return to BC.
Day 17	5th September	JM and JC attempt crevassed ramp left of rock buttress.
Day 18	6th September	Rest day. Mick and George arrive at base-camp.
Day 19	7th September	Rest day. Preparations made for Manda III.
Day 20	8th September	JM, JC and AM walk to Manda III ABC.
Day 21	9th September	Attempt repulsed by dangerous avalanche conditions. Return to BC.
Day 22	10th September	Rest day.
Day 23	11th September	JM, RV, AM, JC and WO set of for Jogin I and III. RV turns back ill.
Day 24	12th September	WO is ill and heavy snowfall in tent force a rest day at camp I.
Day 25	13th September	Pitch camp just below summit of Jogin III after JM buried in avalanche.
Day 26	14th September	Zero visibility. Stuck in tent. Snow falls continually.
Day 27	15th September	Brief break in cloud allows descent to BC.
Day 28	16th September	Rest day.
Day 29	17th September	AM, CA and WO leave for Delhi. JC and RV collect kit from Manda III.
Day 30	18th September	JM, George and Mick climb 'Peak 6050' and bivouac below summit.
Day 31	19th September	Porters arrive at BC. JM, George and Mick descend to BC.
Day 32	20th September	Descend to Gangotri and take bus to Uttar Kashi.
Day 33	21st September	Repacking kit and sorting out Mount Support.
Day 34	22nd September	Travel to Rishikesh.
Day 35	23rd September	Travel to Delhi and rejoin AM, CA and WO who fly home.
Day 36	24th September	Organise airfreight home and change plane tickets.
Day 37	25th September	Deal with IMF and have celebratory meal with Mick and George.
Day 38	26th September	Arrive back in England.
TM	Iim MaElwains	
JM -	Jim McElwaine	

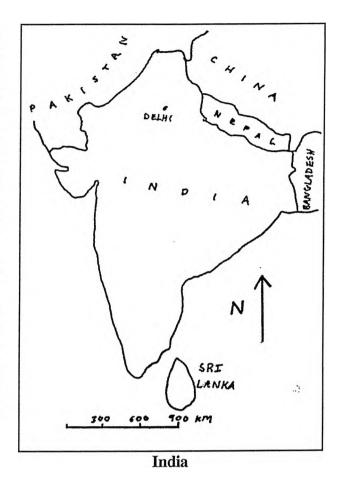
JM - Jim McElwaine
JC - John Carey
RV - Richard Viney
AM - Tony Moody
CA - Clare Ashton
WO - William Osborn

LO - Liaison officer

Narrative

Getting to Delhi

We travelled to Delhi using two different airlines. Tony flew out from the U.K. on Wednesday 19th August by British Airways, the advantage of having a father who works for the world's favourite airline, arriving on Thursday 20th August. The rest of us flew out by Alitalia on Thursday 20th August arriving in Delhi at 1 am on Friday 21st August. Despite having previously freighted out a large amount of our equipment (see below) we still ended up carrying out approximately 45 kilos each on the flights. Fortunately, Alitalia did not seem to mind us carrying bags full of ice-screws onto the plane, although this resulted in inordinately heavy hand luggage and a brief sojourn at every X-ray machine in order to explain that our racks were part of our climbing equipment and were not some cunning way of smuggling Semtex onto the aeroplane.



Arrival at Delhi

Tony, Tig and Will arrived the day before the rest of us and were therefore charged with finding us suitable accommodation. As this was our first visit to India, we had no previous experience to rely on, and thus resorted to the *Lonely Planet Guide to India*. Following what seemed to be the main advice in the book, Tony took a bus to Connaught Place and walked until he found a hotel which had received a favourable mention in the guide. This happened to be the Janpath Guest House, and so this became our Delhi base-camp. The term base-camp is used intentionally. We had originally intended to spend a very brief period of time in Delhi, to get everything sorted out on the Thursday and Friday, and hopefully leave Delhi on the Saturday. The best laid plans, however, do not take account of Indian holidays or Indian efficiency. Tony, on the Thursday, had been to the IMF to discover that they did not have a Liaison Officer organised for us as the original one had dropped out. On the Friday Jim and Richard took an auto-rickshaw out to the Cargo terminal in order to try and sort out our airfreight. On arrival at the terminal the driver brightly informed them that Friday was a public holiday and that nothing therefore would be open that day.

Accommodation

The Janpath Guest House became our base in Delhi more by chance than by planning. The facilities were adequate but basic, no air conditioning nor hot water, both of which were sorely missed. In mid-August, Delhi does not possess one of the most pleasant climates in the world. The heat is completely overpowering, mainly due to the 90% humidity. The other thing that you will quickly notice is the filth that adheres to your body. Good showers are probably a necessity, rather than a luxury in these conditions and the hotel was somewhat lacking in these. Another drawback was that the hotel occupied the top two floors of a five storey building, and lifts are a rare commodity in India. This is probably only mildly irritating for the average tourist, but when you are travelling with over a quarter of a ton of kit, the mildly irritating can quickly become soul-destroying.

Having said all this, there were, however, some good points about the hotel. It was close to Connaught Place (the tourist centre of Delhi), and costing £4 a night for a double room, was reasonably priced for this area. On the way back we stayed at the Blue Mount Villa which we would strongly recommend, despite the fact that it was slightly more expensive at £5.70 a night for a double room. The advantages it had were air conditioning, hot water, excellent breakfasts, and the fact that it is close to both the IMF and the airport.

IMF

Our experience of the IMF was not one of great efficiency, although they made an effort to be friendly whilst we suffered. On Thursday 20th August, Tony had gone along to the IMF to let them know that we had arrived and to find out about our liaison officer and any other formalities we had to complete before we left Delhi. It transpired that they were at least expecting us, but had got little further than that. Apparently, the L.O. we had originally been assigned had dropped out for personal reasons, and the IMF had not been able to organise a replacement.

We returned to the IMF first thing on Saturday morning as it had been closed on Friday due to the public holiday. We were told that the person who was dealing with our expedition had not arrived yet, but that he would not be long. We waited for the rest of that day. Every time we asked about the guy who was dealing with us, he was expected in half an hour. Finally, at about 4 pm, this guy having not appeared, the Director talked to us briefly and gave us a form to sign. There was still no news about a L.O., and we were starting to grumble since we wanted to leave as soon as possible.

Tony and John returned on Monday morning, having been briefed to tell the IMF that we were intending to leave on Tuesday and that if they had not been able to find an L.O. by then, they would have to send one to catch up with us. The IMF had, however, managed to find an L.O., and we were told to return after lunch to meet him. We returned to the IMF after collecting Richard from the airport. He had been obtaining clearance for the freight with Jim, who returned direct to our hotel with the freight, as he was ill. At the IMF, we had to sign some more forms, as the ones we had signed on Friday were out-of-date. We met our L.O., Rajiv Tomar, and explained to him that we were planning to leave Delhi early the next day. He did not appear overly keen on this, but we agreed to meet at our hotel later that evening so that he could see his kit, and we could sort everything out.

Customs

Whilst Tony and John went to the IMF, Richard and Jim cleared our air-freight through customs. In order to do this, you have two choices: you can either hire an agent or do it yourself. The first option is expensive (one group we met had paid £50 for an agent); the second option, which we took, requires a great deal of patience and a serious sense of humour. Getting our kit through customs took almost a whole day, but sometimes, we were told, it can take two. A guide to surviving customs is included in the Appendix.

We only made one mistake whilst going through this process, and that was not tipping the very first porter. Nothing gets done in the customs shed without a porter, and we were left waiting for over an hour before our freight was checked. If it had not been for this, we would have had everything done by 2 pm.

You can get a letter from the IMF giving you exemption from duties on condition that you re-export all your equipment. The customs officers may attach a list into the back of your passport so that they can check that you do do this. In our case, however, the officers were very helpful, and replaced our original baggage declaration form (which had a detailed list of everything, and made-up values) with a new baggage declaration form which just said "expedition equipment, no commercial value". We took in a large amount of food but simply put this down as worth less than Rs500. They then let us go without making any undertaking to re-export the equipment at the end of the trip.

We would certainly recommend that you do your customs clearance personally. Not only does it save money, it also helps to make every other hassle you suffer on the trip seem relatively minor.

Delhi to Uttar Kashi, 390km

In Delhi we decided to hire a 13-seat minibus to take us and our equipment to Uttar Kashi. Around Connaught Place there is no shortage of travel agents who are prepared to try and sell you anything. We visited a couple; the cheapest offer we got was for Rs4500 (£90), and we booked this for Tuesday morning at 6 am.

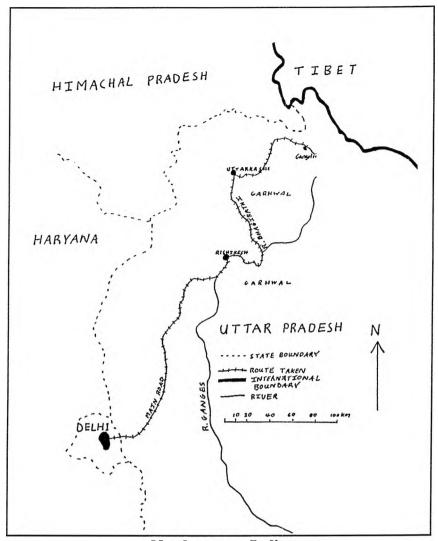
Our idea, and the travel agent's idea, of a 13-seat minibus seemed to differ drastically. What turned up on Tuesday morning appeared to be based on a VW camper van, and was not exactly over-spacious by the time we had packed our equipment into it. We also discovered that the van-driver/owner was only getting Rs2500 for taking us which left a nice healthy profit for the travel agent. The moral would appear to be to look at the van before you hire it, and to try to deal directly with the van-driver, if you can find one.

Having left Delhi at 6 am, we arrived in Uttar Kashi at 9 that evening, having stopped at a town en route, a little out of Delhi, to buy our supplies for base-camp. This stop took about 3 hours, with an additional 2-hour lunch break at the Hotel Polaris (a bit pricey, and not overly recommended, but the only posh place there seemed to be to eat). We were also delayed for about 3/4 of an hour by a landslide which had blocked the road between Rishikesh and Uttar Kashi. The one thing the Indians do seem to be efficient at is clearing landslides.

Uttar Kashi

We decided to spend a day in Uttar Kashi in order to sort out our porters and buy fresh vegetables and fruit for base-camp. The vegetables and fruit were easy to find, a quick trip round the market showing us that it was not as poorly stocked as our L.O. had led us to believe. A porter was hired to carry our food back to the hotel for the grand price of Rs30, which included a Rs5 tip. The smile on the porter's face was something to remember, a long cry from the average London cabby.

Organising the porters was not quite so straightforward. The trip from Uttar Kashi to base-camp should



Northwestern India

normally take 3 days, but the road between Uttar Kashi and Gangotri was blocked by a landslide which was proving immovable, even with the Indian skill and efficiency brought to bear upon it. The last year has been particularly bad for landslides as an earthquake the year before had made the whole valley highly unstable. The police chief in Uttar Kashi tried to persuade us to wait a week before travelling to Gangotri as only a few days previously a Japanese climber had been killed and another wounded when their jeep was hit by a boulder.

We reckoned that on the normal scale of things we should have to pay porters for 5 days. We had decided to use Mount Support, a travel agency, to organise our porters, as a previous British expedition had recommended them. Budhi Singh is the guy that owns the place, and we were to discover that he was a rather sharp operator. When we approached him, he insisted that because of a landslide, it would take 6 days to reach base-camp and 3 days back, and that therefore we would have to pay for 9 days. Jim had a slightly warm discussion with him about his figures, but he was insistent, and in the end we agreed to pay for 9 days. We also hired a base-camp tent and cooking utensils from Mount Support. The base-camp tent was an excellent investment and was well worth the money; the cooking utensils were not quite such good value. It may be worth buying these things in advance elsewhere and trying to sell them on your return. The full costs of the porters, tent, and utensils are set out in an Appendix. We also had asked Mount Support to arrange transport for us and the porters as far as the road block, consisting of 4 Jeeps which cost Rs800 each.

We planned to leave at 7 o'clock the next morning. In the afternoon we packed up the porters' loads. We had expected that they would only carry 22kg or so, but our L.O. had other ideas. He told us to make the loads between 25kg and 27kg. We packed everything inside hessian or plastic sacks, and then sewed the tops closed.

Uttar Kashi to Gangotri, 99km

We left Uttar Kashi at 8.30 am after packing our kit up and sorting everything out. The jeep ride was as comfortable as possible, under the circumstances. Ten of us was a bit of a squeeze, but at least the view was good - straight over a precipice - and there was good ventilation. The jeeps took us up to the road-block where the army was busy displaying its explosive skills, but for some reason seemed to be making little impression upon the boulders. The jeeps kindly dumped us, our porters, and the kit and disappeared back to Uttar Kashi. We sat for a couple of hours contemplating life, the universe, and everything, and doing all the other things tourists do - taking pictures of landslides as if we had never seen one before. It was becoming evident that the landslide was still going to be there the next day, so it was time to take a scenic detour. If you can't go through it, you have to go up and over it; fortunately for us, there was a "path" which had the same idea, so we followed it. It was an hour trip around the landslide. Descending back down was a little tricky as the "path" was merely a mud slide. People above kept knocking rocks down and several people had close escapes and bruises.

Half an hour down the road was a bus that had been trapped on the wrong side of the landslide, and was to be our transport to Gangotri. Fortunately, the massive landslide higher up the valley had been cleared. The trip was uncomfortable - crowded with a slight lack on the suspension side - but at least we got there, even if it was 9 o'clock at night by that time.

The Walk-In

The walk-in to base-camp took us three days, the porters two. One thing we had forgotten to do when packing our kit was to separate enough food for this part of the trip. Unfortunately, all of the bread we had bought, turned out to be mouldy, so we ended up quite hungry. Taking three days over the walk-in meant that it was leisurely, leaving us time to take in the views and the air - what little there was of it.

Leaving Gangotri put us all in the best of moods. We felt that we had achieved so much just to get this far, walking along under our own steam with all our kit, and ourselves still in one piece.

The initial climb up out of Gangotri was steep and went past some impressive scenery, leading into a long valley up to Kedar Tal. The sight of Thalay Sagar appearing at the end of the valley was impressive - at last we really knew we were in the Himalayas.

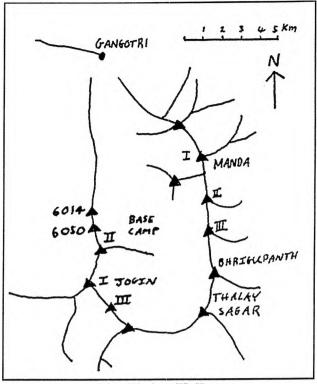
On the first day our L.O. fell ill with bad diarrhoea and vomiting. He had eaten in Gangotri the night before whereas we had stuck to some pot noodles and mouldy bread, having been warned off Gangotri by other expeditions. The rest of us took four hours to the first camp, at Kedar Kharak. On the second day, the porters set off early, intending to go up to base-camp and return to Gangotri the same day. We decided that there was no hurry and that it would be better acclimatization to take the more normal three days over the walk-in.

Our L.O. was too weak to carry anything the next day so we shared out his load with a porter who had remained with us. We took two hours to the second camp at Kedarganda Kharak. After arriving at the second camp John, Jim and the porter went back to help our L.O. who was really struggling. We put him on a course of antibiotics and he waited there for a few days to recover with one of the porters. We continued on the next day, and after two and a half hours arrived at base-camp.

Arrival At Base-camp

Sunday 30th August - Tuesday 1st September

We puzzled long and hard over how a large lake could disappear in a field of moraine. From our viewpoint on top of the largest ridge of moraine, we could



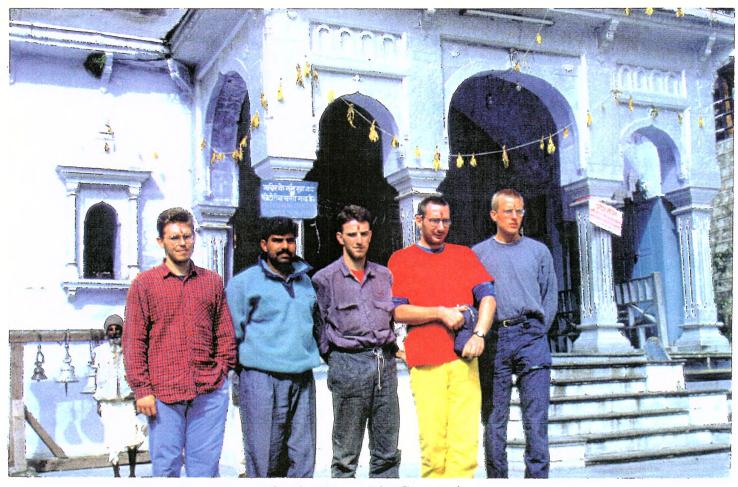
The Kedar Valley

see to the end of the valley but saw no hint of water. A few minutes walk later, beyond the next crest of moraine, we stumbled on our base-camp site beside Kedar Tal, nestled beneath the shoulder of Jogin II. The porters had left our equipment there the preceding day, piled up against a boulder and covered with the old flysheet of our base-camp tent.

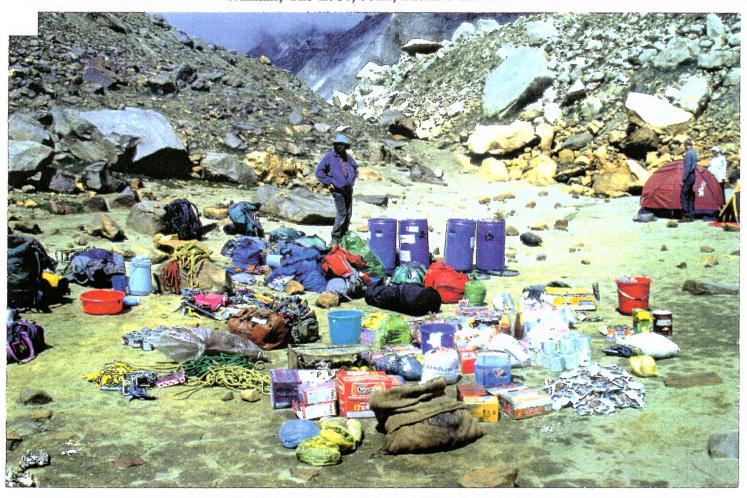
With the afternoon ahead of us, we began to put up the tents and check that all our equipment was present. Before leaving the porters had demolished our entire supply of fruit. All they left were a few bruised apples which didn't take their fancy. We were not particularly impressed either with the use they had made of the climbing ropes in carrying the porter loads. Several more items either missing or broken were added to a very stern letter to Budhi Singh that we sent down with porters. We decided to camp on a dry, sandy inlet of the lake close to the expanse of the Kedar Bamak moraine. This gave glorious views of Thalay Sagar, Bhrigupanth and the Manda group, as well as having fresh water only a stones throw away.

All our equipment was laid out on the sandy bank to be counted and dried. Water-sensitive foods were repacked into our plastic drums, and the vegetables which had not been too badly squashed were put in the sacks. The walk-in did have its victims, including interesting mixtures of Golden Syrup and down duvet jacket, and vegetable oil and climbing ropes. Just as everything had been unpacked the weather changed from brilliant sun to the cloud and rain which was to stay with the expedition for the next few weeks.

The next couple of days were spent setting up the base-camp tent. Many hours were spent trying to salvage enough parts from the stoves we hired to actually get something we could cook on. Similar fun was had putting the flysheet on the base-camp tent in a gale. The entertainment was increased by a total absence of any guy lines. A stone altar was built on which the stoves were placed so we could cook off the ground, and John, Will and Tony constructed an artistic crazy-paving around the sides of the tent to keep the food away from



Getting blessed in Gangotri
William, The L.O., John, Richard and Jim



Sorting out the supplies at base-camp.

the damp. When the fortifications were complete, the base-camp tent seemed surprisingly comfortable and managed to keep most of the rain out. The open end faced our ring of sleeping tents, beyond which Manda III faced us. In the good weather of the first couple of days we had had plenty of time to assess our proposed route. The NW face looked extremely steep from straight on - much steeper than we had expected. Added to this, a lack of snow indicated much of the route would be mixed. For the present this was not a worry. Instead, we concentrated on acclimatising well and shaking off the stomach problems we had picked up on the way in.

Daily Life at Base-camp

The base-camp menu was not the most organized element of the expedition. Staples, such as rice and flour, had been bought on the way to Uttar Kashi, instant mashed potato brought from England, and fresh vegetables and fruit were bought just before we set off for base-camp. After all our efforts to secure luxuries, such as coffee and tea, we had forgotten to include much that contained any protein for our main meals. The little we had was included in the eggs from Uttar Kashi, most of which were broken by the time we reached camp, and six tins of tuna freighted over from home.

It was amazing how far we managed to make those six tins go. One tin managed to satisfy all seven of us in the form of fish cakes served with a generous helping of cabbage, supplemented with tomato ketchup. We had this meal on two occasions as it was the most successful of our culinary experiments. Another tin disappeared into tuna-fried-rice as a treat when most of the party were away trying to conquer Jogin I for the second time.

The eggs, which we thought were probably already old, were disposed of near the beginning of our stay. We spent almost the whole day mixing, cooking and eating pancakes, served with lemon and sugar or golden syrup, of which we had also brought six tins. We were looking forward to a similar session with the remaining eggs, but the plastic bag containing them was stolen the following night.

One night, shortly after everyone had retired to bed, Will and Richard heard a rustling sound outside, reminiscent of a polythene bag being dragged across the ground. They opened up their tent door and shone out a head-torch to find two yellow eyes staring back at them. They decided the creature was of a considerable size, and left it to continue its raid. In the morning, the bag of remaining eggs was nowhere to be found. Near to the scene of the crime, however, some rather large pussy-cat paw prints were traced.

Other visitors included a group of foxes, which we heard clearly and often but never saw. They did not manage to steal any food, only depositing numerous droppings in a large number of crevices in the main tent. The first morning we also saw a small herd of ibex on top of a moraine ridge. By the time any of us had panted our way to the top, they were long gone.

It took a great deal of effort to do the lightest of chores at the altitude of base-camp. Washing-up was a particular favourite. Water took ages to heat up on the paraffin stoves, which invariably blocked up. The cooking utensils were covered with a black layer of grease which coated everything. Indian washing powder does not lift grease off like Fairy does, and it did not do the hands much good either. We had to use the washing liquid for clothes in the end.

Another chore which people competed to avoid, was making supper. It was a thankless task. One could spend two hours battling with faulty cooking utensils, temperamental stoves and a vicious steam cooker, to be rewarded by an after-dinner chat on how bad the food was. The majority of the party spent a great deal of time at base-camp dreaming of steak, scampi and chips.

We were very glad we had brought the water filters, which we filled several times a day. The only water supply nearby was the lake. We had arrived to find it covered with an algal scum and wriggling with mosquito larvae below. The filters worked very effectively, and they only needed cleaning once.

Bathing was a very unpleasant and cold affair. It took well over an hour to heat up a couple of kettles of water. Then one would wait for a break in the clouds. As soon as the sun was shining, it was in to the water as quickly as possible, desperately trying to get washed and dried before the sun disappeared again. Despite all this most of us washed at least once or twice. George even went swimming once in the lake, though no one else was tempted.

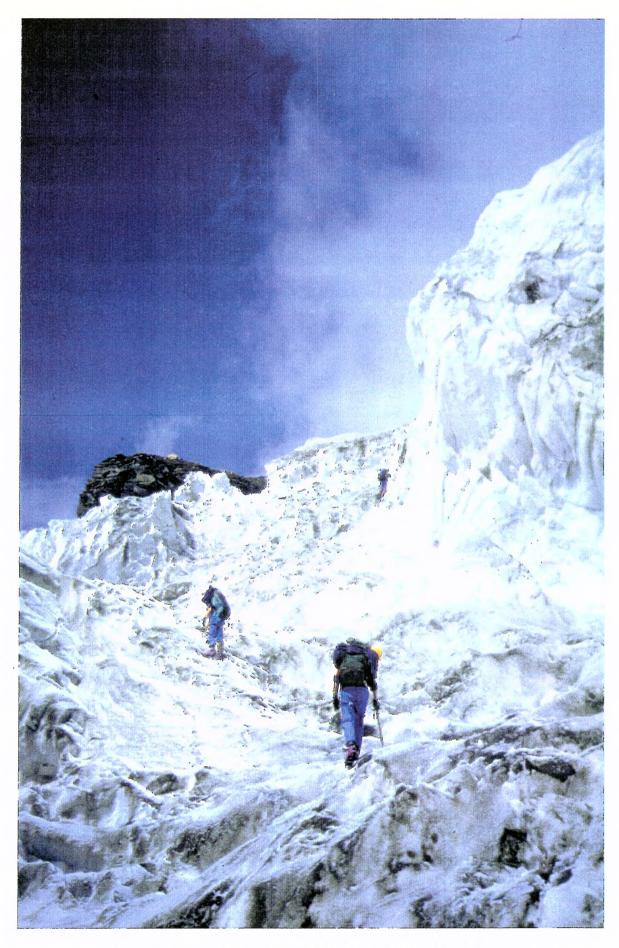
Jogin Peaks - First Attempt

Wednesday 2nd September-Friday 4th September

John, Tony and Tig, being the healthiest of the party at this point, set off for the Jogin peaks. We had carefully spread our communal equipment between our packs so each weighed 22kg. From base-camp we trudged along the ridge of lateral moraine running up the valley. Distances in the Himalayas, we found, can be extremely deceptive. It took much longer than expected to leave Manda III and Bhrigupanth behind, Tony and John surveying the impressive Manda face as we did so. The weather was very clear that day, and walking with heavy loads was hot and tiring work. John decided to counter the heat by stylishly rolling up the legs on his salopettes.

The Jogin peaks lie at the end of the valley forming an amphitheatre with Thalay Sagar. The site of our proposed advanced base-camp lay at the bottom of a rocky spur separating Jogin I and II. We reached this after five hours of hard slog to find a rather limited choice of campsites. We could either pitch the tent on the undulating mounds of moraine or on the glacier which, by this time, had streams of melt water cascading across it. We chose the moraine and managed to kick a small and fairly flat piece of ground out on top of a ridge. Many hours passed due to our indecision and slow work on laying the foundations for the camp, and it was starting to get dark. We fetched water from a stream below the icefall that we would have to traverse the next day, and made a gritty cup of tea before retiring, three in a two-man tent.

As had been the pattern of weather since we had arrived, the good weather of the day before was followed by a day of freezing cloud. We looked out of the tent at six o'clock and saw a distinct lack of anything other than snowflakes. John and Tony were tempted to set out during a freak spell of clear weather but another good dose of snow and sleet dampened their immediate enthusiasm. Tony and Tig decided they would sit the day out in the tent. John, being a maddeningly fit person, decided he would pop back down to base-camp for a book and something to eat. We watched him disappear into the sleet, wondering if he would find this particular heap of moraine again, and began tucking into our hill food.



Climbing up through the ice-fall towards Jogin I & III. The rock buttress can be seen on the left.

After John had left, the cloud actually cleared for at least an hour. This was long enough and the sun hot enough for us to get slightly burnt, whilst sunbathing on karrimats on the beautiful moraine.

John returned, drenched, with Will and Jim close behind. Richard had set off with them but had to turn back due to having a bad headache and vomiting repeatedly.

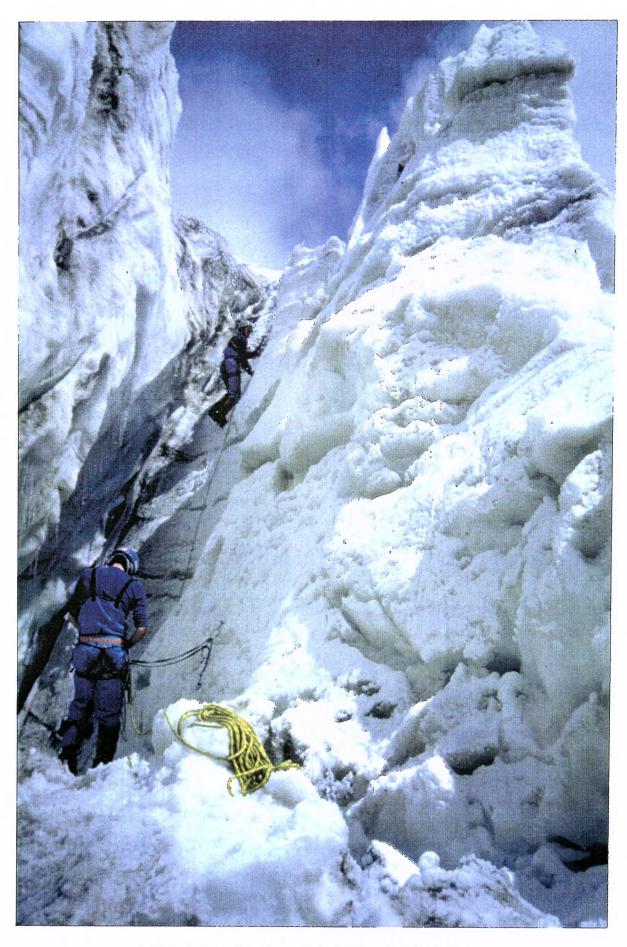
We set off for Jogin III, at seven o'clock, the next morning in strong sunshine. Will had to return to base-camp, due to altitude sickness, leaving four of us. The route mentioned in the Polish guide book involved climbing up the junction of a rocky buttress and an icefall on the right. When we actually came up close to the rock band, the gully looked extremely loose and wet, and we decided to climb up the icefall in the hope of joining the gully further up.

We soloed up through the seracs, front-pointing up the steeper parts, but we could not find any sensible route back onto the rock. We therefore continued up the easy ice picking our way amongst the huge seracs. After a few hours we were close to the top, but the going became more difficult. The glacier, on flowing over the edge, had split into dozens of leaning flakes with huge chasms between them blocking our progress. We hoped that if we could climb the first, progress would then be easier as it flattened off rapidly.

The easiest way up seemed to be the reverse side of a thin, overhanging flake. Jim led up the 70 degree ice until he was ten metres up. He plunged his left axe into the snow and pulled. The pick remained in the ice while he was left holding the useless shaft. Fortunately, the other axe remained solid and he managed to place an ice-screw. Using the remaining axe and ice-screws, he managed to complete the pitch and get to the top safely. From here, progress looked impossible. For the next few hundred metres, the glacier was fragmented into enormous teeth with vast crevasses between them. The only way forward would have been to rap down each one and then climb up the other overhanging side. It was midday by now, and the melting snow and ice made it doubly dangerous. We decided that we could go no further, and we made a hasty descent off the fall.

Tony and Tig had had enough for a few days, so they continued on back to base-camp. John and Jim decided to stay another night on the moraine and reconnoitre another route the following day.

John and Jim set off at six o'clock, carrying only our ice axes and few chocolate bars in our pockets. We hoped that with the right conditions we might make it to the summit of Jogin III (6116m). We crossed the glacier and started up a ramp to the left of the rock buttress. It had looked a straight-forward route the day before, but was in fact heavily crevassed. We found a route without any difficulty, though we had some worrying moments unroped. It took us two and a half hours to get to the high point of the ramp. We turned right, then climbed a hundred metres of slightly steeper ground. At nine o'clock we were at the top and faced by more huge crevasses. The snow was melting in the sun and balling badly on our crampons. We were rather nervous about getting back over the crevasses without a rope later in the day with the snow even softer. We estimated our height to be 5800m, only 300m short of the summit but decided to retreat hoping to try again another day. Sadly, that day was the last time that conditions were good, and that we didn't have to wade through the snow. We descended without incident to our camp, packed up and returned to base.



Climbing an ice-flake, our high point that day.

On our return, we found an Indian expedition from Puna, here to attempt Bhrigupanth. Though initially we were disappointed not to have the valley to ourselves, they were very friendly and welcome company. Towards the end of the trip we cooked a lot of meals together and even had a party.

The following day, two Australian "trekkers" arrived, Mick Haffner and George Mallory (THE Mallory's grandson). We fed them lots of spare food and sat around in the Super Nova playing cards on rest days with them.

Attempt on Manda III

Tuesday 8th September - Wednesday 9th September

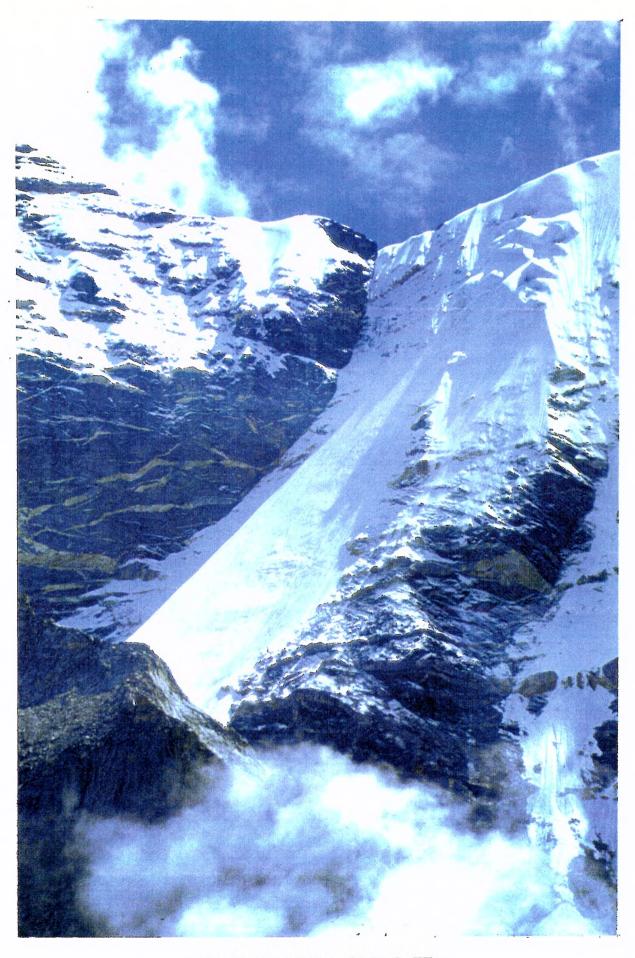
The ascent of Manda III was planned as a five-day round trip. The first day was fairly short, as advanced base-camp was only across the valley at the foot of the ice face. Only Jim, John and Tony were well enough to set out on the attempt. The others were left to the comfort of base-camp to try to shake their stomach bugs and recover their strength.

Our departure from base-camp was at a rather leisurely 9 o'clock. After scrambling up the first exhausting ridge of moraine we turned, gathered our breath and waved farewell, while those left below snapped what they hoped would not be our last photographs.

The moraine of Kedar Tal is immense. Its scale totally defeats the senses, so that boulders which may seem to be within only a stones throw away can, in reality, be half a kilometre. This made our progress feel frustratingly slow. The glacier was completely covered in small boulders balanced unstably on huge ridges of ice. Hopping from one rock to the other proved the best way of travelling on this sort of ground. With the first sunny weather for some days, the rocks began melting from their moorings and often slid down steep grey ice slopes into beautiful, glacial pools dotted with icebergs. Climbing the moraine ridges was particularly gruelling as it was a constant battle making uphill progress faster then the rocks slid down. With frequent rests, we crossed the moraine in an hour and three quarters, and started up the Manda III valley. The face looked much easier from here than from base-camp. We found it difficult to believe that it was 1000m high, as it only looked a few hundred.

A dry stream bed provided a convenient staircase towards the NW face. In this watercourse the rock had been more firmly bedded in than elsewhere, enabling us to gain height without a struggle. Far below, the ridges of glacial moraine seemed a homogeneous slate grey. Kedar Tal was visible only briefly as a thin streak of blue below Jogin II before the path of the stream snaked left behind the shoulder of Peak 6008, an unclimbed rock peak budding off from Manda II.

Plodding up the rubble was beginning to get really tiring. We had gained a lot of height, but with our heavy packs were really slowing. We had started off having ten minute rests every half hour, but as Tony got more tired he found it became impossible to move continuously between every rest. Instead, he adopted a strategy of forcing himself to do fifty steps before allowing a quick standing rest of ten breaths. This was just enough time to stop panting and compose himself so that he could complete the next set of paces. Being so focused each footstep didn't leave much time for admiring the ever-improving view of the peaks, not that this mattered much since thin clouds had blown in from the south over the col between



The Northwest face of Manda III.

Thalay Sagar and Jogin III. We tired rapidly as we progressed upwards and the rests grew ever more frequent. We were carrying 25kg loads, which at that altitude felt like 50kg.

After two and a half hours more, we arrived at the bottom of the face, where John Peck had told us, that there was a lovely camp-site. We could see nothing but mounds of moraine on dirty, black ice. Before the visibility decreased, we managed to clear a small area, and pitch the tent using the ice-screws as tent pegs. It was an impressive site, just below an ice wall guarding the bottom of the face. Over the course of the afternoon, the suitability of the site came into question as the tent was surrounded by muddy melt-water streams, and as a small spring popped up in the bell end. By this stage in the afternoon, we were too tired to care. Rather than re-pitch the tent, John and Tony dozed while Jim mothered us by serving up an endless supply of gritty hot drinks.

The route up the face has to be done in a single push, as there is nowhere to bivi on it. After that we planned to go to the summit and back along the north ridge on the second day, then descend the face on the third day. The alarm woke us at two o'clock. In an hour and a half, we had dressed, had a sip of water from the bottles we had kept in our sleeping bags and packed up the tent.

We had roped up right from the start, largely because the morning was so misty that from the back of the rope it was impossible to see the light from the person in front, a distance of only 25m. This mist would clear as soon as a little sun got onto the face, but for now all that was visible was the rope at our feet, illuminated by our head torches.

By 5.30am we were well on to the face. All the dirty rubble had been left behind, and we were now moving on pristine snow. The condition of the snow was slightly worrying, as the base of the slope was covered by several feet of avalanche rubble. As we had got higher, this stopped and we were confronted with deep powdery snow with a thick crust, which dinner-plated as our feet went through it. We stopped to discuss the risk, but decided to continue. Higher up, it looked even worse. The risk of a new avalanche looked disturbingly high. Any avalanche on this face would almost certainly be very serious. We dug a hole in the snow to see what it looked like further down but were not encouraged. Before turning back, we wanted to see the snow in the light to confirm our assessment and to see what it was like higher up, but decided that waiting for two hours until dawn would waste too much time. After more discussion, we decided to make a strategic withdrawal to advanced base-camp.

The last couple few hours of darkness were spent sleeping in our bivi bags at our previous camp-site. By the time we rewoke, the sun had raced down the side of Jogin II and the mist had cleared. All our ropes and climbing gear, the tent and the remaining food were left behind beneath a boulder which we surrounded with rocks to keep the crows from the food and topped with a cairn, ready for a second attempt in a week's time.

With refreshingly light packs, we ran into base-camp in good time for a mid-morning brew. Amusingly, our L.O., in typical form swore to Richard and Tig that he could see three figures two thirds of the way up the face through a telephoto lens. The others couldn't see this but were beginning to give him the benefit of the doubt, just as we strode over the final ridge of moraine above camp. If only!

In hindsight, our cautious approach may have been a lifesaver, regardless of whether or not there had been an avalanche. That evening, bad weather blew in which stayed for five days. Several feet of snow were deposited on the mountains. Had we reached the col, we would have been unable to continue or retreat down the face for many days.

Second Attempt on Jogin

Friday 11th September - Tuesday 15th September

We left a base-camp dusted with snow for our second attempt on Jogin I & III, while waiting for the snow on Manda III to consolidate. Five of us set out that morning at ten o'clock, leaving only Tig, whose stomach problems were making her increasingly weak, and our L.O., who was enjoying socialising with the recently-arrived Indian Bhrigupanth expedition.

Our pace to our previous camp was blistering. After only three hours we were cramponing-up to cross the glacier. Richard had been finding the going increasingly tough, having not ventured out of base-camp much before. After we rounded the large rib of Jogin II and started climbing, he had started to fall behind. On the glacier we had lightened his load and put him in front, but sudden attacks of dizziness indicated that he was showing signs of altitude sickness. Sensibly, Richard decided that it would be unwise to go on and that he had better go down now while he needed no one else's help. After a quick re-sort of our equipment, we dumped the Phoenix tent and other duplicated equipment with Richard in return for some of his food, and carried on.

We intended to follow the route previously reconnoitred by Jim and John up the snow ramp, to the left of the rock buttress, which weaved a line between the bands of seracs. After crossing the scree below the nose of rock, we hit deep snow. Not only did this make moving much more tiring, but it covered many of the deep crevasses we had to cross. John went at the front to break the trail through the snow, and Jim carried some of his load as he was moving the strongest.

Navigating the crevasses proved very tricky. Very often, they creaked as we walked over them. The new snow deceptively narrowed the width of the crevasses. On take-off or landing several feet of snow platform could easily disappear, forcing tug assisted leaps in the order of long jumps for those at the end of the rope. Jim, with a 28kg rucksack and at the end of the rope, had particular difficulties with some of the leaps. On several occasions, platforms collapsed beneath him, and he had to climb out of the crevasses.

By mid-afternoon, the crevasses had been negotiated, and all that was left to reach our proposed campsite was a long walk up a shallow slope to the top of the ramp. This provided another example of the defeating scale of the Himalayas. With only uniform snow and thin cloud around us with which to assess distances, what looked like a hundred-metre stroll took over an hour and a half to complete. By the time we reached a suitable campsite the time was six o'clock, the contrast was so low that it was impossible to tell if we were at the top of the slope of not. In fading light, the four of us piled into our Mountain Supernova, had some supper and curled up in our sleeping bags exhausted.

To get moving by 6 o'clock we needed to start getting up at around 4 o'clock. There was only space in the tent for one person to get dressed at a time, so, to minimise needless waiting around, we had developed a protocol whereby the slowest to get ready dressed first. William was unlucky enough to be first in the queue for getting up. After spending over 30 minutes on dressing, he said he was feeling pretty unwell from the altitude. During the night, another foot of snow had fallen, and none of us relished the thought of even deeper snow through which to wade. The remainder of the route was up an icefall with plenty of

avalanche-prone slopes. Even this early in the morning, we could see the clouds moving back in, so we decided to have a rest day. We had five days of food with us and plenty of fuel, and thought we could easily spare one day.

We knew that George and Mick were planning a rapid lightweight one-day assault on Jogin III from their advance base-camp that day. They would surely pass our high point that day, providing some easier tracks for us the following day while we sat it out with our large hoard of food.

At around 11 o'clock our cheerful Aussie friends showed up. Both looked really tired and not as full of cheer as usual, so we interrupted our hundredth hand of bridge that morning to resuscitate them with mugs of hot chocolate. They had found it hard tracing our path, losing it beneath the new snow, and were unable to follow over some of the wider crevasse jumps. After leaving some clothing, they set off up the ramp above our tent.

By the afternoon, we were tiring of bridge and searched for other entertainment. A carefully smuggled copy of *Howard's End* was in great demand. Reading it in a "listen with mother" style became too much effort, so we took hour-long turns with it while the others ran through a selection of card games made for three.

George and Mick arrived back an hour before darkness. They had been stopped 200m below the summit of Jogin III by a large bergschrund, which had looked feasible from below. After leaving this information they hurried down to their camp beyond the glacier before night fell. We had planned to use that line, and so would have to find a new route to try the next day. We regarded this as a triumph for laziness, and were extremely pleased to have spent the day resting.

Dawn on 13th September greeted us with a clear sky. More snow had fallen overnight, cementing the tent even more firmly in position. Digging it out proved extremely tiring, and left large chunks of the snow valances behind in the compacted snow. Shortly after first light, our packing was complete and we set off up a slightly steeper bit. Mick and George's footprints were still visible, but were as hard to follow as making fresh steps due to the powdery snow which had filled them. At the top of the ramp, a couple of monstrous, seemingly bottomless crevasses greeted us - Jim and John's previous high point. After negotiating them, we departed from the Australians' route and turned right below an ice wall before striking upwards on its left hand side. We zig-zagged up through additional bands of seracs and crevasses, taking a rising traverse line to a gap between two lines of sheer seracs.

After climbing a short 50-degree slope, we took our first major rest of the day on the edge of a large rounded saddle. All the peaks in the valley were clearly visible in the morning sun. Manda III looked fantastic, but formidably steep, and Meru could be seen in the neighbouring valley from between Bhrigupanth and Thalay Sagar. Peak 6008, the rocky subsidiary peak of Manda II, appeared to be level with us, placing us just over 6000m and less than 100m below the summit. At just past 10 o'clock, our plans to have a camp set up on the top of Jogin III (the only flat area around) by lunchtime, followed by a rucksackless afternoon trip to the top of Jogin I, seemed to be on course. However, the weather, yet again, had other ideas. As we sat munching our Mars bars, thin cloud raced over the col with Thalay Sagar, a sure sign of a dramatic change for the worse in the next hour or two. With an increased urgency, we pushed on for the top of Jogin III, but by the time we set off we were buried in cloud.

John, who had been breaking the trail, needed to rest, so the rope was reversed, with Jim

taking over the lead. The large summit dome of Jogin III was but a stone's throw away, but due to a very steep icy patch above us, we traversed rightwards up round the dome. As we progressed, the cloud thickened and the horizon disappeared. On this, the leeward side, the snow was much deeper, rising up to our waists. With no indication of which way to go, Jim decided to head straight up. The snow got deeper and deeper. To gain one foot of height involved twenty steps and kicks into the snow. After only ten minutes and a few feet of progress upwards, misfortune struck. There was a loud, dull thump, and the whole slope dropped a few inches. We could hear a deep roar quickly loudening. A blueish wave of snow appeared out of the cloud, rolling down on Jim. Fortunately, because we had recently been traversing and Jim had made virtually no upwards progress, we were spread out on the rope horizontally. Jim tried to remove his rucksack, but didn't succeed before the edge of the avalanche struck him and carried him down, dragging the others along by the rope.

The aftermath was earily silent, punctuated only by Jim's cries for help. The wet snow had frozen solid around him, trapping him fast, his head scarcely visible, the snow only inches from burying him completely. The others waited to see if any more avalanches would be triggered by the first before they advanced, then Tony dug him out with the snow shovel. Fortunately, Jim was unhurt, just rather shocked by the experience.

As this adventure was progressing, the weather drastically worsened. The cloud had thickened and engulfed us, and visibility was rapidly decreasing. It was briefly possible to see the clean fracture line in the snow above us from where the slab had rolled down, then that too was obliterated by white-out. Despite it being only 11 o'clock, we decided it we would have to camp immediately. Roaming around avalanche-prone slopes in a white-out was considered extremely unwise, but we did not want to abandon the attempt yet. The only flattish piece of snow we had seen was the shoulder we had just left, so we retraced our steps and camped on the most level piece of snow, only 20 metres from the avalanche rubble and, we estimated, no more than 3 rope- lengths from the summit.

By the time the tent was up, it was snowing, and we were pleased to get inside. The Super Nova made an extremely cosy shelter, shutting out the miserable weather. The unnerving creaks of the snow and the distant roars of other avalanches kept us from feeling too secure, though. Visibility continued to decrease so that even the ends of the guy lines disappeared into the whiteness. The pack of cards was once again bought out, and *Howard's End* circulated. Tony was twenty-one that day, and as a birthday treat he received an extra hour's reading. Our hopes of reaching Jogin I were vanishing fast, but we were still very prepared to snatch Jogin III if the weather cleared.

The next day, the white-out and snow continued. With nothing much else to do the remaining food was quickly polished off excepting a few rather unpleasant looking Cup-a-Soups. Bored of cards and the book, most of the time was spent trying to sleep, with interruptions to check the weather. So much snow had fallen that the tent was virtually buried and the sides were collapsing inwards. Games of 'I went to the shop and bought ...' offered limited entertainment once the obvious choices had been exhausted.

Sleep became increasingly difficult as the wet snow coating the tent prevented the renewal of oxygen, even with the tops of the doors open. Combined with the altitude, this led to bouts of John hyperventilating which were quite scary. The lack of ventilation was probably a contributory factor in the sudden development of headaches in the whole team, probably linked with an accumulation of stove fumes.

By Friday the 15th, with no food, we had resolved to try to descend given the slightest

opportunity by the weather. Even Jogin III, just a 10-minute walk away, had become unattainable in this weather. We packed everything up and dug the snow from around the tent. Crouched in a bare tent with all our kit on, we waited for a break in the cloud. When it came, we rushed out to take the tent down and set off. The break lasted only a few minutes, but in that time we got a good look at our heading and lost height quickly. We continued the descent in swirling cloud, but with sufficient visibility to get down safely. The descent was rapid, with a lot of uncontrolled sliding. Because of the deep snow, we were cramponless, which was fine most of the time. In places, though, where the hard ice was close to the surface, it was very treacherous.

We returned to a base-camp covered in snow, and a jubilant welcome. News had reached the others from the Indian team on Bhrigupanth that our tent had been sighted on the top of Jogin III. Sadly, they were ever so slightly mistaken.

"Peak 6050"

On return from our last attempt on Jogin III, morale back at base-camp was low. It was still snowing heavily on the mountains at night, and heavy cloud and fog were the norm even at base-camp. Even when the sun was visible, the temperature was not far above freezing, and the weather in general showed no signs of improving. Nobody except Jim wanted to try any more climbing. We decided that Tig, Tony and William would return to Delhi and would arrange for Budhi to send up twelve porters in a few day's time.

Mick, George and Jim decided to make a last attempt on Jogin III. They thought that they could do it in two days if conditions did not deteriorate further, and be back in time for the porters.

After a rest, day Tig, Tony and William left on Tuesday morning, giving us three days to pack up before the porters arrived. Richard and John collected the gear from Manda III, while Jim, Mick and George prepared for the next day. We gave our excess food to the Indian expedition, and on advice from our liaison officer, burnt and buried the remains of our rubbish. We had intended to take it back down to Gangotri but we were told that it would only be thrown in the Ganges, so there was not any point.

The nightly snow falls continued, and the weather did not improve. Jim, George and Mick decided to shift their objective to something nearer. The ridge descending from Jogin II to Gangotri looked possible and had several subsidiary peaks on it. According to Jan's book, Peak 6014 had been climbed once before. We could see another peak between this and Jogin II at the top of a 1000m snow face. It looked very avalanche-prone, but had several snow ribs, and we selected a route that we hoped would be safe for most of the time. We thought that we would be able to do the route in a day, if there were no technical difficulties. Looking at the face straight on, we found it very difficult to gauge its steepness. There was a rock band about half way up, but we thought we could see a break in it and routes around the other tricky-looking bits.

At 6 o'clock on Wednesday morning, we set off over the moraine. After an hour, we were at the bottom of the face. We changed into our climbing boots and dumped some spare kit. Carrying the absolute minimum -- a rope, crampons, a few chocolate bars and a water bottle in two rucksacks -- we set off unroped. We skirted around the right-hand edge of the bergschrund and traversed up and left on the face protected from avalanche by the rock

above us. It was only thirty degrees, and we made good progress. The weather was fantastic and the skies brilliantly clear. Climbing up through the virgin snow and looking out over the valley lightly dusted with snow was a wonderful experience. Back in base-camp, Richard and John saw us progressing quickly until we reached a large gully by the rock. By now, the cloud had moved in, and a gentle snow began to fall.

George passed his rucksack to Jim and took the lead. From here to the top, the route was steeper, averaging about forty-five degrees with steeper bits up to sixty. Although only about Scottish Grade II or Assez Difficile, the route felt scarier due to conditions and exposure. The snow became much deeper, and our progress slowed. Once again, the scale of the face amazed us. What looked like fifty metres took an hour. We climbed up a small snow-shoot on the left of the gully to by-pass the rock band. After this, George managed to make better progress, staying on top of the snow. Jim found progress increasingly difficult. The extra weight of the rucksack caused him to break through. With every step, he sank deeper and deeper into the drifted snow. Fracture-lines appeared in the crust, and Mick, who was bringing up the rear, climbed out of the gully on the left onto the snow rib. Jim retraced his steps through the snow trench, treading delicately.

The going did not become much easier on the rib. As the afternoon drew on, we realised that we would have to bivouac at the top if we planned to continue. Mick had bivouacked before at a similar height in the Andes, and thought that we would be alright. Rather worried about the night ahead of us, we continued. The snow was between knee and waist-deep all the way to the top. From time to time, we could hear the rumble of avalanches on either side of us.

Just below the ridge, we broke out of the cloud. Fifty metres higher up, we saw the last few rays of the sun from the ridge. Behind us, we could see across the cloud-filled valley to the Manda peaks. Ahead of us was a precipitous rocky face with the Rudugaira valley below. Jogin II, along the ridge from us, looked incredible. Climbing Jogin II from here would be highly technical, but very exciting. We walked a short distance the other way up the ridge to the summit. We stood there at half past five and posed for the last two remaining photos on George's film. The summit was not marked on any maps, and probably is not even considered an independent peak, but it made us ecstatic. We celebrated with a lot of mutual back-slapping, hand-shaking and the like. Peak 6014 looked a long away off, but slightly lower. Reaching it would have involved a small abseil, so we decided to stop there and to find a bivi site.

We were not happy about the safety of the face, so we decided to dig a snow-hole just below the summit. Unfortunately, only a few feet below the surface lay hard ice and rock. After four hours of hard work with our ice axes, we had managed to clear enough space for the three of us to squeeze in lying down. Movement was impossible in the confined space. Conditions were extremely claustrophobic with our faces pressed into the snow or other bodies. We told each other stories to stay awake and wiggled our fingers and toes. Every couple of hours, we would jump up and down outside to try to stay warm. We had no clothing except what we had worn to climb in, and only two rucksacks between the three of us to keep warm. That night the temperature was minus twelve degrees Celsius at base-camp. It was considerably colder 1200m higher up and on top of an exposed ridge. We did not want to risk blocking up the exits with snow, so the wind blew through the snow hole depriving us of heat even more quickly.

Down in the valley, Richard and John began worrying as night fell. After a meal provided by the Indian expedition, they climbed up the moraine to attempt to find us. The cloud had dropped further, covering the lower parts of the mountain, and they heard no reply to their whistles, so after setting up a head torch as a beacon, they returned to camp.

Early the next morning, John and Rajiv set out on a rescue mission, carrying the first aid kit, food and warm clothing. They feared the worst, at least for fingers and toes. Fortunately, the weather was clear, and at nine in the morning, they spotted us moving at the top of the ridge. Rajiv waited for us at the bottom with the equipment, heating water on the stove.

After our night on the ridge, it took several hours to get warmed up enough to move. Jim had mild frost nip on his fingers, and could not use them at all. We roped up due to our concern about avalanches and thought it might help to locate someone. We started descending, and soon sped up as we warmed. Mick was worried about triggering an avalanche, so we descended facing-in until we crossed the gully. After five hours, we made it down and celebrated by stuffing ourselves with food and drink. None of us had eaten or drunk for over 24 hours. With renewed energy, we walked across the moraine to base-camp and a delicious meal cooked for us by the Indians.

The Return

During the day, the porters had begun to arrive. We had not finished packing, and due to Jim's absence we were unlikely to leave before the next day. Fortunately, the Indian party was able to help. The porters were initially unwilling to stay the night, but after being offered food, stoves and the mess tent in which to sleep, eventually agreed.

Early Friday morning, we left, the porters leaving about two hours before us. It took approximately four hours to reach Gangotri, allowing us to catch the three o'clock bus to Uttar Kashi. The weather on the walk down was fantastic; it looked as if, on our departure, the monsoon had finally finished, over a month late.

The journey back to Uttar Kashi was uneventful, the road finally having been cleared from landslides and reassembled. Even so, it is a road I would not like to negotiate in a Land Rover, let alone a 60-seater bus. We arrived at ten o'clock with all of our luggage at the government hotel and booked in for the night. Most of the porters disappeared very quickly when the bus stopped, and it took a lot of effort to carry all the luggage to our rooms on the second floor.

The next day started well, with restoration to our clean-shaven selves by the local barber. None of us had ever been shaved by anybody else before, let alone by someone with a cut-throat razor. After checking his business was not next to a pie shop, we took the plunge and ignored worries of AIDS. Richard was so impressed with his shave that for days afterwards, he would stroke his chin with an amazed expression on his face.

We then went to see Budhi Singh of Mountain Support to discuss the bill for the equipment and porters. We were unhappy with Budhi for a number of reasons. He had told us that the porters were Rs70 a day, when in fact he only payed them Rs60, and the Sirdar had received no more than other porters. He had insisted that it would take ten days for the porters to get to Kedar Tal and back, and only after a lot of argument had he agreed to charge us for nine. In fact, the journey took the porters only four days on the way out and three on the way

back. Budhi only paid the porters for five days. We were very aggrieved and felt that Budhi was defrauding us in terms of what he was paying the porters, the time he was paying them and the ten percent commission he charged. He even tried to make us pay for resupply, which he had agreed to do for free. We did not begrudge the porters any money and did not mind paying a commission, but resented being lied to. Jim went into Budhi's office to bargain, with John and Richard sitting outside as moral support. Rajiv declared it was not his problem, and took a neutral role, translating when necessary.

After two hours of discussion, Jim had not really gotten anywhere. Budhi was threatening to call the district Police Chief and Chief of Justice, and even telephoned the IMF to complain about us. It was completely impossible trying to compromise with him, as he refused to give ground on a single point.

Eventually, Jim gave him enough for 9 days in, 8 days out and left, Budhi yelling at him and issuing threats. We ended up on good terms though, as that afternoon, Budhi came round to the hotel, apologised and invited us out to dinner. There are several agencies in Uttar Kashi which organize porters and equipment. We would probably have got a much better deal, if we had asked around, and ascertained the current rates.

We then discovered that the town was sealed by a general strike in support of a separate state. We were therefore unable to buy food or hire transport out of Uttar Kashi. The next day, the area was also due to be paralysed, in this case by a student demonstration for religious and law studies at the local college. No one was prepared to drive us anywhere as everyone was afraid of being beaten up or having their vehicles damaged. After a lot of wandering around, we managed to find a jeep owner who was willing to leave at 2:30 the next morning. Apparently, he knew a back road that would avoid the road blocks.

At 2 o'clock, we started carrying our quarter-tonne of equipment down the stairs. At 3 o'clock with still no sign of the driver, we tumbled back in to bed furious. After a long lie-in, we got up and carried the kit back up the stairs. Just as we had nearly finished, two Indians lent a hand with the last few loads. Needless to say, they wanted a tip afterwards, -very cunning, if not much help.

At midday on Sunday, we finally found someone willing to take us, although unfortunately the van was a little small for us and our luggage, leading to a cramped journey. The police did not allow us to leave until two o'clock, and we were delayed for a further two hours at the student's, roadblock until it was cleared it. We arrived in Rishikesh late that evening and booked into the hotel from which our L.O. assured us the luxury bus for Delhi would leave in the morning. We spent all of the next morning trying to find alternative transport to Delhi due to the non-appearance of the luxury bus. In the end, we had to settle for two taxis as no one else would take us with our amount of luggage. By the time we had loaded up yet another taxi with luggage, we were beginning to get really fed up with moving it all around. We would strongly recommend that expeditions do not split and leave a small group to deal with the luggage. It is extremely hard work to shift luggage through India. By the time we arrived back at Delhi, we had completely run out of rupees and even had to borrow some money from our L.O..

We arrived at the Blue Mountain Hotel that evening. This was a very pleasant change from the Janpath Guest House, and should be recommended to anyone intending to stay in Delhi. Unfortunately, Tony, Tig and Will were not there as had been agreed, but had left a note instructing us to phone them at the Janpath Guest House. We sorted out the kit that evening before they flew home.

Wednesday was spent rearranging flights and booking out the air-freight. It did not help that we had to pay in officially-exchanged rupees, as the current rate was then only Rs49 with the pound having just plunged. The actual process of sending the freight back is relatively straightforward and much easier than importing, and took us about three hours.

We had arranged to meet our Liaison Officer, Rajiv Tomar, at our hotel, at 10 o'clock Thursday morning before continuing to the IMF for debriefing. He arrived promptly and asked to see Jim alone. We then learnt that Rajiv had a few extra demands. His line was that we should pay him one thousand US dollars in cash, or else he would inform the IMF that (a) we had climbed, or attempted to climb seven mountains in the area, (b) we had treated himself and the porters very badly, and (c) we had supplied him with sub-standard equipment. The mountains alone would result in a bill, he claimed, of about 4500 US dollars. Time was a problem, since we were scheduled to leave at 2 o'clock the next morning.

Understandably, we were more than a little shocked by this, particularly since Rajiv had been very good up to this point, and had told us that for the two unbooked mountains we had attempted there would be no problem transferring our booking. A long discussion with Rajiv got us nowhere. We decided that paying Rajiv was not an option that we wanted to consider. We would try our luck with the IMF.

We transferred all our luggage to the airport, ready for a quick dash out of the country if necessary. At the IMF, as before, the director was out and Rajiv refused to drop his demands. Nerves were getting strained. The British Consul seemed the best option.

We explained the situation to the Consul, who agreed to contact the IMF on our behalf. It was not until three o'clock that afternoon that the IMF was able to handle our case. Colonel Mall, the director, was sympathetic, and we returned to the IMF to answer Rajiv's claims on a line by line basis. His list of complaints was very comprehensive, impossibly so. Among his many grievances were that we had only offered him beef to eat (if only we had had some!) and that we had regularly mocked his religion.

Jim went through his the list item by item with Col. Mall, answering the charges. When the list was completed Col. Mall apologised and hoped that we would return again. The only unresolved issue was the equipment which Rajiv still had not returned. As we were flying out that night, it was too late to do anything about it. With hindsight, we should have asked Col. Mall to write a report then and there for us to take back with us. At present, we are pursuing the matter with the insurance company and with the IMF.

We were disappointed that this unpleasantness occurred, since Rajiv had been a helpful, if somewhat childish, L.O. up to that point. Our only loss was about £400 for the equipment, which had been lent to Rajiv, and which we were unable to recover. We managed to claim for some of this from the insurance company.

That evening, George and Mick took us out for a meal and we celebrated the conclusion of our adventure.

Conclusions

For all of us, this trip was our first expedition to the greater ranges. Though from a mountaineering stand-point our achievements were small, we all feel that we achieved a great deal on a personal level. Simply getting ourselves and our equipment to base-camp was a huge logistical effort. Every situation in the Himalaya was vastly different to those in the Alps or Scotland. We continually had to ask ourselves: Should we go on, or should we turn back? Trying to weigh up the risks in situations of which we had no first-hand experience was often frightening.

When we were planning the expedition all our discussions were very informal, and no clear break-down of responsibilities was made. We would have organised the expedition a lot more efficiently, if we had decided exactly who was responsible for what, and had written minutes at our meetings about what we had achieved so far and what we hoped to have achieved by the next meeting.

There were several financial advantages to Tig and William travelling with us to base camp, and staying there; we split the costs of air-freight, we saved money on transport and we shared the portering. Having more people at base camp was also more sociable, and meant that there were always plenty of people available to do base-camp chores, even when some of us were ill. Before we went out, however, we had only come to a loose, verbal arrangement, about how we were to split the costs. We would have been more sensible to have made a written agreement before we departed.

Another problem was that all forms were in the leader's name. This meant that a lot of the time other members of the expedition had nothing to do as at customs and at the IMF, since officials always wanted to speak to the leader. It would have made a lot of sense to send out the freight in somebody else's name, and to call them a deputy leader, in order to satisfy the bureaucrats.

There are many things we would do differently if we went to the Himalaya again, and we are sure that experiences from this expedition will be useful in the future. Despite the difficulties and problems we faced, we all want to return; perhaps this is an indication of what a fantastic place the Himalaya can be, and how much we all enjoyed the expedition.

Appendices

Appendix 1 - Accounts

Income

Mary Euphrasia Mosley	£450.00
British Mountaineering Council	£500.00
Charles Parkin Award (Clare College)	£400.00
Donald Robertson Award (Trinity College)	£240.00
Bevir Memorial Fund (Wellington College)	£400.00
Mount Everest Foundation	£450.00
Cambridge Expeditions Fund	£600.00
Personal contributions	£2561.10
Tig and William	£389.00
Sale of equipment	£452.00
Total	£6442.10

Expenditure

Prospectus	£71.00
Peak fee	£771.58
Visas	£64.00
Insurance	£396.00
Food	£209.10
Administration	£181.70
Flights to Delhi	£1345.00
Freight to Delhi	£158.85
Gas to Delhi	£98.50
Medical supplies	£66.16
Equipment	£1030.42
Expendable equipment	£201.42
Indian expenses	£1530.00
Clearing freight at Heathrow	£18.37
Printing and distribution of report	£300.00
Total	£6442.10

Equipment Expenditure

Fleece for liaison officer		£18.00
2 Phusion Extreme tents		£520.00
2 Snow shovels		£35.48
2 Epigas micro stoves		£29.99
12 prussik loops		£19.12
25m abbing tape		£18.75
12 rock pegs		£48.00
26 titanium ice screws		£253.00
4 60L plastic drums		£70.00 £6.50
Hand scales		£11.58
Climbing guide		£11.38 £1030.42
Total		11030.42
Expendable Equipment	Expenditure	
24 Epigas canisters		£35.52
16 head-torch batteries		£31.20
10 slide films		£73.00
Glues, cleaning kit, washing line etc.		£40.81
Hacksaw blades, paracord etc.		£20.89
Total		£201.42
Expenditure In I	ndia	
Transport		£242.88
Freight clearance and demurrage		£30.27
Accommodation		£167.16
Base-camp supplies		£102.15
Porters and kit hire		£538.68
Freight home		£221.14
Miscellaneous (food, taxis etc.)		£227.72
Total		£1530.00
Mount Support Ch	narges	
0.4	D 15100	2270.02
24 porters up for 9 days at Rs70	Rs15120	£279.82
1 sirdar up for 9 days at Rs100	Rs900	£16.66
2 resupply porters for 6 days at Rs70	Rs840	£15.55
11 porters down for 6 days at Rs70	Rs4620	£85.50
1 sirdar down for 6 days at Rs100	Rs600	£11.10
Sub total	Rs22080	£408.63
10% commission	Rs2208	£40.86
Tent hire for 26 days at Rs120	Rs1560	£28.87
Kitchen utensil hire for 26 days at Rs120	Rs1560	£28.87
25 up porters return transport at Rs40	Rs1000	£18.34
12 down porters transport at Rs38	Rs456	£8.44
Insurance	Rs500	£9.25
Total	Rs29364	£538.68

Transport

Delhi - Uttar Kashi, 13 seater minibus, should have cost Rs2500.	Rs4500	£82.55
Uttar Kashi - landslide, private jeeps as road was blocked.	Rs2000	£36.69
landslide - Gangotri, public bus Rs30 each, includes porters.	Rs900	£16.51
Gangotri - Uttar Kashi, public bus Rs40 each, includes porters.	Rs840	£15.41
Uttar Kashi - Rishikesh, small van, JM, RV, JC & the L.O.	Rs1400	£25.68
Uttar Kashi - Rishikesh, private taxi, CA, WO & AM.	Rs900	£16.51
Rishikesh - Delhi, three private taxis.	Rs2700	£49.53
Total	Rs13240	£242.89

Currency conversions were carried out at an average rate of exchange of £1 = Rs54.5. The airfreight, portering, transport and base-camp supplies were for six people. All other expenditure was for four.

Appendix 2 - Equipment Report

Hardly any of the technical kit taken was used, as the only technical climbing done was one pitch on the icefall. The kit was chosen on the advice of Lew Hardy for the technically-difficult finish of Manda III's NW face. Some extra ice-screws were taken so that, in the event of a retreat by abseil, there would still be enough left for a second attempt. For what was actually accomplished a few ice-screws and a deadman would have been perfectly sufficient.

Two of the ice-screws were high quality; the rest were Polish and Russian screws purchased at the Bristol climbing wall and in Chamonix. They all appeared to be well-manufactured and were easily placed. None were tested in a fall, however. Two camp snow shovels were bought which were designed to fit onto ice axes. One of these broke in the Alps before hand, when the spot welds failed. This was replaced free in the UK with a wooden-handled version. Although weighing a couple of hundred grams more, it was much easier to use. We reinforced it with four nuts and bolts around the spot welds. Both snow shovels performed well on the trip, with no signs of fatigue. They even proved useful in digging into the mud around base-camp to bury the rubbish.

The Phusion Extreme tents also performed well, though they were never tested in storm conditions. At 4.6kg they are quite heavy, but are incredibly strong. Unfortunately, one of the tents had a manufacturing defect, which resulted in one of its poles breaking the first time it was used. The pole was easily fixed, however, with one of the pieces of tubing supplied for such accidents. Obviously, it is very important to check all pieces of equipment thoroughly before departing as this could have been a disaster. The one draw-back with the Phusion is that snow or rain collects on the roof panels at the ends. Eventually, water drips through the fly-sheet and inner, and into the tent. Presumably, in cold enough conditions in which the snow does not melt, this would not be a problem.

The other tent, taken for use primarily at base-camp, was a Mountain Super Nova, borrowed from the Rats. The main problem with this was that the fly-sheet was much newer than the inner tent and did not fit properly. The two side guy lines on the fly-sheet were much too low and failed to stop the fly-sheet touching the inner. More guy lines on the side panels would have prevented this problem. In its defence, the Super Nova was taken on the second attempt on Jogin, and despite being buried, in over three feet of dense snow, it survived. Digging it out, though, resulted in a lot of damage to the snow valances as the stitching ripped very easily. The Super Nova was excellent at base-camp as it is quite possible to sit six people in it comfortably, and it rapidly warms up. It is very good for team morale to be able to do this. The mess tent, hired from Mount Support, though completely waterproof, was very drafty. It was impossible to warm up to a reasonable temperature. Perhaps the best solution would be to take a large 'family' type tent. It might even work out cheaper as it cost around £15 to hire the mess tent, plus the cost of the one and a half porters needed to carry it -- about the same as the freight and porter costs would have been for a 'family' tent, since one would have been much lighter.

Leading up to the trip, we discussed what sort of stoves we wanted to take. We all normally used petrol stoves, but most people recommended gas for the Himalaya. The main drawback is the cost and inconvenience of air freighting the gas. The other disadvantage we found with the gas stoves was that, unless we kept the canisters warm, they were extremely slow. One

stove stacked on top of another was very effective, but probably not very safe. Mick and George took a MSR Whisperlite and had no problems getting it to run on the petrol there.

The BBC supplied us with World Service schedules, and we took out a good short-wave radio. Listening to news at home and abroad provided welcome entertainment. The water filters operated well and provided us with an abundant supply of clean water. We could have managed adequately with only one, however. The dustbin bags were also extremely useful and were all used. We bought some large hessian sacks in Uttar Kashi and some smaller plastic ones for the porters' loads. Unfortunately, we ran out of strong thread to sew the tops of the sacks shut, something well worth doing to stop anybody meddling with them. These sacks were very cheap and were exactly what was needed. The clothing lists could have been easily trimmed if weight were a problem, and were more than adequate. Passport photos were unnecessary.

Group equipment and supplies

Brought from England

spring balance

shortwave radio and batteries

2 epigas micro stoves

24 butane, propane mix gas cylinders

medical kit

150 sandwich bags

5 brillo pads 10 dish cloths

7 pan scourers

4 tea towels

wd40

tent repair patches tubing for poles

file

Mountain Super Nova

hacksaw blades

paracord

washing line

2 sterilizing water filters

100 iodine water purifying tablets

30 heavy duty dustbin liners

sewing kit canoe tape

2 tubes of superglue

Araldite

seam sealant

flammable priming paste spare glacier goggles

12 boxes of matches

4 60L plastic drums

Bought in India

washing powder 2 plastic bowls toilet paper 24 candles

2 plastic buckets 24 boxes of matches 20 large hessian sacks 24 plastic sacks

These lists were based on those of the 1991 British Bhrigupanth Expedition.

Climbing equipment per rope

6 extenders

rocks 1-9

nutter

hexes 8 and 9

6 pegs

15 titanium bang in ice screws

tuber

jumar

2 screwgates

4 slings with screwgates

deadman

12m abbing tape

snow shovel

tent

epigas burner

2 pans

Personal Equipment

Climbing

5 season sleeping bag goretex bivi bag 5 season karrimat thermal top and bottom

jumper or fleece fleece jacket

windproof salopettes windproof jacket 2 pairs outer gloves 2 pairs inner gloves

balaclava neck scarf

mountaineering boots

gaiters

2 pairs inner socks 2 pairs outer socks 75+L rucksack

sun cream

glacier goggles head-torch Lipsyl pen knife mug spoon

2 1L water bottles alarm clock

helmet

full body harness

tuber

2 screwgates

2 slings with screwgates

3 prussik loops pair of ice axes crampons ice axe holsters

Base-camp

spare boot laces toilet bag small towel plate, knife, fork waterproof trousers

sun hat pair of shorts warm trousers light trousers 2 t-shirts

2 long sleaved shirts 4 pairs of pants / boxers sweatshirt thin sweater walk in boots comfortable shoes walkman / batteries

3 books

goody bag < 2kg

ice axe and crampon tools and spares

foot powder / cream

money belt

10 passport photos

These lists were based on those of the British-Indian Police Expedition 1986.

Appendix 3 - Freig

We used two different firms to freight our equipment to Delhi. The bulk of our equipment was sent by Expedition Freight, while we used Special Air Service to freight our Epigas canisters out as they were a cheaper service. We took the equipment to the airport ourselves (which saved us £40), and Expedition Freight organised the paperwork. We used four plastic drums, supplied by Expedition Freight, and three cardboard boxes to pack the equipment. The drums were great for storing equipment, food, or anything else valuable as they were waterproof and very porter-resistant. Our freight was never actually weighed. We told them that we thought it was approximately 125 kilos, and that was what we paid for at £1.05 a kilo.

We had been told by Expedition Freight that our freight would go straight to the IMF. Dream on! The procedure upon arrival in India is that when your freight arrives, the paperwork is sent to the contact address you have given -- in our case the IMF. Expedition Freight had bulked our equipment in a large consolidated consignment which had been addressed to an agent in India, so we had to go to the agent to collect the paperwork (for a fee). Once you collect these papers, you then have to go to the international cargo terminal to collect your freight (see customs in the appendices).

There is one point worth mentioning. Our freight went out about two weeks before we left, and we then had to pay for storage in Delhi for this period, which for the gas canisters came to a relatively large sum (£20). If we had had the freight sent later, the storage costs would not have been so high, as the first week of storage is free. It is a matter of making sure that the freight gets there in time, but not too early.

With the gas canisters, we felt a little hard done by. The required "special packing to IATA standards" merely involves wrapping up the canisters in newspaper and then packing them into boxes with hazardous stickers on. It might be worth talking directly to an airline about freighting your gas. A lot of expeditions finish with canisters left. The IMF will store these for a fee, so it would be worth asking to see if you could buy some in Delhi.

On the way out of India, we went directly to the international cargo terminal to freight our luggage home. We initially tried British Airways, but discovered that, if you are not arranging it through a shipping agent, it is only possible to send unaccompanied baggage on an airline with which one is flying. The staff at the Alitalia office were very friendly and helpful, but the return freight worked out very expensive. Freight charges are levied on a sliding scale, depending on the size of the shipment. We only had 65kg, but it worked out cheaper to send it as 100kg as then it was in the next tariff band. We found it rather strange that, again, nobody actually bothered weighing it. Perhaps we should just have claimed it weighed 30kg? In retrospect, it would have probably been better to have gone to a cargo agent in Delhi and to have had our luggage put into a consolidated shipment. The plunging pound only made things worse. We payed approximately £1 a kilo on the way out and £3 a kilo on the way back.

Clearing the luggage through Heathrow was fantastic compared to Delhi. It took around an hour, and was completely hassle-free, if rather expensive at nearly £20.

Appendix 4 - Guide to Customs

- 1. Collect your paperwork from the IMF. If your freight has come out in a bulk shipment you will need to go to the agent to collect the papers. If it has come out alone you will need to go to the airline office at the cargo terminal to collect the papers.
- 2. Collect a letter from the IMF saying the equipment is for an expedition and is thus exempt from duties.
- 3. Go to the Import side of the cargo terminal, and go to the building marked personal baggage.
- 4. Go to Window No. 1 and collect a baggage declaration form (these must be collected before midday).
- 5. Fill in form. Under description of baggage put "personal clothing and equipment for climbing expedition". Under value put "no commercial value".
- 6. Return to Window 1 or 2 (depending on which one they happen to be using) give them all your paperwork and wait for it to be returned with a baggage location form.
- 7. Take this form to the customs shed (next door) and show it to the customs officer just inside the shed.
- 8. You will be told which gate number to go to. Go to this gate inside the shed and wait for your freight to be fetched.
- 9. When a porter has fetched your freight give him a tip.
- 10. Wait for a baggage opener to come and open your freight. He will also fetch a customs officer to check it.
- 11. Show the customs officer the letter from the IMF and all your other paperwork. See what he says.
- 12. When he is satisfied he will write on the baggage declaration form. You should then take this form to a supervisor who will stamp and sign the form.
- 13. Your freight will then be resealed. You have to pay for this. Also tip the people who opened and sealed your freight.
- 14. Take all your paperwork back to Window 3. You will then be given a bill for storage and handling charges.
- 15. Go to the Bank window and pay these charges.
- 16. Take your receipts and paperwork back to Window 3. You will be given some papers authorising the release of your freight.

- 17. Return to the shed and give these forms to the customs officer by the entrance to the security area.
- 18. He will then give these to a porter who will disappear with them. He will return about 20 minutes later with your freight.
- 19. Between the exit to the secure area and the exit of the shed you will need to get your papers signed by various people. The porter should push you in the right direction.
- 20. When you are out of the shed you will be surrounded by people offering to help load your freight onto a truck, and a truck will also appear.
- 21. All these people will, of course, expect a tip. Don't lose your paperwork, as this will need to be checked by the guards at the exit from the terminal.

Appendix 5 - Food Report

Deciding what food to take and where to buy it were some of the hardest decisions we had to make. Discussion on what to buy in India continued even in the shops and markets. Once we had decided that we would have to airfreight equipment out we also decided to buy all our hill food, except nuts, in England, as the cost of the air freight was only £1.05 per additional kilogram. Once one knows that this is all it costs it is very easy for things to get out of control.

On the whole the hill food worked well. It was designed for four people for twelve days. By the time that we arrived at base-camp we had all become heartily sick of shortbread so little of this was eaten on the hill. The other biscuits were also regarded as quite hard going and most of them were eaten at base-camp. The Primula and Salami were definitely the most popular food. The Primula went very well with the cheddar biscuits and digestives though it was rather fiddly. It is very important not to let Primula freeze as if it does it separates and becomes revolting.

The nuts bought in India were very expensive (by Indian standards) and unroasted. Roasting nuts is extremely tedious and took an inordinate amount of time so it is probably better to buy them in England. The boiled sweets were a random assortment from the supermarket. The chocolate eclairs were especially popular and all went. It would have been better if each person had bought his own personal favourites.

Base-camp food was less successful. We had decided not to take a cook in order to save money and avoid hygiene problems. Cooking in the cold and drafty mess tent on badly working paraffin stoves was not much fun. It was impossible to draw up a rota with people coming and going and some days not eating at all. It is probably better to take a cook simply so that it is possible to relax at base-camp and not squabble over duties. The amount of time everything takes is enormous, cooking meals, washing up and organising equipment. The result was that lunch was never more than a plate of noodles. Another reason for having a cook is that they would know how to use the local ingredients much better. As a result of these problems everyone got very fed up with the base-camp food. Towards the end of the trip, however, the Indian expedition did a lot of cooking for us which was extremely well appreciated.

We had intended to buy all our food in Uttar Kashi like the Bhrigupanth expedition the year before. Our L.O. however did not think much would be available there so all the food except for fresh fruit and vegetables was bought at a town an hour out of Delhi on the way to Rishikesh. With hindsight it would have been much better to have bought all the food in Delhi, especially as so much time was wasted there. According to our L.O. there is much more variety and the prices are cheaper.

Perhaps the best way to have improved the food would have been to take out more luxury items like the tuna. A few Vesta meals would have been very welcome and would not have weighed much. A lot of what was taken out was taken merely because it had been given to us, the golden syrup for example.

One jar of marmite would have been sufficient, though it was very nice on chapattis. The six tins of tuna were a godsend and made very nice potato fish cakes with the smash and onions. The golden syrup was good on porridge and was used exclusively as a sweetener in drinks

as the Indian sugar was revolting. Amazingly all six tins of syrup were used. Thirty packets of Schwartz sauces were too many; only about fifteen were used. They do not work very well without meat. The food would have been much better appreciated if some meat had been taken. Only six of the packet soups were used. The packs of butter and the bread were a complete waste. Most of the bread was mouldy. Check it very carefully if you buy any - and the butter melted and went rancid extremely quickly. Nearly all of the eggs smashed on the journey to Gangotri even though the L.O. had said that they would be alright. Take great care packing eggs, use a wooden box to stop them getting crushed as people will sit on them on the bus. It would be a good idea to make one porter responsible for the eggs and pay him extra for each one that arrives safely in base-camp. Do this even if your L.O. disagrees. The jam went well on chapattis. Only a small amount of porridge was bought as only unrolled oats were available and nobody was sure exactly what to do with them. If they are soaked over night then the result is like ordinary porridge. The Indian milk powder was not very good and only the English was needed. The pot noodles were very convenient on the walk in and for snacks at base-camp though it is difficult to cook them properly at altitude. More things like the sausage mix should have been taken as it provided one of the nicer meals. With the resupply we had an enormous number of oranges and apples. Lots of them were given away to Mick, George and the Indians but they never ran out. A few of the lemons and limes were used on pancakes, but after the eggs ran out they were useless. Any items not mentioned above were bought in roughly the right quantities.

There was a lot of wild life at base-camp despite the apparent lack of food. We soon found that our supplies were considered fair game. Any food left out in the mess tent would be dragged off or eaten on the spot. The only safe place in the tent was inside the plastic drums. They were extremely useful for this. We never discovered which animals were eating the food but feline and canine prints were spotted and a lot of birds.

Mount Support agreed to provide a free resupply at base-camp. Unfortunately the date for this and the exact items were not fixed. As a result it arrived only a few days after we did at base-camp, which was rather a waste and included a lot of things that we did not need at that time. Only the eggs were of any use as the few remaining ones had been dragged off by a large cat-like creature.

Amazingly enough, despite the bad planning nobody starved to death and the food did keep everybody going for the twenty-two days spent at base-camp. Probably the best way to plan the food would be to cook a few meals in England with the ingredients available and then plan a series of meals and calculate the exact quantities needed. It sounds like common sense but the expedition did not do it and regretted not doing so. The hill food which had been worked out on this basis was far more of a success.

Base-camp food freighted out from England

1 2kg tin of hot chocolate
2 (1) 0.5kg jars of Marmite
6 400g tins of tuna
6 2lb tins of golden syrup
50 50g sachets of Alpen

7 454g packets of Yeoman mashed potato

1 250g jar of Staminade
30 (15) bags of Schwartz sauces
17 (5) 1.5pt packets of soup
1 packet of sausage mix
4 (3) 2kg bags of powdered milk
41 (21) pot noodles

Base-camp food bought in India

5kg flour 15kg (3kg) sugar 2kg (0.5kg) salt 10kg (7kg) rice 300 (200) tea bags 750g coffee

3 (1) jars of jam 120 eggs

6kg (4kg) oranges

5kg potatoes, far too little 2 large tins of tomato puree

60 packets of noodles

2kg green beans 4 cabbages 2kg peas 1 cucumber 4kg (2kg) apples

6 loaves of bread, mouldy and inedible 2 packs of butter, useless in the heat

3 (2) bottles of tomato ketchup 4kg milk powder, not used 100g of 4 spices, not used

12 garlic bulbs 41 cooking oil

1.5kg porridge, too little

2kg (1kg) lemons 2kg (1kg) limes 7kg onions

Resupply Food (approximate)

2kg apples, not used 2kg oranges, not used 1kg lemons, not used

1kg lemons, not used 1kg limes, not used

8 (4) cabbages 2kg green beans

2kg (0) aubergines, too fiddly

36 eggs, too few

Hill food freighted out from England

12 400g packets of Digestives

12 250g packets of chocolate Hobnobs

24 200g packets of chocolate Homewheat

24 125g packets of cheddars

96 2 finger packets of shortbread

36 packets of jelly

12 50g packets of twiglets 66 sachets of Cup-a-Soup

98 sachets of hot chocolate

2kg bag of raisins

40 mars bars

40 double deckers

40 twixes

40 caramel wafers

78 Jordan's crunchy bars 48 packets of glucose tablets

12 tubes of primula

24 sticks of salami

6 250g packets of boiled sweets

Hill food bought in India

2kg cashew nuts 2kg (1kg) almonds 2kg (1kg) peanuts

Brackets indicate how much was actually consumed.

Appendix 6 - The IMF and Liaison Officer

Our L.O., Rajiv Tomar, was a student studying tourism and a keen mountaineer. He had been pressurised by his family into doing the job. Most of the time he was extremely helpful, haggling over prices and finding out information. He had previously climbed Jogin I so knew a lot about the area. On some things, though, he was completely wrong. He insisted that it was impossible to get to Utter Kashi in less than two days. We did in fact get to Uttar Kashi in around twelve hours. He also said that we would only be able to buy potatoes and a few other things in Uttar Kashi. He was completely wrong on this as most foodstuffs were available. It was felt to be undiplomatic to mention these disparities.

He was also very good at being wise after the event, a habit that became extremely irritating. At base-camp he said that Mount Support were the most expensive agency to use and that others would have been just as good. He had not breathed a word of this before however. He also complained a lot about the food. He said that all the wrong things had been bought even though we had discussed extensively with him what food to take.

He suffered from bad diarrhoea on the walk in to base-camp and never recovered enough strength to do any climbing. He became increasingly bitter at base-camp and complained about the way he was treated. One day he would go on about how he did not want anything from the expedition, the next he would ask for all sorts of equipment. Tony and Tig had been given various free pieces of clothing by manufacturers. He thought that they had been given to the expedition for him and was aggrieved that he was not given them. For most of the time he was helpful so we decided to give him an epigas burner, the remaining gas canisters and some items of his kit.

Liaison Officer's Equipment

The Liaison officer was supplied with equipment as set out below in Delhi. His 'friend' who came with him insisted that he was bought some trainers as not knowing his shoe size it had not been possible to obtain any boots for him in England. The L.O. was also a little unhappy at the lack of waterproofs but decided that it did not matter. He also decided to take his own sleeping bag with him as he did not think that the one provided would have been warm enough. The only items of equipment purchased for the L.O. were the trainers and a fleece, a total of around £30 and a very considerable saving on the budgeted £500. The rest of the equipment was borrowed from the Clare Rats.

Karrimat
Jaguar S65 Rucksack
K2 crampons
2 Ice axes
fleece top
sit harness
4 season sleeping bag

chest harness helmet head-torch balaclava glacier goggles trainers Goretex mittens

Appendix 7 - Weather

The intention of the expedition during planning was to arrive in the Garhwal just as the monsoon was leaving the area. This would have given us the maximum amount of climbing before having to return to university at the start of October. However, the weather on this occasion did not seem to follow its usual reliable patterns.

Before we left Britain, we knew that the weather situation would be different from our expectations. Reports had reached English newspapers about the complete failure of the monsoon on the plains.

Our week in Delhi saw the start of a significant period of rain, two months after the monsoon should have begun, with sporadic heavy showers often drenching us unexpectedly. In our stay there, the city became noticeably less dusty and more humid.

In the foothills around Uttar Kashi, very little rain had fallen before we arrived there by mini-bus. Upon our arrival it rained solidly for many hours. The effects of this downpour were immediately apparent the next day on the road to Gangotri, in the form of a huge landslide.

Thankfully, the days spent on the walk-in were free of rain. The sun shone during much of the day, and the sky was so free of cloud that Thalay Sagar, at the head of the valley, could be seen from the first camp. The sun remained visible until the afternoon we arrived at base-camp, when, whilst we were unpacking the porter loads, cloud suddenly blew in from the col by Thalay Sagar and the rains started. The monsoon had finally caught up with us.

From that time onwards, the weather followed a predictable pattern. Mornings were always the clearest time of the day, and we were generally able to see Manda for all of the first week. By the time the sun had reached half way down Jogin II, wisps of cloud were already blowing in from the south to hang above the valley. Afternoons were marked by cloud, often with heavy rain or snow. This would continue through the night.

The head of the valley held cloud almost permanently. During the second week, trekkers started to arrive at base-camp to view Thalay Sagar, but very few were lucky enough even to glimpse it during their stay. The temperature steadily dropped and the amount of precipitation rose during our stay at Kedar Tal. The temperature in base-camp (4700m) fell to -12 degrees, and by the end several inches of snow were falling each night.

On the mountains these conditions were accentuated. With daily snow falls, little consolidation occurred on the faces. This made for dangerous avalanche conditions and painfully slow progress. The incredible speed with which cloud appeared and closed in added to difficulties.

The final week in base-camp was spent in virtually perpetual cloud and drizzle, with visibility less than 30 yards. This was extremely demoralising and provided little incentive to try and stick it out another week, in the hopes of a let-up so the snow could consolidate. The weather did finally improve, but too late. John, Richard and Jim descended in weather as perfect as when they had arrived.

This season's weather in the Himalaya was some of the most anomalous in living memory. Because of the extremely late monsoon, instead of arriving at the beginning of everimproving clear weather, we found ourselves climbing through conditions more akin to Patagonia. We felt sorely cheated by the weather. The monsoon reigns supreme!

Appendix 8 - Medical Report

In Cambridge, the Department of Community Medicine provides a valuable service for university-approved expeditions. Lorraine Perril, the Occupational Health Nurse, organised the medical kit after an interview with Jim. Most of the drugs were obtained free or at a discount from the drug companies through the scheme. They also provided a booklet for diagnosing and treating common medical problems on expeditions. Finally they organised a question and answer session with a doctor at the department. All of this was extremely useful and saved the expedition a considerable amount of money.

The department recommended the following inoculations:-

Typhoid Rabies Hepatitis A Polio
Japanese B Encephalitis
Tetanus

The Rabies vaccine is expensive: two shots are needed at £25 each. It is much cheaper if you can arrange for six people to have it at once as the vaccine is sold in doses of six, so it costs the same as for one. We only took the first Rabies inoculation, but this still provided some protection. The Japanese B Encephalitis inoculation is also expensive. The disease is transmitted by mosquito bites and is not common. As the period of our exposure was so short - transit time from Delhi to base-camp - we decided to miss this one out as well. There is risk of malaria in Northern India. Paludrine, two once a day, and Chloroquine, two once a week, were taken for prophylaxis.

We also took the book *Mountaineering Medicine*, which provided amusing reading, in its explanations of how to perform appendectomies and other operations. Most of us felt that we would rather take our chances than risk medical treatment from any of the other expedition members. Data sheets were also ordered from the 'Mountain Medicine Centre' on acclimatization and frostbite. Unfortunately, these did not arrive in time.

Lorraine Perril recommended that Diamox (Acetazolamide) be taken to aid acclimatization. Everyone took two tablets a day for five days starting in Gangotri. Diamox helps to prevent cerebral and pulmonary oedema by acting as a diuretic. It also inhibits the excretion of carbon dioxide, making one breathe more, and so preventing cyanosis. A side effect of the last property is tingling in the extremities. Some of us found this so acute that they stopped taking the drug.

Everyone acclimatised fairly well on the walk-in except Richard. He felt extremely weak and was very slow. For most of the time at base-camp he coughed up blood and had little appetite. He did not have any other identifiable symptoms. Every time he tried to go above base-camp he felt nauseous and dizzy and coughed a lot. Towards the end of our stay, he stopped coughing up blood, and he fully recovered in the valley. Everyone developed dry coughs to some extent, but these were not a problem.

The L.O. suffered very badly with diarrhoea and vomiting on the walk-in. On the second day, he was moving extremely slowly and was requiring frequent rests. He stayed with two porters at Kedar Kharak for several days to recover. He was treated with a course of Flucloxacillin (Floxapen).

All of us, except John, suffered from diarrhoea to a lesser extent on the journey to base-camp, despite precautions (only bottled water was drunk, no street food was eaten, etc.). John escaped, we reasoned, as he lives in Yorkshire and was used to bad hygiene and strange bugs. All of the Rehidrat sachets were used, and other similarly-sized expeditions should take at least twice as many. A little of the Imodium and Codeine Phosphate was also used.

At the end of the trip some of the drugs were given to the Indian expedition and the others burnt. None of us had any medical problems in the UK subsequent to the expedition.

Medical supplies

Malarial

Paludrine 700 X 100mg Chloroquine 100 X 150mg Quinine Sulphate 30 X 300mg

Antibiotics

Ampicillin 40 X 500mg
Tetracyclin 50 X 250mg
Augmentin 30
Flucloxacillin 20 X 250mg
Fasigyn 20 X 50mg
Norfloxacin 14 X 400mg
Trimethoprim 30 X 200mg
Ciprofloxacin 40 X 250mg
Erythroped 56 X 500mg

Diarrhoea

Codeine Phosphate 50 X 30mg Imodium 30 X 2mg Rehidrat 30 sachets

Constipation

Senokot 60

Altitude

Acetazolamide 40 X 250mg

Analgesics

Paracetamol 100 X 500mg Dihydrocodeine 10 X 30mg

Antihistamine

Triludan 30

Eye ointments

Chloromycetin 1 X 4g Brolene 1 X 5g

Miscellaneous drugs

Hydrocortisone cream 1 X 30g Algipan 1 X 40g Betadine 1 X 8ml Insect repellant 2 X 35g

Dressings

10 X eye pads

2 X triangular bandages

1 X varicrepe bandage

1 X 8cm bandage

1 X medium sterile wound dressing

1m sterile absorbent gauze

12 X non-adherent absorbent dressings

10 X sofra-tulle dressings

1 X sterile pad

5 X hypoallergenic skin closures

1 X roll elastoplast

11 X coverlet adhesive dressing

40 X assorted plasters

2 X 500cm micropore tape.

Miscellaneous

6 X Medi-Swab

15 X cleansing towelettes

3 X 5ml syringes

2 X 10ml syringes

3 X no. 14 needles

3 X no. 2 needles

1 X I.V. Cannula (1.2mm))

Appendix 9 - Bibliography

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Babicz, Jan. Peaks and Passes of the Garhwal Himalaya, (Cordee, 1980).

Expedition Planners' Handbook & Directory 1988/89, Nigel & Shane Winser, ed. (London 1990).

Medicine For Mountaineering, James A. Wilkerson, M.D., ed. (Seattle 1985).

India a Travel Survival Kit, Lonely Planet.

Information packs, Mountain Medicine Centre.

Alpine Club Journal 1987.

British Bhrigupanth Expedition 1991 Report.

British-Indian Police Himalayan Expedition 1986 Report.

British Gangotri Himalayan Expedition 1990 Report.

Expedition reports can be obtained from the Expeditions Advisory Centre. Mountain Medicine Centre information packs are available on a range of topics and contain a lot of useful information and advice.

Appendix 10 - Distribution List

British Mountaineering Council Mount Everest Foundation Alpine Club British Library National Library of Wales National Library of Scotland Wellington College University Library, Cambridge
University Library, Oxford
Expedition Advisory Centre
Cambridge University Explorers and
Travellers Club
Clare College library
Indian Mountaineering Foundation

Appendix 11 - Useful Addresses

Useful addresses in England

Expedition Freight Ltd.

Pant y Cafn
Llanberis
Gwynedd
LL55 4UW

tel: 0286 870052

SOS Air Cargo Ltd.
Room 101, 102 building 308
Cargo Terminal Manchester Airport
Runger Lane Ringway
Altrincham WA15 8UX

Mount Everest Foundation

W.H.Ruthven Gowrie

Cardwell Close

Warton

Preston

PR4 1SH

British Mountaineering Council

Crawford House Precinct Centre Booth Street East Manchester

M13 9RZ

tel: 061 273 5835

Expeditions Advisory Centre

1, Kensington Gore London SW7 2AR

tel: 071 581 2057

Mountain Medicine Data Centre

c/o Dr. C.Clarke

Dept. of Neurological Sciences

St. Bartholemew's Hospital

38, Little Britain

London EC1A 7BE

Useful addresses in India

Blue Mount Villa C-2/10, Vasant Vihar, Near Tagore International School (Opp. Paschimi Marg) New Delhi - 110 057

Tel: 670102

British High Commission Chanakyapuri

New Delhi - 110 021

tel: 601371

Indian Mountaineering Foundation Benito Juarez Road Anand Niketan New Delhi - 110 021

tel: 671211/602245