

**The 1989 East face of Kedarnath Dome Expedition  
(To Gangotri, India in August 1989)**



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## Acknowledgements

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The biggest vote of thanks must go to the British Mountaineering Council and the Mount Everest Foundation for their grants and support. A particularly big thank you must also go to Colchester Colour for so kindly supplying all our film needs, free.

We put very little effort into asking for equipment until just before leaving, being such novices at the Expedition game. It is incredible how generous many companies were in supplying gear at cut price to a team attracting so little publicity.

### Grants

Mount Everest Foundation - £700  
British Mountaineering Council - £500

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Colchester Colour Processors - all the free Agfa film we needed  
Epigas - Butane/propane gas  
Markill - Markill stormy stoves  
Rab Carrington - Andes duvets  
DB Mountain Sports - Messner scissor crampons  
Harvest - free food  
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## **Abstract**

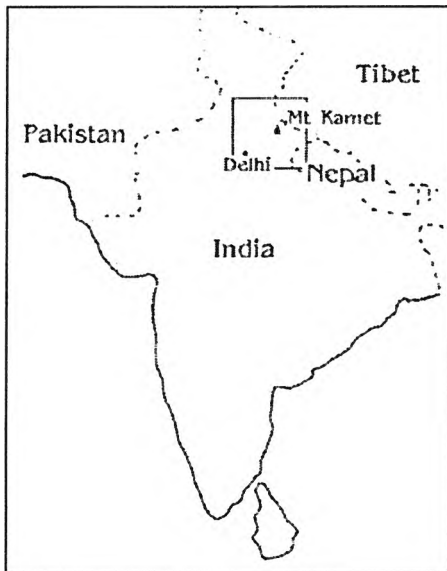
David Fletcher (leader), Ian Dring and Julian Mathias left for India in July 1989. After travelling via Hardwar and Uttarkashi we started the walk to base camp from the roadhead at Gangotri village. A two day walk took us from 3,100 metres to base camp in upper Tapovan, directly under Shivling, at 4,500 metres. Base camp was set up by David and Ian on 27 July and Julian arrived, with the Liaison Officer, at base on 6 August.

On August 10 we all made an attempt on the unclimbed East face of Kedarnath Dome (6,831 metres), via a route previously attempted by a Polish Expedition in 1986 (up the ridge on the left of the face). After only two days climbing and 14 pitches we were hit by a storm and safely abseiled off leaving equipment for a second attempt. The weather, however, had other ideas and no further attempts were made. We can be grateful, however, that no serious illness or injury occurred to anyone on the team.

I advise against August for future Expeditions to the area. The Expedition cost us about £1,200 each.

## Introduction

In the summer of 1988 I had a yen to try some relatively safe and low altitude Himalayan climbing and knew about the East Face of Kedarnath Dome in Gangotri, India from Duncan Critchley and Mountain 84. I was surprised to discover that it was still unclimbed and wrote to the Indian Mountaineering Foundation (IMF) to book the face. I was offered Kedardome, which I soon found out is the same mountain, for August 1989 but unfortunately the East face was booked for September although, I only discovered much later, by another British expedition.



I immediately contacted Duncan who pointed out that I must first check that August had reasonable climbing weather and in the first flush of anticipation I perhaps fluffed this stage. So many expeditions had gone to Gangotri in August, some succeeding, that it felt unlikely they could all be mistaken and on top of that a few books said the monsoon finished in Gangotri in mid-August. Life is a risk and I happily took the plunge and sent the IMF \$900 of my money.

In 1982 Chris Bonington had said that the pillar, if climbed, "would undoubtedly be the technically hardest route yet to be climbed in the Himalayas" so a good team would be needed. Julian Mathias joined the team in October but soon after John Mothersesele decided definitely not to come.

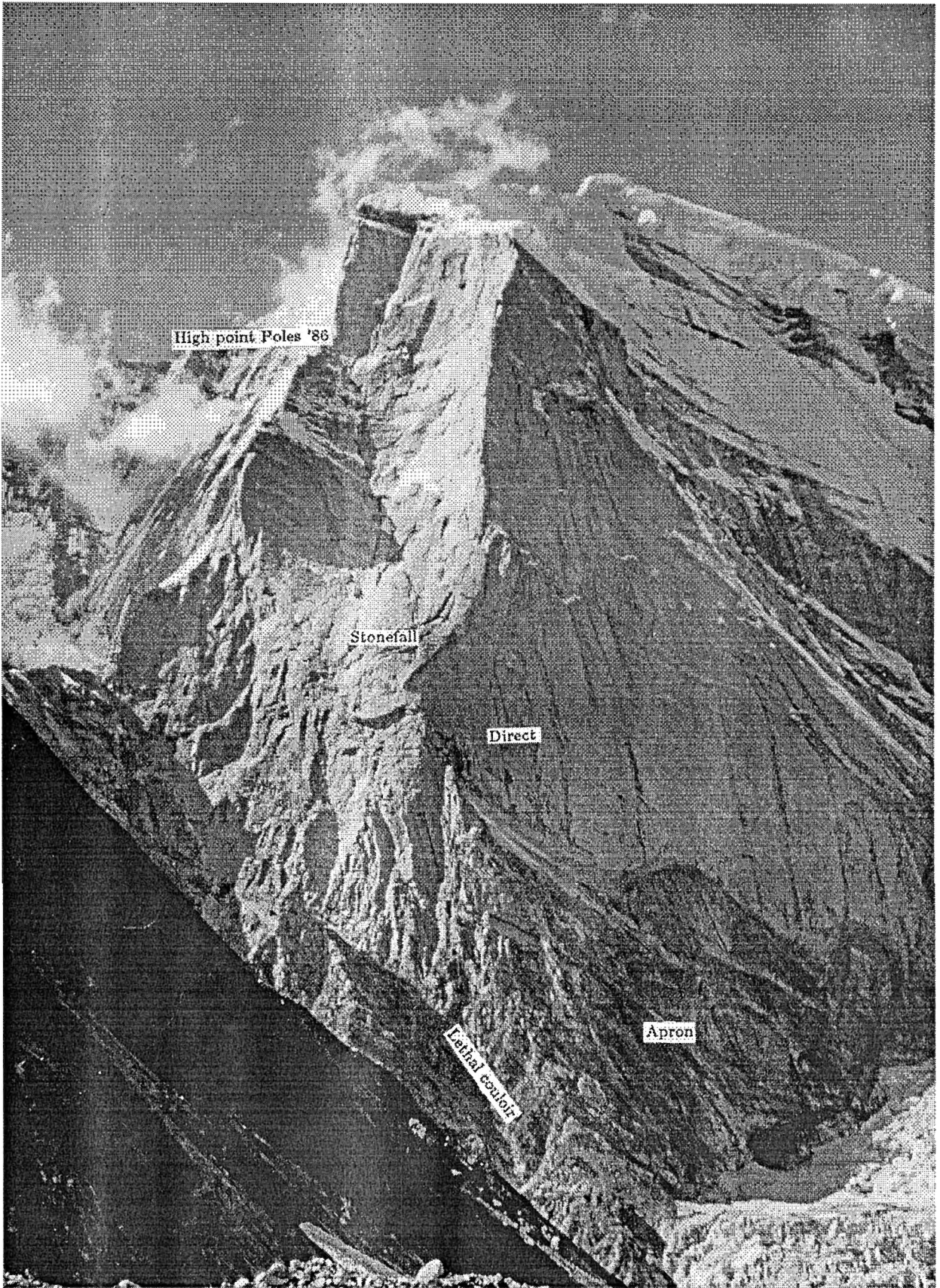
In February Ian Dring joined the team and was a very welcome and energetic member. Several other people were invited but couldn't make it and unfortunately Duncan had to drop out in June when his elbows got tendonitis. So we were down to a bold three but, if all of us stayed healthy, we knew that three can be a good number for a big wall.

## Objective

As Chris Bonington puts it in 'The Everest years' :- "It [the East face of Kedarnath Dome] looked attractive - a 2,000-metre face that in the pictures seemed as sheer and as blank as the walls of Yosemite... It had everything, hard challenging climbing, size, easy descent and because it faced east, it got the early morning sun, more than a luxury after cold bivouacs."

There are three obvious quality lines on this vast face. The most prominent of these is the pillar up the middle of the face which was the line we had originally hoped to attempt. This had seemed from photos given us by John Mothersesele to be the best and safest line. because any line off the pillar would have to finish via a band of shale, a common and nasty feature on many Gangotri routes. Another difficult line is up the face to the right of the pillar (although finishing up the very top of the pillar) and this route, which I've termed 'the Direct', was attempted by Barry Barrett. Lastly there is the ridge we actually attempted on the extreme left of the face, which had already been attempted by the Poles in '86. Incidentally, the face on the left of the pillar is swept by stonefall.

The first two lines take the main challenge but start only a few hundred yards apart at the top of the apron and meet again at the 'snow blob' at one third height (see later picture of



The East face of Kedarnath Dome, photo John Mothersole October '84.

There's substantially more snow, on the apron and in the lethal couloir, in September.

East face). However, we had originally hoped to go to the left of the upper pillar and Barry's team to the right, which would have kept the lines distinct. It is also possible that there is another line further right again but the far right hand side of the face has seracs collapsing down it.

The height of the face was up for debate but the very bottom of the wall is at about 4,900 metres and the summit is at 6,831 metres. I estimate the wall to be 1,400 metres high and the final 2Km long snow crest to the summit probably involves a 500 metre height gain. We had planned to climb the pillar somewhere between a capsule and an alpine style with ethical considerations taking a strong second place to a flexible and practical approach. The route we finally attempted was tried in pure alpine style.

The Poles in '86 had started by traversing the very bottom of the lethal couloir immediately to the left of the pillar. They then made their way up and left on a ramp system to a snow crest from where they went up the ridge on the extreme left of the face (the South-East ridge?). The route we eventually attempted started slightly differently. We started from the highest point of the snow fan, immediately to the left of that dangerous couloir, from where one steep pitch took us to a zig-zag set of ledges. Then, just before getting back to the main ramp, we took a steeper ramp to join the main ramp and the Polish route.

## History

Kedarnath Dome was first climbed by a bunch of very fit Swiss in 1947 via the now very popular (easy) NW ridge. No other route has yet been put up the mountain. The East face is one of the last great problems of the Gangotri area and has had several attempts.

Chris Bonington came to Gangotri in 1982 and considered the ridge on the left of the East face starting from the subsidiary glacier at the base of the ridge. But with only a team of two he felt that it was too bold and went off to put a new route up the SW ridge of Shivling instead.

In October 1984 a British team, led by Martin Moran, arrived but a combination of illnesses and the short, cold days of mid-October meant that no attempt was made on the face.

A Polish team, led by Marek Grochowski, made a fantastic attempt on October 1st 1986. They took a ramp system to the left hand ridge then went up the ridge to within a few hundred feet of the shale-band at the top of the face in seven days of climbing at grade IV-V UIAA. They then ran into continuous snowfall which made them retreat after a further 2 days; and it must have been a very difficult retreat from so high on the face.

Another Polish team including Barry Barrett, led by Marek Raganovicz attempted, in August 1987, the Direct route. They set up a camp at the top of the initial apron but, only a few pitches up the wall, the strap holding a rucksack to a piton snapped and a lot of their gear was lost.

In September 1988 a Japanese team had a shot but all I know is that they were stopped by the bad post-monsoon storm of that year. As far as I am aware there were no further attempts until ours and in the following month Barry Barrett's second attempt.

Immediately after our attempt in August, which was washed out, Barry's team was blessed by September's good weather and they attempted the '87 Polish line. Ropes were fixed up the apron (one hard snow/rock pitch) and they established a snow cave before fixing ropes up the wall. After a few pitches (some 5c climbing) a very hard pitch stopped progress for two days (it would have been about E4/A3 ?) and with only 10 days left and a massive wall above a decision was made to retreat.



## The Team

David Fletcher (29) [leader] Computer Programmer with seven summer alpine seasons including North face of the Eiger and three winter seasons including the Super Couloir. In Yosemite the Nose and Zodiac on El Capitan and a solo of the Diamond Couloir direct on Mt. Kenya.

Ian Dring (30) Research Scientist with 2nd British Ascent PO wall and Mescalito El Capitan, North ridge Ushba (Caucasus), Six alpine seasons included the Cima Ovest direct.

Julian Mathias (30) Dentist with 1st free ascent of the Scott-Braithwaite and 1st ascent S-W couloir direct during four visits to Mt. Kenya. Three summer alpine seasons (plus three in winter) included the Swiss route on Grand Capuchin. Also leader of the 1988 British Ganesh Himalayan Expedition.

Training was mainly having fun climbing at weekends although Ian also managed a very extensive get-fit regime. I tried some long distance running and Julian was lucky enough to have time to just do tons of climbing in Verdon etc.

## Permit & L.O.

A permit, and a Liaison Officer (LO), is required from the Indian Mountaineering Foundation (IMF) for all mountains in India over 6000 metres and the fee for Kedarnath Dome was \$900. This fee should be paid, usually as a foreign bank draft, within 2 months of the provisional booking or the face can be given to the next team asking. The address of the IMF is :-

Mr P.C Katoch,  
Indian Mountaineering Foundation,  
Benito Juarez Road,  
New Delhi - 110 021,  
India.

You will have to fill in a form with the full details of the team. One of the questions is 'Expedition date of arrival in India?'. Do not believe, as I unfortunately did, that this will have any effect on when the Liaison Officer will be ready. The LO will be ready about 2 days before the permit starts and, of course, you are not allowed on the mountain without the LO. You are not meant to be on the mountain after the 31st of your 'month' and you are not allowed to climb any other face of your mountain. Although rules in India tend to be negotiable your \$900 only pays for one face on one mountain for about 2 weeks climbing time, allowing for acclimatisation.

The IMF told me, that the LO would be ready only on 29 July, too late for me to delay the flights so Ian and I arrived in Delhi on 20 July. We got the freighted gas and gear out of customs, amazingly, in one exhausting day. We then decided to go to Uttarkashi by taxi leaving a note for Julian, who arrived on 25 July, to pick up the LO. Contrary to information from previous expeditions, Julian had problems leaving with the LO who he was told should be met by the leader, but succeeded by intelligently promoting himself to deputy-leader.

The IMF building is on the airport side of Delhi near the 'West End'! Julian met the LO, Mr Digambar Singh, and set off by bus on 1st August to meet Ian and I at base camp. The

LO may be one of - an Army Officer, a Police Man or a respected local and we were fortunate enough to get the last.

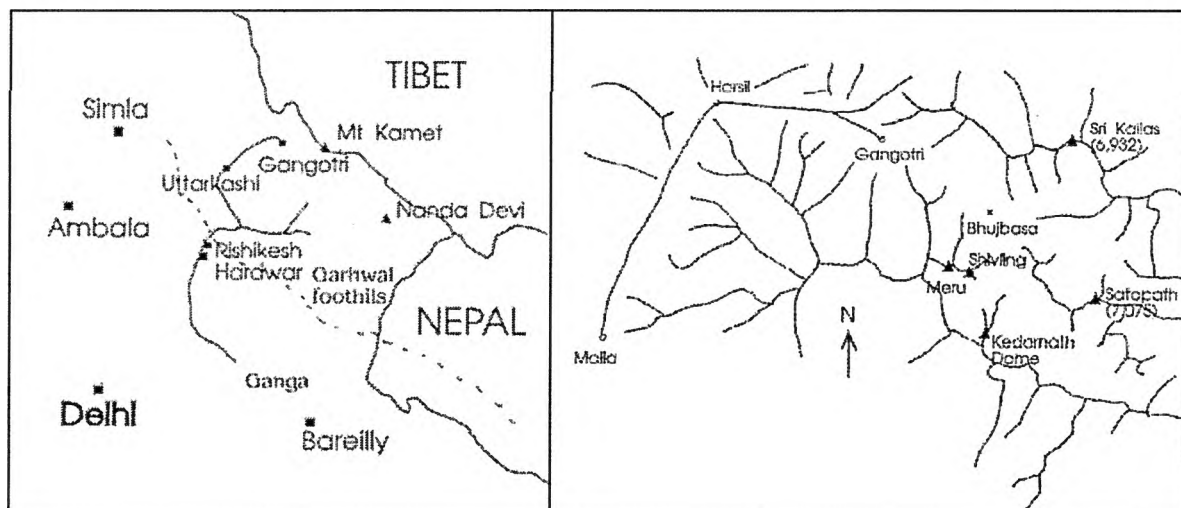
The LO is paid about 500 rupees a month by the IMF (they keep the amount quiet) but you provide all his living expenses. This is not a high wage even in India (a teacher's wage is about 1000 rupees a month). You have to give the LO some clothes of reasonable quality but we gave far more than the minimum required. This was partly because he was a good bloke and partly because he was a fellow climber shackled by the poverty of his country and his equipment.

## Approach

From Delhi to Hardwar and Rishikesh is a flat 280Kms followed by 100Kms up and down to Uttarkashi. There are two main ways to get there - 80 rupees each in two stages (changing at Rishikesh) and usually two days by Bus or 2000 rupees and a long day with a Taxi. At Uttarkashi, where there are 300 gurus (but nowhere to change travellers cheques), we stocked up with supplies and porters. We used a local agency (unless you are rich don't use the Delhi-based agencies) to save time and effort and gain security at an increase in portering costs of 10%. We are very happy to recommend Budhi's Mount Support whose address is :-

Budhi Rama Singh,  
Mount Support,  
Post Box No. 2,  
Uttarkashi 249 193,  
Garhwal,  
(U.P) India.

We managed, after tense negotiations, to get permission from the Uttarkashi police to go ahead of the LO and set up base camp. From Budhi we hired a lovely large cook tent, he gave us an Indian flag and we insured our two High Altitude (HA) porters and the cook. This insurance, with 15,000 rupees of cover, cost 75 rupees for a month for each person.



Delhi to Gangotri

Surprisingly we needed 22 Porters on the way up - gear 9, kerosene 2, eggs 1, food 7, kitchen tent 2, and kitchen utensils 1. To make life easy we hired a bus for 1,500 rupees to take all of us for the 6 hour and 99Kms journey to Gangotri. The public bus is a squash but only 53 rupees return.

The road head is at Gangotri from where the almost dangerously (from the point of view of acclimatisation) short walk-in begins. Gangotri is a tiny village at 3100 metres in a beautiful wooded valley between leaning solid granite walls and the roar of the youthful Ganga, the holy Ganges. The hotels are OK but watch out for the fleas. Ian and I received the blessing at the temple of the goddess Ganga; reminiscent of the blessing in all those Everest books at Thyangboche.

The first stage beyond Gangotri is to Bhujbasa at 3,730 metres in an easy 5-6 hour stroll (16Km) which takes a well defined path passed the 'Forest Rest House' at Chirbasa. The next day from Bhujbasa the trail cut across boulder scree and moraine to Gaumukh, the birth place of the Ganga. After watching pilgrims bathe in the freezing water at the mouth of the Gangotri glacier we climbed up to the left and onto the East side of the glacier. The Gangotri glacier is almost totally covered in scree and boulders and isn't much fun but eventually after crossing the glacier and climbing the moraine we arrived at the grassy plateau of Tapovan. Tapovan is in a lovely ablation valley, the fertile hollow lying between the crest of the glacial moraine and the mountainside, and in this case the mountainside is the incomparable Shivling.

We had decided to set up base at upper Tapovan, which is about another hour up the side of the valley (5hrs or 14Km from Bhujbasa). This cost us another days wages for the porters - the pay is unrelated to the number of days they work and is simply related to 'stages', for each of which you have to pay a day's wage. I still feel this extra cost was worthwhile and base was set up at about 4,500 metres on 27 July. Incidentally the porter rates were 50 rupees per stage (there are 5 stages to Tapovan or 6 stages to upper Tapovan). The porters to Tapovan do not require any special equipment and to Sundaban you would be able to negotiate it so that they would require little extra equipment.

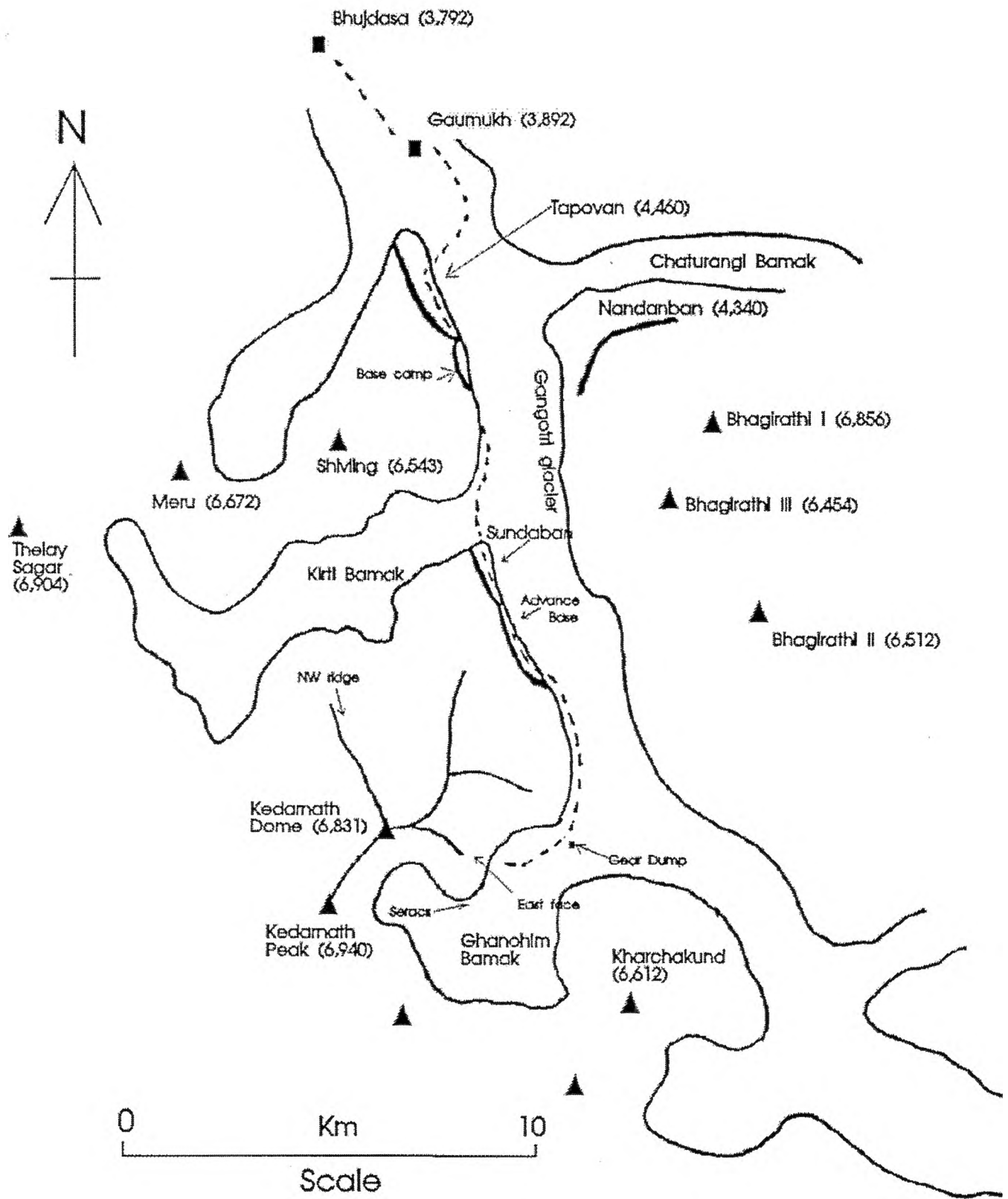
The cook and HA Porters cost 85 rupees per day and it cost 20 rupees a day for the hire of a set of basic mountain clothing for them (sleeping bags etc). The cook and high altitude porters are paid from the moment that you leave Uttarkashi to their return and carry only their personal gear to base camp. On top of this an extra 10% of the costs of all wages go to Mount Support (for organising everything). Finally you have to pay for everyones journey up to, and down from, Gangotri.

## **Advance base and East face dump**

Thus in 3 days we had gone from 1,000 metres at Uttarkashi to 4,500 metres. The following morning we were amazingly both able to carry a 15Kg load to upper Sundaban with our two ultra fit HA porters (Portum and Ram Singh).

The route was via a steep trail traversing down to the Gangotri glacier and then along the edge of this glacier until the Kirti Bamak glacier came in from the right. Every piece of glacier we crossed below 5,000 metres was over contorted scree and boulders and this route is a classic of the genre. These glaciers were variously tried in trainers and koflacs but seemed to be best in light walking boots. Before the Kirti Bamak there is a nasty and steep moraine to the right with many dangerous sections, which some people traversed quickly under, and others steered out onto the more awkward glacier far enough to feel safe. Both Barry's and our team experienced close shaves from serious rockfall here and in heavy rain this section could be very dangerous.

Then it is across the junction of the Kirti Bamak and Gangotri glaciers which is nasty work all the way but the best rubble route available was clearly marked by energetic Ian over the next few days. After three and a half hours from base (later Ian managed this in less than an hour and a half) we arrived at Sundaban which is a lovely flat grassland with two streams running through the middle; although both rivers dry-out most mornings and during some



Map of Gangotri

seasons. We then went on to what we dubbed Upper Sundaban (it's otherwise known as Kedarban), at about 4,600 metres, which is about an hour further up the edge of the Gangotri glacier and a more reliable water source. I now realise this is the best spot for a base camp when attempting the East face and we left our loads here, which became the site of our Advance Base.

Over the next four days we and our HA porters got about 70Kg to advance base and a further 95Kg beyond, to a dump about half an hour from the bottom of the East face on the Ghanohim Bamak glacier. It was only on the fourth day that I made a carry to the East face dump with the porters. Ian had seen the face the day before and declared that our proposed route, the pillar, was too dangerous, because it was exposed to stonefall in its lower section and that we should try the route attempted by the Poles in '86. I agreed to try this excellent alpine route but felt on first seeing the pillar, and now, that the pillar is a reasonably safe and a truly formidable line.

We sent the HA porters home then climbed to below the NW ridge for acclimatisation and to recon the descent route. We reached a previously well used and flattened camp-site at 5,200 metres and we left some gas and food for our descent from the East ridge.

## The Attempt

On 6 August Julian and the LO arrived. Julian, who has proved he can acclimatize extremely fast, felt good and fit so we soon set off for our first, and what proved to be last, attempt. Until now the weather had been far from perfect but generally only rained lightly in the late afternoon, so we were hopeful.

We stopped at upper Sundaban for the night before starting up the bottom of the East face midday on 10 August with about 30 man days of food and gas (see 'objective' for route taken). We climbed four pitches to a lovely flat ledge with running water and fixed three pitches. The jumaring with such heavy rucksacs was knackered but we had started. The last rope was fixed to a bolt, the only bolt we were to place on the way up but there was no choice in the glacier polished rock. The grades of the pitches that day were approximately VS, D, M, D then VS, HVS, HVS.

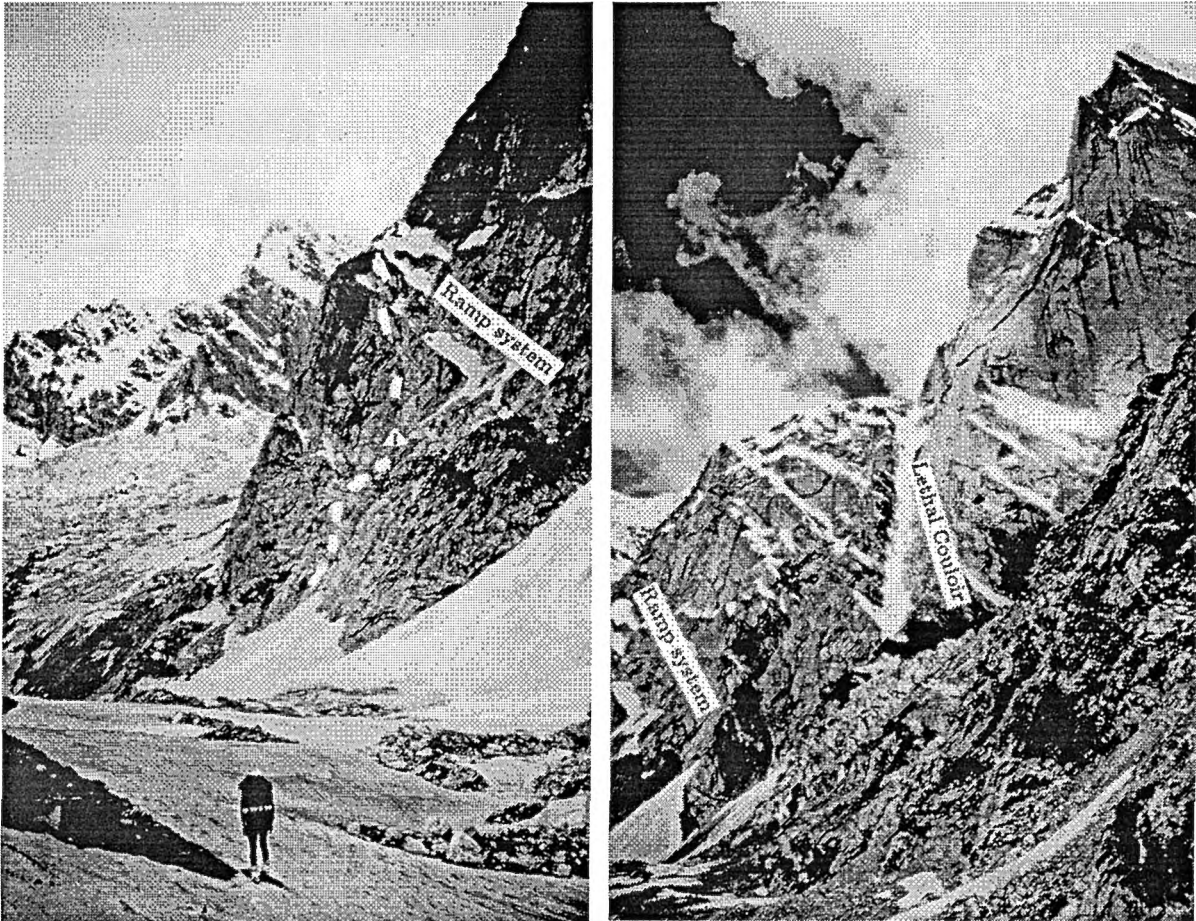
A lovely morning dawned, although it soon became misty, and we were ready at the top of the ropes for 9.00. The prow of our original route towered majestically over us all day, the rock scenery was truly impressive with 1,000's of feet of steep granite soaring into the mist. After another 5 pitches we arrived at an exposed snow crest and the top of the ramp. Once at the top end of the snow crest I was reluctantly persuaded, it was only 1.00, that we should stop on another lovely dry ledge and merely fix three ropes above. To be fair, the reason for stopping was that with only steep dry rock visible above we might not find any snow for water, a real problem on the face, which would make continuing counter-productive. The grades of the pitches had been severe, with the odd move of VS, the whole way. The climbing had so far been generally good quality slab climbing on solid rock with reasonable protection and there had been no stonefall.

During the night heavy rain came in and soon turned into heavy snow-fall. We all got damp but Ian, who was in the home made Matrix covered hill tent without gortex cover, was soaked. In the morning it was still cloudy and didn't seem to be improving much. Besides it was still so early in the month that we decided to leave the food, gas and some gear for a second attempt and abseil off.

On the descent we left three bolts, two on the last abseil which we left fixed for an easy return. We got back to Upper Sundaban for the night and it rained again.

## Failure

The weather was poor for a few days and Ian descended to meet his wife in Gangotri. By the time he returned on 18 August the weather had improved and we planned to leave for our second attempt on 20 August. Then we had to delay leaving for a day because Ian had a bad sore throat. He soon also had a temperature and was obviously out for the count. Julian and I considered a 2 man attempt, but decided against. Now with too little time to allow Ian to fully recover we cleared the East face dump and advance base, after continuous rain on 22nd and 23rd but still in poor weather, before an incredibly heavy rain storm from 26-28 August.



The bit we did

and the massive East face

## Descent

Julian left on 27th August and Ian and his wife left in tipping rain on the 28th (to have a harrowing descent with much dodging of falling rocks) to leave the LO, the cook and I with the company of the newly arrived Barry Barrett and team. That day we had some interesting mud slides and boulders crashing down towards base and in the evening it started to snow, the only time it snowed that low (early morning was usually between +1 and +5°C at base). But the next morning was fantastic without a cloud in the sky and the surrounding peaks were absolutely stunning. The porters arrived and base was left better than we had found it (Ian had cleared the area of tin-cans and rubbish left by others). Please note that the Indian authorities are considering closing Gangotri on account of the rubbish left by climbers and trekkers. We all carried immense loads, in direct contrast to no load on the way up, so that only 6 porters were needed.

## Conclusion and reflections

During the descent from base I felt the Expedition had been a total failure, but my views have mellowed with time. I still feel that from a climbing point of view the energy was too easily wasted and I will stick with the Alps in winter for the best climbing has to offer. The experience itself, however, was very powerful, and I feel permanently changed, but it will take a few years yet to find the motivation for another shot.

August is a poor month and a year or two's delay for a better month would have been very wise. None-the-less I have a niggling suspicion that we could have succeeded even with the weather we had, at least on the easier route we had attempted, if we had taken synthetic sleeping bags in gortex bivi bags and had a better team spirit. It would, however, have been a good risk because the finishing snow ridge would be dangerous and exhausting after fresh snow and having enough gear to abseil the whole route would be problematic.

While the IMF persist in stating that one month, Delhi to Delhi, is quite sufficient for any route in Gangotri I feel that the style has to be damn close to alpine (i.e fast). A good, well organised team with fine weather and fast acclimatisation still has very little time to fix ropes up the wall. I feel Barry Barrett's team proved this point.

The obvious routes on the face, ready for a first ascent are:-

1. The 1986 Polish line which would be a fantastic alpine route, if avoiding the main challenge, for 2 or more needing perhaps 7 days at HVS. There are also two quicker and more dangerous potential starts. The route itself is very safe except for a 200 foot (?) shale band at the very top of the face which would need care.

The quick starts are first straight to the top of the lethal couloir which would be very exciting and would have to be climbed solo at night, and fast. Second from the upper Ghanohim Bamak on the left of the ridge. We didn't explore that way but saw that the Ghanohim glacier pushes one towards the right side (looking up) and that there is a band of seracs where the glacier turns sharply up and right.

2. The Barry Barrett line, the direct route, would need a team of 3 or 4, probably in a capsule style. From the top of the apron possibly 15 days food each and maybe 10 ropes or more for the team but it would be heavy duty big wall stuff.

3. The pillar has an easier start, above the apron, than the direct route and may be possible in alpine style. I have heard from Barry's team that they noticed some ice and rock fall, above the apron and at the bottom of the pillar, where Ian had predicted. Also they felt there would be either ice or wet rock under the initial curving roof that would have to be followed. I, though, still have stubborn faith in this line from its direct, generally safe and relatively low initial angle which could mean speed.

The face itself is still there, vast and simple, and would be a wonderful challenge for anyone.

## **APPENDIX**

### **The weather**

#### **The risk**

One of the main precepts of the Expedition was that, although August was undoubtedly a risky month and we were likely to get wet in the first half of the month, the weather would probably clear for the second half. We understood the monsoon weakens considerably by the time it reaches the Gangotri area and from 1984 to 1987 the monsoon apparently failed to reach Gangotri altogether. But we based our hope on the fact that a number of publications also suggested the monsoon should finish in the area in mid-August.

The only advantage of August is that it is a lot warmer than September - thus making hard rock climbing easier. Some Expeditions undoubtedly succeeded even in years with a wet monsoon - for example the Thelay Sagar NW couloir was first climbed in August 1988 and while we were there an Italian Expedition took a gamble with avalanches and succeeded on the West ridge of Kharcha Kund.

#### **Our experience**

This year the monsoon in India started 10 days late, was relatively weak in the north of India (92% of normal), but was very stormy. Thus for almost half the days we could, potentially, have climbed all day and only on five days did it rain all day. However, the largest number of consecutive potential full climbing days was five and this had a solid day of rain and more poor weather either side. In the first half of August we only had light rain but in the second half, particularly in the last week, we had the worst and heaviest rain.

There was no weakening of the monsoon until the 29th August when we had two completely clear days followed by some rain before the monsoon finally left on 2nd September.

#### **The monsoon system**

In winter the cold land mass of Asia produces a very powerful high pressure area, this produces a prevailing northerly wind over India. Throughout the spring as the main land mass warms up the high pressure system slowly breaks down to a point where it allows the warm moist air from the Bay of Bengal and the Indian Ocean to penetrate into India. Thus the monsoon breaks over Calcutta and Bombay at approximately the same time, about 10th June, and then moves across India to, for example, reach Delhi on average on the 23rd June.

The moist monsoon winds from the Bay of Bengal reach up the Gangetic plain and into the foothills of the Himalayas. However to reach the Gangotri region the air is forced to travel almost a full circle back on itself, weakening all the way, as it follows the deep upper Ganges Valley.

Towards the end of the summer the high pressure system over the landmass of Asia begins to develop again until the prevailing dry northerly winds again dominate in India. The monsoon normally retreats from Delhi on 10th September and from Calcutta on 25th September.



## **Gangotri weather**

First, monsoon failures in the region are far less likely than the eighties would have one believe. Also 'monsoon failure' is only a relative term so that there had still been frequent heavy afternoon showers in the area.

After talking to the helpful and knowledgeable Nehru Mountaineering Institute (Uttarkashi) Principal, Group Captain A.K Bhattacharayya, I feel that September is easily the best month for Gangotri. The monsoon normally finishes between the 30th August and 8th September and the following two weeks are almost invariably excellent. Through September the afternoon clouds and showers develop a bit and it gets colder but October is usually clear and freezing. September's only real problem, common with the whole of the Himalayas, is that usually a post-monsoon storm hits at some point in that month. Its strength and duration is very variable but it can create dramatic amounts of snow to below 4,000 metres.

May can also be a good month but rocks, particularly west and south-west facing rocks, develop verglas in the morning hours. After mid-June, during the onset of the monsoon, the weather is unpredictable and often bad.

## **Freight**

We each had 30Kg of gear, plus as a team we had 55Kg of Expedition gear (big wall gear, medical and repair kit etc) and 10Kg of LO gear. Only in June after Air India reduced our promised weight allowance, from 50Kg to 35Kg, did we decide to freight out gear; which allowed us in the end to take about 70Kg of food.

The cheapest way seems to be to deal with the cargo handlers direct and not to use an intermediary. We used, and can recommend :-

SOS Air Cargo Ltd  
Room 112 Building 302  
Cargo Terminal  
Manchester Airport  
Runger Lane  
Ringway  
Altrincham WA15 8UX

In England the gas (packed separately as 'dangerous cargo' by SOS) and gear simply had to be taken to the airport and left after a small amount of paperwork. In India however, things are more complex. In the customs shed next to Delhi airport, even with their new computers, the system runs on reams of paper and loads of queues to officials moving at an Indian pace. One problem had been that we were asked for a letter from the IMF giving us permission to import equipment. We showed the Custom Officers various letters from the IMF but none of them were apparently right. I have since been told that it is essential to have a letter from the IMF stating that the gear being imported will also be exported, so that no import duty needs to be paid. In hind-sight, therefore, it is surprising that we eventually convinced the officials and went on to the next queue.

As a related issue we had a problem convincing the officials that we were allowed to import gas, while one official waded through thick books on import exemptions. A letter from the IMF, explaining that it was alright to import cooking gas, would probably help.

Another problem was that Ian addressed the gear to I. Dring, East Face Kedardome Expedition; reasonably enough. In the customs shed however it became a real issue as to whether he was a member of the Expedition because all the letters from the IMF only mentioned me by name. My insistence as leader of the Expedition seemed irrelevant but we eventually passed that hurdle as well. Like most things in India it would be easiest to address the freight to the leader and to leave it to him.

We eventually got 90kg cargo and 40 gas cartridges through in one exhausting day in what proved to be our best performance of the Expedition. We have since been told the reverse process (ie collect freight in England, sent from India) can take only half an hour.

## **Gear**

A tent each (mine a Super Nova), socks and all that but more interestingly we took gear for a big wall route although ended up trying an alpine wall. Thus a fair amount of gear wasn't used but, with the exception of the bivi tent, all the gear proved perfectly adequate.

The big wall gear we took to India included

- a 9mm rope each plus four 9mm ropes for fixing
- a pair of jumars each
- a haul bag and rucksac each
- a couple of pulleys
- 4 sets of friends
- a set of rocks each and some RPs, HBs and tricams
- 80 krabs
- a load of slings and 6mm abseil cord
- belay seats and bandoliers
- Phoenix helmet or equivalent.
- Fires or Rock Star boots
- 60 pegs and a few skyhooks and copperheads
- a peg hammer
- a pair of binoculars

We also took two types of bolt

- 1/4" Yosemite type contraction bolts (from Leeper) with a Leeper Super drill and
- 1/4" rawl plug red head self drill bolts

Both types were first tested at base and the red head types proved far superior, taking about 15 minutes to drill (although care has to be taken not to overdrive because the teeth might break). The contraction bolts needed about 30 minutes to drill a hole with a newly sharpened drill bit and were not taken on the route.

The Expedition also took 40 butane/propane 250g Epigas cartridges (good option but expensive because of need to freight as dangerous cargo), a Katodyne filter (see medical report) and a bunch of spare parts and tools for repairs. Ian amazed me that a swiss army knife could be really functional, but we also took a hacksaw, pliers, files, sewing kit etc.

## **En Route**

We actually took one set of friends, one set of rocks and RPs, a few nuts on cord, a selection of 25 pegs (10 knife blades, 10 angles & leepers), 20 bolts and 2 titanium ice screws. Also 50 metres 6mm abseil cord (100 might have been better), 30 man days of food and three rucksacs - one packed much lighter for the leader. A pair of crampons and plastic boots each, one ice axe, one ice hammer and a peg hammer, two pairs of rock boots, two pairs of jumars and three 9mm ropes, 7 gas cartridges and a Markhill stormy stove with spare burner.

I had a sleeping bag with 600g of down, the others had bags with 450g down. In August synthetic is possibly better and in September a 600g bag would be a minimum. Then we had the 2 man bivi tent and a gortex bivi bag. Julian's lightline was gortex covered, we all took a full length karrimat.

We took thermals and a couple of pile jackets each. I wore polalight trousers, a shirt and lifa top while climbing but overheated a bit. I have been assured that polalights are ideal for climbing in September. Ian wore a mountain bike tracksuit, plus or minus pile jackets, which proved good.

### **Gear retained by LO**

Beware of specifications sent by the IMF. We were told our LO took size 9 boots when in fact he needed size 6 boots, which is fairly average for Indian blokes.

The LO was given a new, very nicely home made, ultra fleece jacket and trousers and some leather boots where he had been hoping for plastic (but Ian sent him some plastic boots after our return to England!) and also waterproofs, a sleeping bag and karrimat, rucksac, headtorch and a basic selection of personal clothing. The IMF were quite happy for him to stay at base, so a loan of climbing gear was not actually required. At the end of the trip he made it clear that as a climber what he most wanted was a good rope and I gave him my new rope.

### **Food**

We tried to take food that could be cooked quickly and so took things like dried mash potato, dried eggs, tubes of cheese and yeast spread, soups, vege burgers, tea bags, sachets of choc-a-mint, custard, trakker bars, freeze-dried food and muesli. Chocolate, custard, jam, biscuits, peanut butter, sweets and cheese is available in Uttarkashi.

Our cook used hired kerosene stoves which proved very effective and caused no problems - perhaps because we insisted on brand new ones. Meals made by our cook at base were excellent but invariably;  
Breakfast (the highlight) - Omelette and Pancakes,  
Lunch - Rice and Dhal,  
Dinner - Rice & Dhal, Sabzi (lightly curried vegetables) and Chappatis.

Ian and I got totally fed-up with this stuff, only Julian seemed to be able to eat with gusto and could even out-eat the porters. We all lost weight, energetic Ian over a stone, Julian and I about half a stone.

### **Insurance**

This was arranged through the BMC, underwritten by General Accident, and since no claims were made wasn't really tested, but at £90 each can't be grumbled at.

### **Medical by Ian Dring (and help elsewhere)**

Great care was taken on the approach to base camp with water purification and food. A Katodyne filter was used from Delhi to base and we also added iodine. With these precautions only minor stomach problems were encountered. Once in the mountains you are probably safe (from germs) but watch out for the trekkers (which is how I caught flu).

The filter is recommended by the Red Cross and used by the army. The 0.2 micron microporous ceramic filter element delivers 3/4 litre per minute and removes loads of harmful whatsits such as amoeba, cysts, fungi, and Giardia. It is available from Survival aids.

We each took suncreams, lipsalve, mosquito repellent, throat lozengers and antimalarials.

**Equipment:** Thermometer, aids prevention pack, stretch Bandaid, alcohol swabs, 'Melonin' sterile dressings, 3" Elastic bandage, 1" Zinc oxide tape, Tubigrip ankle & finger sized.

**Drugs:**

- Paracetamol - mild pain killer
- Dihydrocodeine - stronger pain killer
- Metronidazole (Flagyl) 400mg - antibiotics
- Erythromycin 500mg - antibiotic
- Cephalosporin 500mg - antibiotic
- Naladixic acid 1g - diarrhoea
- Topical Cicatrin powder - cuts, grazes, skin infections
- Triludan - antihistamine
- Mottrin 800g - sprains
- Diazepam (1mg tabs) - sleeping tabs
- Loperamide (Imodium) 2mg tabs - slows digestive system
- Milton & Savlon skin antiseptic
- Polytrim (Trimethoprim) Eye drops
- Diaralyte rehydration sachets

## References and Bibliography

August 1983 Bhagirathi I Expedition Report  
by Martin Moran

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Edited by James Wilkerson M.D (The Mountaineers - 3rd edition )

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John Cleare, Unwin/Hyman, 1988.

An interesting aerial photo of Kedardome is in the Himalayan Journal, volume 36 (1978-79).

Mountain 84	Gangotri
Mountain 125	Planning an Expedition Medical Kit, Dr John Hillebrandt
Mountain 128	Letter on 'shit or bust' on stomach problems, Dr David Shlim

## Financial Report

<u>Expenditure</u>		<u>Income</u>	
In England	£		£
Peak fee	540	Grants	
Visa (23*3)	70		
Insurance (90*3)	270	BMC	500
Flight (470*3)	1,410	MEF	700
Admin costs	80		-----
			1,200
Expedition Gear			
Katodyne filter	170		
Gas	40	Team (£1177 * 3)	3,530
Medical kit	60		
Repair kit	20		
Hill tent	50		
LO Gear	200		
Food from UK	70		
Freight			
Gas (40*250g)	110		
90Kg gear [Note 2]	140		
	-----		
	3,230		
<b>In India</b>			
Costs in India [Note 1]	540		
22 porters up	300		
Hired Bus to Gangotri	60		
Food from Uttarkashi	110		
Hired Kitchen tent & utensils	90		
Cook (38 days)	170		
H.A.Ps (2 * 12 days)	110		
Mid-term fresh food (incl. 2 Porters)	30		
6 porters down	90		
	-----		
	1,500		
	<u>4,730</u>	TOTAL	<u>4,730</u>

### Notes

1. Costs in India include all travel, food and accommodation costs for the whole team and the LO. These were high partly because of the use of taxis from Delhi to Uttarkashi and back.
2. We only had to pay for 75Kg of gear but 90Kg went.
3. Personal gear expenditure is excluded.
4. The official exchange rate was 26 rupees to the pound.