THE 1991 BRITISH BHRIGUPANTH EXPEDITION REPORT.

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acl 25096

# ABSTRACT

REGION: Gangotri, Garhwal.

COUNTRY: India.

CLIMBS: 1st ascent of The Bhrigu Prow, (Technical rock climb

in capsule style).

N.E face Bhrigupanth, (Snow/ice face in alpine

style).

DATE: September 1991

CLIMBERS: Ian Dring

Martin Moran Kevin O'Neale Martin Welch

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### 1 INTRODUCTION Ian Dring

The expedition was conceived by Martin Moran and myself in early 1990. For my part the rationale was to lay the ghost of an expedition which I took part in in 1989 which ended in a climbing failure and in bitter personal wrangling. For me that trip proved to be a great learning exercise and I was convinced that I could perform well at altitude and with a bit of luck contribute to a successful outcome. Martin and I were like minded in that we wanted to attempt an alpine or capsule style ascent of a high altitude difficult rock climb.

The east face of Kedardome in the Gangotri region of the Garhwal Himalaya of India first attracted our attention. This was in part because of ease of access to the region, which means that 5 to 6 weeks is plenty of time for an expedition in this area. However our interest in this project waned after we learned of a successful Hungarian ascent and our attention turned elsewhere. We were surprised to discover that there was no climbing record from the Bhrigupanth Bamak. This is also located in the Gangotri region and lies about 4 km NW of the Gangotri Glacier snout. In Mountain 84 there was a tantalising photograph of a huge granite wall which was identified as the NE face of Bhrigupanth. We were sufficiently motivated to start the hard work of organising an expedition for September 1991.

Our number increased to 4 when we were joined by Martin Welch and Kevin O'Neale in the spring of 1991. It was their intention to explore further climbing possibilities from the mysterious upper Bhrigupanth Bamak.

In this day and age when most mountain areas are fairly well trodden we counted ourselves lucky in being able to partake in such an adventure.

#### 2 THE TEAM

<u>Ian Dring</u> (32) [leader and equipment officer] Research Scientist with 2nd British ascent of PO wall and Mescalito El Capitan, North ridge Ushba (Caucasus), Diamond Couloir (Kenya), 1989 East Face of Kedardome Dome expedition (Gangotri India), 6 Alpine seasons 30 routes up to ED.

Martin Moran (36) [treasurer] Qualified Mountain guide with 1st ascent of W Ridge of Bhagirathi I in 1983 (Gangotri India). 1st ascent of Sunrise pillar on side of E face Kedardome in 1984, Mt Mckinley, 200 Alpine routes inc. N. Face of the Eiger.

Kevin O'Neale (37) [food officer] Qualified Mountain guide with Singu Chuli expedition (Napal) 1985, NW Buttress Mt Kenya 1984, 8 Alpine seasons 70 routes up to ED.

Martin Welch (29) [medical officer] Climbing instructor with 2 Alpine seasons, climbing in Norway, Winter climbing in Canadian Rockies.

### 3 ACKNOWLEDGEMENTS

The expedition are very grateful to the following people for their help:

The MEF, the BMC and the Bowline Climbing Club for financial support.

Berghaus Ltd for the supply of clothing, boots, rucsacs and gaiters to the team members.

Troll Safety Equipment for discounts on the purchase of climbing ropes, tape and harnesses.

Phoenix Mountaineering for discounts on the purchase of tent and bivouac bags.

Romneys of Kendal for a discount on the purchase of hill food.

Medo Pharmaceuticals Ltd, Britcair, Searle, Windsor Healthcare Ltd, Tosara, Smith and Nephew, and Nicholas Laboratories Ltd for free medical supplies.

Air India for granting a luggage excess and to Himalayan Kingdoms Ltd for organising it.

Dr Tom Navin and Dr C. Macleod for medical advice and help.

Lew Hardy, Chris Bonington, Steve Venables, Bill Ruthven and Ann Andrews (of the Alpine club) for information and photographs in our search for an objective.

Digambar Singh for advice on the approach.

Dave Williams for the loan of big wall gear.

John Codling and Kev Sales for the fixing rope.

John Mills for the help with freight and this report.

Sandra Dring for transport in the U.K.

Mrs Moran (Martins mum) for baking the fruit cakes.

# 4 HISTORY Martin Moran

Although lying close to the major pilgrims' thoroughfare up the Bhagirathi valley, the Bhrigupanth Glacier and its encircling mountain faces remained unexplored until our visit.

Only two expeditions had recorded activities in the area, but both restricted their excursions to the lower part of the glacier. In October 1935 J.B. Auden and Dr D.G. MacDonald made a reconnaissance (Ref 1) of the glacier in an attempt to identify peaks and passes to adjoining glacier systems. They mistakenly called the valley the Kedarnath Glacier and believed the peaks at its head to be the Kedarnath peaks. In fact Kedarnath lies some 8km to the SE across the Kirti Glacier. In their reports Bhrigupanth is not mentioned by name.

Auden and MacDonald made an attempt to climb the icefall barring access to the upper glacier, but without crampons were unable to surmount the final 200 ', reaching an estimated height of 14,000 '. They noted the severity and smoothness of the encircling granite walls, and took an excellent photo of the N.E. wall of what is now known as Bhrigu Pathar, estimating the height of the face as 4000 '.

A small Indian team made a reconnaissance of the lower glacier in may 1969, but were more interested in establishing access to Manda I to it's west than exploring the glacier itself (Ref 2).

No firm details of more recent visits to the glacier came to our attention. It is rumoured that a Japanese expedition was there in the mid-1980's but made no real progress up the glacier, and it is certain that one or two trekking groups have camped by the lower glacier. Modern climbers passing in the Bhagirathi valley have admired the blank wall of Bhrigu Pathar, but were unable to identify the peak correctly. Doug Scott's photograph in Mountain 84 caption the wall as the NE face of Bhrigupanth. In fact Bhrigupanth lies well out of sight from the Bhagirathi valley floor. Our own erroneous opinion was that the face was part of Manda III.

The name Bhrigu Pathar was only discovered by our LO during scrutiny of maps at the Nehru Institute of Mountaineering in Uttarkashi. (Bhrigu is the name of an ancient Indian sage, Pathar means stone). Regarding Bhrigupanth itself the mountain has always been attempted from the Kedar valley to the west. The first ascent was by an American ladies expedition in 1979. (A full history is given in Jan Babicz excellent climbing guide to the Garhwal (Ref 3).) The virgin NE face was clearly visible from surrounding peaks, Meru in particular, and has been noted as a suitable objective provided that suitable access could be found.

#### 4.1 Reference

- 1) J.B.Auden The Himalayan Journal, Vol 8, 1936. (Excellent Photograph of The Bhrigu Prow)
- 2) 'Manda Reconnaissance' The Himalayan Journal, Vol 30, 1970.
- 3) J.Babicz 'Peaks And Passes Of The Garhwal Himalaya' Alpinistyczny Klub Eksploracyjny Sopot 1990. (U.K. distributor Cordee)

### 5 THE APPROACH Kevin O'Neale

We arrived in Delhi on the 24th of August it took two days to complete various formalities at the Indian Mountaineering Foundation (IMF) and to collect our freighted equipment and food (see appendix A for details).

### Tuesday 27th August

It was decided to travel in comfort from Delhi to Uttarkashi. To this end two small vans - called Rascals in Britain were hired with drivers for departure at 6 am. The journey took 12 hours for the 400 km, but seemed shorter because of the opportunities for sleep offered by the extra leg room over the usual cramped bus. A fixed price was not agreed before departure, rather a rate per kilometre, the result being that the drivers tried to charge us for an extra 100km by fiddling their mileometer on arrival at Uttarkashi (1158m). The eventual cost for a one-way journey was £137, still reasonable when divided by 4.

Uttarkashi was thronging with Hindu pilgrims bound for Gangotri, from where many trek the 18km up the east bank of the Bhagirathi river to Gaumukh (Holy mother of cows), the snout of the Gangotri river and one of the sources of the holy Ganga.

The porters were organised through Mount Support who are based at Uttarkashi. Run by Budhi Singh, this is a friendly and effective organisation.

# Wednesday 28th August

Occupied buying food, dividing gear and food into 23 porter loads of approx 20-25 kg, the exact weight a guess as conveniently no-one had a spring balance.

A private bus to Gangotri was hired for us and the porters for the following morning at a cost of £50.

### Thursday 29th August

Uttarkashi (1158m) to Gangotri (3140m), 99km in 6 hours.

Our party comprised 23 porters, 1 cook, 1 Mount Support representative, 1 sirdar, 1 liaison officer and the four of us.

Although the road was open to traffic, with buses and trucks going up the valley each day, one or two members were a little apprehensive given the recent clearing of the monsoon season. Landslips involving the road had occurred, one section in particular on the east bank of the Bhagirathi River, above Gangani looked extremely unstable, the road merely a flattening on an enormous scree slope which extended from 800 meters above the road and steeply dropping 500 meters below all the way to the river. Local gangs of lads and lasses had done an incredible job in keeping the road open during the monsoon season. Working only with pickaxes, two to a shovel, sacks and their hands. Being a

roadmender in the Indian foot hills must be one of the most soul destroying, endless jobs in the world.

From Gangotri we were advised to follow the pilgrim trial on the east bank of the Bhagirathi, as the west bank was very difficult with loads. Martin Moran in fact found this to be the case when he returned by this route. (Probably the best approach to our base camp was discovered on our return and is detailed in sec 10).

# Friday 30th August

Walk from Gangotri (3140m) to Bhojbasa (3792m) 14km.

This was easy and pleasant walking along the Hindu pilgrim trail. The distance from Gangotri is marked every tenth of a kilometre for your convenience. Chai shops can be found approximately every 5km. There is much litter and large white obtrusive slogans saying that the Himalayas should be left to it's natural beauty and exploration should be banned. Unfortunately mist and clag over the hills hid the views. Otherwise we could have seen our final destination, the entrance to the Bhrigupanth glacier, just across the Bhagirathi River south west from Bhojbasa, but for us a full days march away via the snout of the Gangotri Glacier.



Map of the approach.

We reached the tourist Bungalow at 1pm, which offered simple accommodation and food.

An inspection of the Bhagirathi River was made in the drizzle, with the hope of effecting a crossing the following day, saving us the long detour to the Gangotri Glacier snout. The size and ferocity of the river put paid to these hopes, there was bold talk of a rope bridge from bolt anchors, but no volunteers could be found too take the rope across first, so the idea was abandoned. The grave of a Czechoslovakian who had tried to cross the river in 1984 was a salutary remainder of the dangers involved.

The evening was enlivened by an energetic discussion between a representative from our Nepalese porters and our LO. We were hoping to set up base camp in the Bhrigupanth valley. However this was unfamiliar to the porters. Nobody had informed them fully what was going on and there was understandable confusion. The situation was not helped by the disappearance of the sirdar back to Gangotri.

### Saturday 31 August

Bhojbasa (3792m) to Gaumukh (3892m).

No views again, except of a classic crag of British proportions which was admired across the valley from Bhojbasa. We christen it the 'Crafnant Crag', it should yield superb routes of a similar nature to its namesake in Wales.

We reached Gaumukh and the snout of the Gangotri Glacier at midday; strangely quiet on this day, it is the ultimate destination for hundreds of pilgrims, for the purpose of ritual cleansing in the holy waters of the Ganga.

An easy crossing of the snout of the Gangotri Glacier, rubble, mud and the odd bare ice patch led us to the opposite bank of the Bhagirathi river. We followed a rising traverse until we were about 200m above and opposite Bhojbasa. Here Ian and Martin Welch decided wisely to stop for the day, having gained enough altitude for safety. (That evening a large boulder cut lose from the hill side above, missing their tent by a few yards!.) Martin Moran and myself, having just spent a season in the Alps were more acclimatised and carried on in the expectation of reaching base camp that evening.

Whilst gaining height up the lateral moraine of the Bhrigupanth Glacier, the mist and drizzle descended and by 4pm this had worsened to steady rain. Everybody was getting cold and it was unclear whether the porters had the resolve to continue. We were not sure where base camp was located. We had been told by Budhi that a flat grassy area existed below the left lateral moraine (looking up the valley) opposite Bhrigu Pathar. We were probably within an hour of it, but the porters were getting damper and colder so we decided to camp for the night on a flat sandy area below the snout of the Bhrigupanth Glacier. In no time the big mess-tent was up, a brew going, Martin had dug out a bottle of

whisky for the porters, and it was a happier team that night than earlier in the afternoon.

# Sunday 1st September

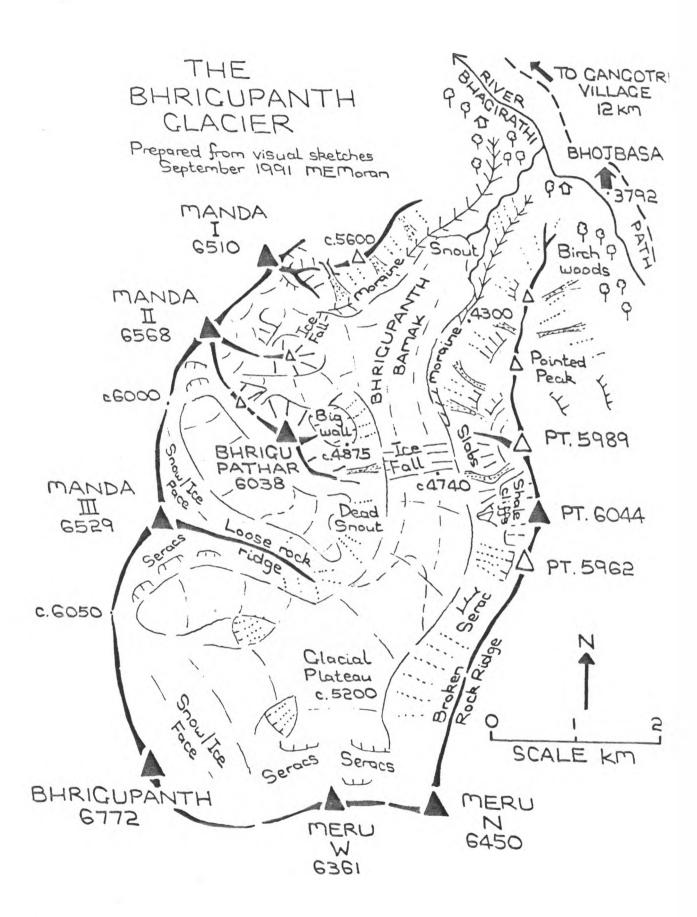
Martin Moran got up early and went off to find Base camp, returning 2 hours later with the news that we had only been  $\frac{1}{2}$  an hour away from it the previous day.  $1\frac{1}{2}$  hours from breaking camp we were putting up our tents again after a kilometre walk up the lateral moraine.

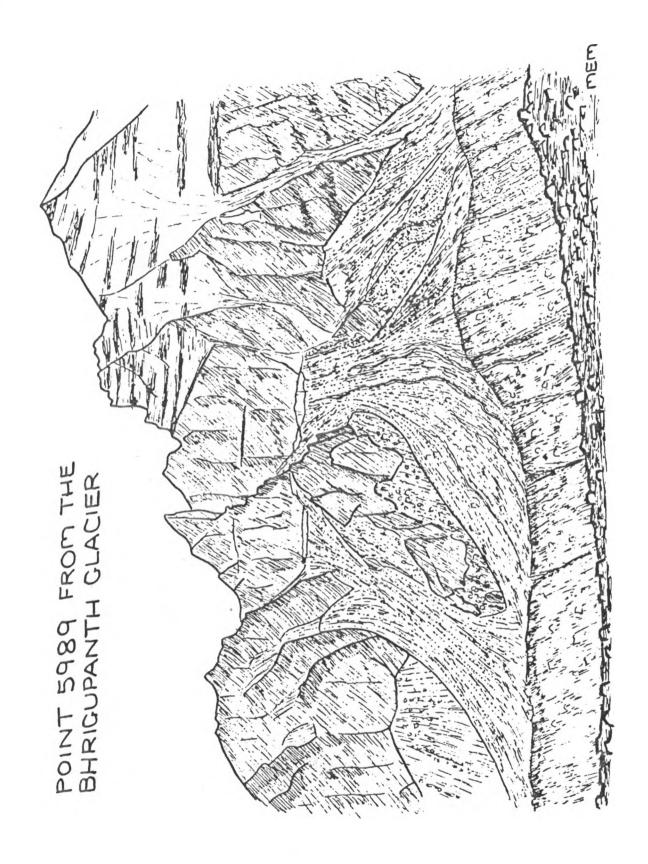
Base camp was a beautiful grassy flat area below the sharp-ridged lateral moraine, well-sheltered with a clean stream 50 meters up the valley. Our porters were rewarded with a 50rps tip each, before returning to Gangotri via the west bank of the Bhagirathi the same day.

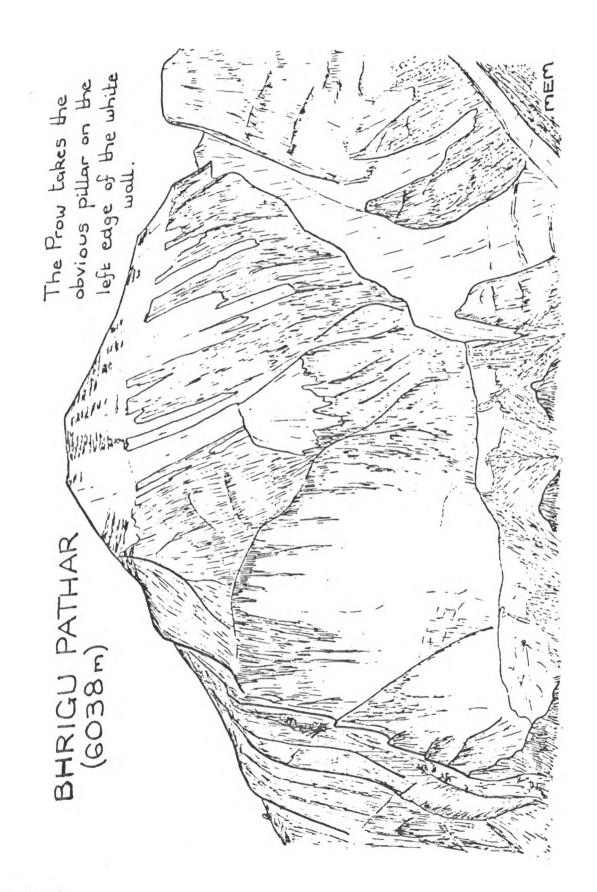
Base camp at 4300m, proved to be 2-3 hours from the start of Martin and Ian's route on Bhrigu Pathar and  $1\frac{1}{4}$  hours from the foot of the gnarly ice-fall blocking the way to the upper reaches of the Bhrigupanth Glacier.

There was no sign of previous occupation, no litter or blackened stones from fires. Any previous parties had made an effort to leave the place as they found it. We resolved to do the same.

Ian and Martin Welch arrived later that day.







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# 6 THE BHRIGUPANTH OLYMPIAD Sports Correspondent

A great international sporting event was held on the 5th of September on the Bhrigupanth Bamak. Five nations were represented by athletes of the highest calibre. For Scotland there was Martin Welch, a giant of a man, whose formative years, spent in a drug crazed motor cycle gang, made for a very tough competitor with a leather fetish. The Welsh entrant was Kevin O'Neale, a different kettle of fish from the aforementioned Gaelic thug. Kevin seems to spend most of his time hibernating, only emerging at meals times, a clever ploy in energy conservation. For India there was Capitan Praful Ghatnekar, cream of the Indian army. The people of the Garhwal were represented by Premsingh Rana, who's athletic prowess had been somewhat diminished by smoking 50 bidis a day and consuming large amounts of the evil brew, chang (the local rice beer). There was a choice between two for the English team, these were Martin Moran and Ian Dring. Dring was awarded the position by default because Moran was absent with his etchings. This was a devious ploy by the other competitors, who by keeping the timing of the event secret, effectively nobbled the favourite. The event comprised of several rounds designed to test the competitors overall skill and fitness. The prize for the person who accrued the most points was a bottle of Bells Scotch whisky.

The first game was cricket. The equipment was somewhat Heath Robinson, as the bat was a snow shovel, the ball was a bunch of rolled up socks and the wickets, three marker poles. The proceedings were brought to an abrupt end when Welch, not knowing his own strength caused the end to fly off the shovel. Two other competitors narrowly escaped decapitation as they dived for cover.

The second round was the shooting, this comprised of throwing stones at a series of elaborate targets. A hit scored a variety of points depending on the difficulty of the target. The game was won by Capt Praful, presumably his army training helped here. At this point Rana mysteriously disappeared.

A large boulder was selected for the shot put. Thug Welch approached the throw line with the boulder perched on his shoulder, he puffed up his enormous chest and let out a blood curdling scream, heralding a gargantuan effort which left the other competitors gasping with awe. He won the event by several meters.

A series of jumping events now followed all won by spindly legs Dring, who by now was building up an unassailable lead on points front. Capt Praful retired at this stage with a hurt pride. O' Neale, slipping on the points front, redeemed himself in a memorable demonstration of obstinacy in the weight lifting. This involved holding a bucket of water horizontally in front for as long as possible. Dring and Welch managed 1 min but gorilla limbed O'Neale powered to victory with a time of 2 mins. The sedentary nature of the event seem to suit the Welshman.

The final event was the Bhrigu 100m sprint. This was a time trial event in which each competitor sprinted 3 times round the base camp site hoping over various boulders on the way. The three remaining

competitors all recorded a time of 23 secs dead. The medical symptoms after completing the course were interesting. The correct term for the blueness seen in a variety of their extremities due to lack of oxygen is referred to as cyanosis. The shortness of breath observed as the competitors collapsed to the ground after crossing the finishing line is known as Stokes breathing. Remarkably all the runners lived. The final result was:

Gold: Ian Dring (England)
Silver: Martin Welch (Scotland)
Bronze: Kevin O'Neale (Wales)

It was time for the prize giving, but the whisky had disappeared. Imagine the mirth when a drunken Rana was discovered slumped on his back with an empty bottle of Bells whisky at his side.

#### 7 CLIMBING THE BHRIGU PROW Martin Moran

Climbers: Ian Dring, Martin Moran

A reconnaissance in the Bhrigupanth icefall on September 2nd revealed a clear cut ridge and pillar on the left side of the blank white wall of Bhrigu Pathar. This was just the line that would suit our planned capsule style of ascent, and looked well furnished with cracks. Only the bulging headwall of this prow gave us serious doubts, but we had enough aid climbing gear plus a small bolt kit which would cope with all but the most severe big wall difficulties.

On September the 3rd and 4th Ian and I ferried loads to the foot of the ridge and climbed its initial 5 pitches, fixing ropes to enable a quick ascent on jumars when we returned for a full scale attempt. Miserable monsoon weather kept us in base camp for the following 3 days, but the morning of the 8th dawned clear and we decided to go to the route immediately so as not to waste an hour of precious sunshine.

Approach from base to the foot of the ridge took between  $2\frac{1}{2}$  and  $3\frac{1}{2}$  hours depending on loads and inclination. The initial 3 towers of the prow had given varied climbing between IV and VI+ in standard, all of it completely free. Now it took double the effort to jumar the ropes and hoist our two haul bags which weighed close on 50kg in total to a terrace 40m below our high point. Here we excavated a good lie-down bivouac ledge from the rubble. There was a flow of water in the big couloir 50m to our left, so our comfort was complete.

On the 9th we took only fixed lines and essential hardware in order to push the route out. Unfortunately we had discovered an easy line in the gully on our left which avoided the third tower, so wasted two hours removing the fixed ropes from our previous high point. The morning heat was debilitating, and it took great effort to get going again.

We were now below a smooth grey buttress some 200m in height. The climbing was steep, and complicated by moss-choked cracks which forced Ian to use our first aid points on the second pitch. The third lead saw me tempted into very steep cracks capped by an offwidth peapod. Ian led through up cracks and grooves in light drizzle, to gain easier ground. We abseiled to our bivouac ledge in little over 20 minutes having spent 8 hours gaining those four pitches.

The weather pattern seemed stable, fine mornings followed by afternoon mist. Even in the cloud it was warm enough to free climb without gloves. Next morning we endured the Herculean task of hauling all of our gear plus 13 litres of water, for we weren't sure of finding a supply higher on the climb. From the top of the ropes we climbed one further pitch to good terraces beneath the head wall. Here we spent nearly two hours excavating another ledge as night fell.

Our mood was somewhat tense. Each day left us close to exhaustion and we were mentally stressed at the prospect of pioneering the uncharted expanse of rock above. We had pulled up our fixed ropes behind us and next morning set out on the headwall with lightened loads, hoping we

might climb it in a day, bivouac and make a lightweight push to the summit on the morrow.

After initial pitches the rock steepened and smoothed. We were led into a slight depression in the centre of the wall, and here climbed three magnificent pitches of grades VII- and VII. Ian's best lead was a chimney and wide corner crack where he had to repeatedly leapfrog our two Friend no. 4's for want of any other protection. On the next pitch a shallow groove gave some very technical bridging, a short aid section and a rousing layback to finish. Ian then aided a dirty crack exiting left to a tiny ledge. With an hour to darkness we were still well below the top of the headwall, so were forced to abseil back down for another night on the terrace.

This retreat ensured a good sleep but committed us to 2 hours of jumaring the next morning. We had left sleeping bags at the bivouac, and carried only three litres of water plus one night's food. This had to be the decisive push. From the top of the ropes I led a long complex pitch which ended below a rather formidable roof crack. Amazingly Ian was able to avoid prolonged aid climbing by traversing left on undercuts and pulling over the roof with a giant mantleshelf.

This emphatically completed the headwall. Above stretched a belt of easy-angled slabs. We dumped much of our hardware, and continued happy in the knowledge that our descent was fully equipped with piton abseil anchors. Without sleeping bags the night was cold and sleepless. Despite vivid lightning in the night sky the dawn was fine, but we sensed that bad weather was approaching.

Steeper overlapping slabs barred our exit onto the summit slopes, and tenuous grade VI climbing delayed us here a further hour before we debouched onto a slope of shattered shale. Only now could we be sure of success. In boots we toiled up horrible screes and a final snowy ridge to the summit. It was 12.45pm on Friday the 13th. The views were clouded, the air close and humid. Indeed the weather was deteriorating.

We abseiled then down-climbed the slab-belt, picked up all cached gear and swung down the headwall, removing all fixed ropes as we descended. Just as a wetting snowfall commenced and 10 minutes before dark we regained our sleeping bags on the terrace. No amount of rain and snow could have disturbed our sleep that night.

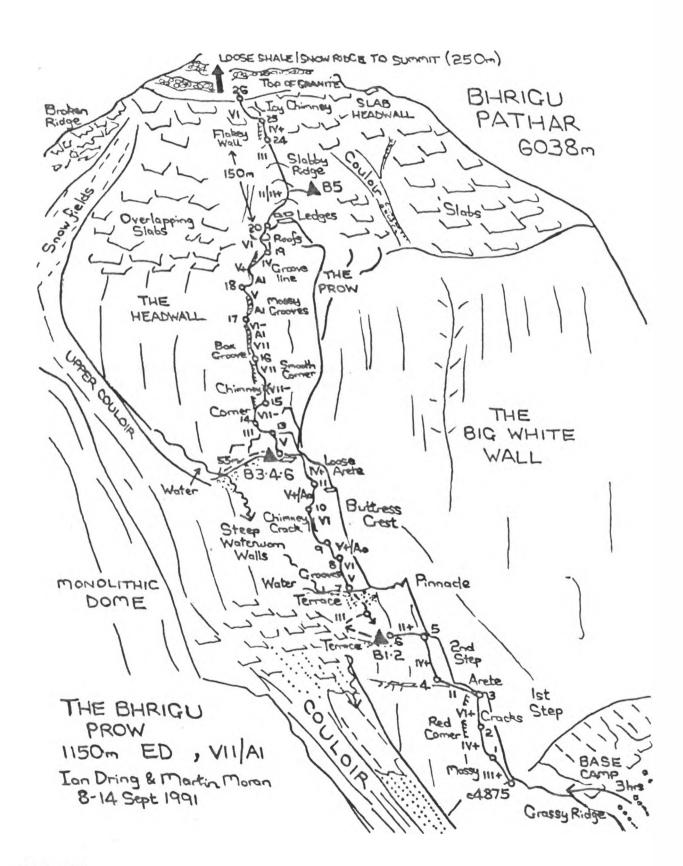
The 7th morning of the climb dawned dreich and misty. Before continuing our abseil descent we packed one haul bag with all surplus gear. From a promontory Ian cast the sac into the void of the white wall. After several seconds of eerie silence we heard it crash onto the screes below.

Nearly every abseil that morning posed problems. The wet ropes snagged and jammed, while we were nearly toppled over backwards by the growing loads on our backs. After 6 fraught hours we reached the bottom, dumped all the hardware and headed straight back to base. By 3.30pm we were supping sweet tea and hugging our friends in celebration of success and safe return.

Three days later we returned to the route to collect all our gear. The haul bag was intact, although it's contents were rather battered. We were pleased to leave the route as we found it save for the abseil points and two plastic water containers.

Having established the mountain as Bhrigu Pathar (6038m), we named the route The Bhrigu Prow. Including scrambling it is 1150m in height, gave 26 rock pitches and rates ED on the overall UIAA scale of difficulty. It's high quality was marred only by moss and soil in some of the cracks which necessitated careful cleaning and a few short aid sections. With belays in place, and the assurance of water at two points on the route it could be repeated in 3 or 4 days. Due to it's relatively low altitude we would especially recommend it to parties with limited time in the area.

(Note: Bhrigu Pathar is not on the IMF listings of peaks. For identification it is a subsidiary summit of Manda II.)



# 8 NE FACE OF BHRIGUPANTH Martin Welch

Climbers: Kevin O'Neale, Martin Welch

To get to the NE FACE we intended to travel along the upper Bhriguphanth Bamak to the head of the valley where the NE face starts.

However the upper glacier is protected by a gnarly 200m high ice fall. We tackled it on the E side (left) and found a way through the tottering heaps of rubble and jagged dirty ice. During our 3 week long dealings with the icefall our route changed due to the shifting ice.

We established a food and equipment dump on the upper glacier 2km from the icefall. With enough food for seven days there we returned to BC to await some settled weather.

On the 9th of September we went through the icefall and camped at the dump. On the 10th we continued on up the gentle glacier to a plateau at the bottom of the NE face (c 5300m) where we had our 'advanced base'.

From here a way was found through the lower part of the face, which consisted of  $45^{\circ}$  ice, avalanche debris, filled crevasses and some steeper clearer ice, to a bivi site on a large boulder at 5700m.

The summit was attempted from here. After many brews we left at 11.30pm. Carrying the minimum of gear (single 9mmX50m rope, 6 ice screw, 1.5 litres of water and snack food) we took a line trending right to a point on the summit ridge right of a hanging serac.

The snow was poor with a few inches of soft snow lying on hard ice. The general slope was about  $45/50^{\circ}$  but steepening at the top to  $65/70^{\circ}$ .

Climbing unroped we dug in 100m from the summit ridge and waited for dawn. Once it arrived we pitched the last steep snow flutings to the horizontal ridge and arrived there (6600m) at 6.30am on the 12th of Sept.

The ridge was found to be narrow and covered in deep unconsolidated snow and after weighing things up we decided not to go for the summit. We estimated it was 150m higher and 400m along the ridge.

After rappelling the first 100m we down climbed the rest facing in. The snow condition was very poor as the sun had softened the thin snow layer covering the ice and a long, exhausting descent ensued.

Kevin became convinced that we were being accompanied by a third person and I was in fact somebody else.

We rested at the bivi site that afternoon and night and endured the extreme heat generated in the sheltered valley head.

From here we took a further two days to descend to base camp (arrived 14th). It was a full 6 days from BC to BC and we moved on every day.



View of Lower Bhrigupanth Bamak from Base Camp towards Bhrigu Pathar.



Exploring the Upper Bhrigupanth Bamak. The NE face of Bhrigupanth is in the background.

# 9 TREKKING Ian Dring

After completing our climbs 4 days were spent resting and a day was taken to clear all of our equipment from the base of our respective routes. For Kevin and Martin this meant that they had to risk the icefall again to clear their camp. Our porters were due back on the 25th so we had some time to kill. Martin Moran and Praful decided to explore the Gangotri group, whilst the rest of the expedition headed up to Tapovan to do some sunbathing.

Martins itinerary was as follows:

Sept 20: Descent to Gangotri via west bank of Bhagirathi River. Very arduous with a 20kg load, no track until last 3km.

Sept 21: Ascent of Rudugaira Valley to base camp site at 4400m under the Gangotri peaks.

Sept 22: Reconnoitre of Rudugaira Glacier to 5100m and within  $1\frac{1}{2}$  km of Auden's Col.

Sept 23: Ascent of Rudugaira Peak in trainers, 5818m summit height but no snow until the last slope. special views but depressing litter.

Sept 24: Litter clean up:- burning and burying horrendous piles of trash strewn across base camp sites. Returned to Gangotri village in mid afternoon.

Kevin and myself returned to our base camp on the 23rd to pack, ready for the return of the porters.

### 10 RETURN TO GANGOTRI Kevin O'Neale

### Wednesday 25 Sept

We had asked for 12 porters for the return to Gangotri, enough to clear base camp of every scrap of rubbish and gear and allow the remaining members an easy walk down with light rucsacs!

Nine porters arrived with a Spanish 'trekking' party, three returned immediately, leaving six for us, plus one Mount Support representative. Twelve loads of 25kg each were transformed into six loads of double weight with Ian and myself carrying loads also. Tins and gas cylinders were crushed flat and along with the glass, compacted into  $\frac{1}{2}$  of a load, left over food and gas was given to the Spanish 'trekkers', who surprisingly (for trekkers) had quite a lot of technical climbing equipment. They were relieved that our LO was not in camp.

A fire was made of everything surplus and burnable and the ashes were buried. Every effort was made to ensure that our beautiful base camp was returned to the pristine condition in which we found it.

# Thursday 26 Sept

The Mount Support rep suggested that we would be able to descend to Gangotri in a day, crossing the Bhagirathi river by a wire Tyroleon located on the section of river between Chirbasa (3606m) and Bhojbasa (3792m). The existence of this wire was news to us, had we known of it's existence on the way up, it would have removed the necessity of travelling all the way up to Gaumukh. Oh well!

The crux of the day proved to be the crossing of the outflow from the Bhrigupanth Glacier. Verglassed boulders and an energetic, ever increasing volume of icy water held up the lads in their rush down hill in the early morning, carrying 40-45 kg's in their flip flops (removed to cross the river).

The Tyroleon was in place, adjacent to an Ashram on the west bank of the river, about 1km down from the confluence of the Bhrigupanth glacial outflow and the Bhagirathi. It took only  $1\frac{1}{2}$  hours to ferry across the nine of us, plus our loads, amidst much laughter, false bravado and camera clicking. We used a system involving a Whillans harness, a sling threaded through the three tie-in points on the harness to ensure a high centre of gravity - clipped to a pulley on the wire. A 50m rope was enough to pull the load or person across the river and then retrieve the pulley and harness back on the other bank.

Breakfast was enjoyed at Chirbasa at 11am. We reached Gangotri with all the gear at 1pm.

## Friday 27 Sept

Bus from Gangotri to Uttarkashi, booked the evening before.

# Saturday 28 Sept

Two Taxis booked to the IMF at Delhi, departing at 8am.

### 11 SECOND ASCENT OF BHRIGU PROW Ian Dring

On the 25th of September a group of three Spanish climbers including Cristobal Barbero of Barcelona arrived at our base camp to attempt the white wall of Bhrigu Pathar. They soon came to the conclusion that the wall was impossible without a lot of drilling and so decided to attempt a second ascent of The Bhrigu Prow. They had gone to the IMF seeking permission to climb this Mountain in October. Despite the fact that nobody had booked the Peak the IMF refused to grant them permission. They therefore decided to make an illegal ascent. This required them to bribe their local guide to keep things quiet. They initially pretending to be trekkers, but after realising that our LO was not present they became more open about their intentions. Whilst not condoning an illegal ascent, I can understand their actions in view of the IMF's irrational behaviour.

They were successful on the route, reaching the summit on the 5th of October. With all the belay and abseil pitons in place and a route description they managed to complete the route in 5 days.

#### 12 OTHER OBJECTIVES Ian Dring

# 12.1 Upper Bhriguphanth Bamak

From the upper Bhrigupanth Bamak a route can be found up through seracs and snow/ice slopes to the summit of Meru N and a continuation is possible along the superb snow ridge to Meru S.

Unclimbed Manda III seems a straightforward snow/ice slope from the coladjoining it to Bhrigupanth.(It would also be possible to climb Bhrigupanth from this.col.) The long scrambly E ridge of Manda III also offers perhaps a more interesting route up this mountain. From a distance the quality of the rock on this route looks uncertain.

#### 12.2 Lower Bhrigupanth Bamak

The most obvious challenges from the lower Bhrigupanth Bamak are the untouched N and E faces of Manda I and II. These would give 5000ft mixed routes in alpine style with some very steep ground.

It would be possible to climb Manda II via a snow/ice couloir to the right of the NE face of Bhrigu Pathar leading to the SE ridge of Manda II. This couloir would also provide a fine route up Bhrigu Pathar.

The large White wall on the NE face of Bhrigu Pathar is smooth and featureless. It would succumb to a large amount of drilling or might provide a very hard aid climb of A5+.

Pt 6044 and satellite peaks to the west may be possible from the lower and upper Bhriguphanth Bamak, but some lose rock may be encountered.

### 13 RUBBISH Ian Dring

We were all dismayed to find large quantities of rubbish in the area. Upper Tapovan was disgusting with cans, broken glass, toilet paper and excrement everywhere. We buried and burned as much of this as we could. Judging by the type of debris the worst culprits are probably Indian trekking groups, it would seem that they have little regard or respect for their Himalayan heritage. A western group had been in the area recently and it was obvious that they hadn't bothered to clean up the mess, so they were just as guilty. There is talk of closing the area in 1995 to let the ecosystem recover. The current behaviour and attitude of most visitors doesn't deserve access to such a beautiful area and I would personally support such a ban.

#### 14 CONCLUSIONS AND REFLECTIONS

#### Martin Moran

The expedition was a success both socially and in the climbs and exploration achieved. We were lucky with the weather and in avoiding illness but equally we benefited from good planning and teamwork. It was a privilege to explore new ground in the Gangotri with such a good bunch of people.

# Martin Welch

The Whole Idea of going and experiencing a developing country was of great interest to me .

From the first sodden footsteps during the monsoon in Delhi through the excitement of climbing up an unexplored glacial valley to being entranced by a powerful sunset over the Taj Mahal, then hounded by the hordes of hecklers waiting outside -it was far more than a climbing trip -it was a lifetime experience!.

# Ian Dring

Three months have now passed since our return. An abiding memory is resting in an alpine meadow, warmed by a hot sun and surrounded by beautiful Brama Lotus flowers. The Bhrigu Prow winks at me like an old friend from behind a cloud. It's soaring features are now very familiar as our return was only four days ago. My sense of peace is so different from a week ago when I was totally absorbed in the battle of the climb. At times it seemed as if one of the Indian deities that sometimes frequent the Himalaya was involved in a playful game with us, he made us work all the way, placing a series of obstacles in our path, not designed to be impossible, but just to make us struggle a little. In truth this was a precious gift because without the fight our success would have been hollow.

# Kevin O'Neale

Our 2.5 litres of whisky and 0.5 litres of Baileys was not enough. In retrospect 4 litres of whisky and 1.5 litres of Baileys would have been better.

#### APPENDICES

### A ADMINISTRATION Ian Dring

The Indian system is bogged down by an excessive self serving bureaucracy, mountaineering activity doesn't escape from it's clutches. Patience and plenty of time are required.

### A.1 Permission and Visas

The steps you have to take are:

- 1) Identify objective
- 2) Decide who the leader is going to be (a poisoned chalice). The Indian authorities require such a person to deal with booking the peak etc. It is best to let this person deal with all of the Indian bureaucracy or else confusion may arise. (Grant giving bodies in the U.K. also require a leader.)
- 3) Write to the Indian Mountaineering Foundations IMF (note 1), detailing your intentions. If nobody else has booked your peak they will send you an official application form and a provisional booking. It is important to send this form back quickly with the peak fee (note 2) in the form of a bank draft ( It is probably best to have this stage completed at least 6 months before the date of departure). On the application form apply for permission from the date you intend to arrive in Delhi, otherwise your LO may be late. With the application form submit a detailed itinerary of your intended movements in India (ie dates and form of travel etc). You probably won't know this, so make it up. If there are personnel changes on the expedition it is possible to change details, but try and allow as much time as possible or else they may not get permission. (I forgot my signature on one of the letters I sent to the IMF with a personnel change. This omission held up our entire application for two months, because they wouldn't submit it without my signature on this one letter, but they didn't bother to inform me that this was the case until two months after the letter had been sent.). Before you depart for India it is probably a good idea to send the IMF a telegram informing them of your impending arrival and asking them to ensure that the LO is ready. The IMF have a FAX number on their documentation, I used this facility , but I had no evidence that they received any of these messages.
- 4) Once the application has been processed you will receive a letter from India informing you to send off to the Indian high commission in London (note 3) for mountaineering visas. The letter contains the rules and regulations for climbing in India which the expedition leader has to sign agreeing that they will be complied with. We only received this letter the week before we were due to depart, so in the mean time we had all obtained tourist visas (1991, £6). I sent the letter to the commission saying that the expedition would comply with the rules and that the expedition members would collect their visas from the commission in person. We didn't do this and the fact that we only had tourists visas passed unnoticed. (NB you probably won't get away with this in areas that are restricted)

### A.2 The Liaison officer

Every foreign expedition in India has to be accompanied by an Indian liaison officer. These may be one of three types - an army officer, a police man or a respected local. It is the LO's job to help to organise transport to and from base camp (including porterage), to liaise with the local authorities, to help out in the case of accidents and to make sure that the expedition follows the rules and climbs the peaks that it has agreed to. (There are procedures to change peak objectives, but this involves paying an additional  $\frac{1}{2}$  peak fee).

Our LO, Praful, was an army officer, he was helpful and willing and was even prepared to ferry equipment up to the base of our routes.

In the IMF application form it states that the LO is expected to climb to upper camps and even the summit according to his experience and competence. In reality he rarely leaves base camp.

The expedition has to supply the following to the LO: A pair of climbing boots and gaiters, crampons, ice axe, wind proof, down jacket, sleeping bag, air mattress, Rucksack, socks, tent.

In addition to the above items we supplied: Head torch, sun glasses, gloves, fleece jacket, fleece trousers, Karri mat, harness.

The expedition has to pay for the LO's food and accommodation and at base camp provide a cook.

The LO is paid 500 rupees by the IMF (not very much even by Indian standards). At the end of the trip the expedition can ask for the equipment back. However in view of the low pay and the amount of help our LO gave us, we let him keep all of the equipment, with the exception of the tent and the harness. We also gave him a rope.

### A.3 Insurance

Insurance for the expedition members was arranged through the BMC (address given in general bibliography). It cost £110 each. The porters and cook were insured through the Mount Support agency that we used (see sec A.7).

### A.4 Fund Raising

Information on grant giving organisations can be obtained from the Expeditionary Advisory Centre (see general bibliography). Our expedition received support from the Mount Everest foundation (MEF), the BMC and the Bowline climbing club. To simplify matters the MEF and the BMC process grant applications jointly. The address to apply for application forms is given in note 4 below. The closing dates for applications are on the 31 December and the 31 August. The Bowline climbing club gives an annual 'Carrot' award for the pursuit of adventurous activities. Leicester based climbers or members of the club are eligible to apply.

# A.5 Flights, Freight and Customs

We took a direct flight from Heathrow to Delhi on Air India. The flights were obtained through Himalayan Kingdoms (note 5), who negotiated an excess baggage agreement of 30Kg (total weight allowance for each person excluding hand luggage). If you do manage to get such an agreement obtain an official letter from the airline to show to the people at the check-in, or else they won't believe you and they will try to charge you 1% of a first class ticket for every Kg that you are over the normal weight.

We air freighted about 90kg of equipment and food as well as 40 cans of EPI gas at a total cost of £250. The EPI gas is classed as dangerous cargo and must be packed in a special way and accompanied by the relevant paperwork. In India every item of freight baggage is searched, to reduce time it is best to pack your cargo in as few containers as possible. (We used two large plastic drums for the general cargo). The handlers we used, and can recommend were SOS Air Cargo (note 6). In England the gas and general cargo simply had to be taken to the airport with a list of contents. SOS packed the gas, completed the relevant paper work and the security measures. For the cargo to be in India when you arrive it is best to take it to the handlers at least 10 days before you are due to depart. Address the Cargo to the IMF in the name of the leader of the expedition.

In India the procedure for getting your Cargo from Customs is as follows:

- 1) Go to the IMF and get a special form that informs the customs that all of your non-consumable goods are to be re-exported. You will need to know the approximate value of your equipment. Claim that the value of imported food is less than the 500 rps limit allowed. The Customs put a note in the back of your passport stating what equipment is to be re-exported. You may be asked to show this equipment when you leave the country. (We didn't have to do this).
- 2) Go to the airport and locate the two cargo terminal buildings.
- 3) The airline offices are in the cargo terminal on the left as you look at them. Go to the office of the airline that handled your cargo and obtain paper work which enables the customs to locate your cargo.
- 4) Now go to the right hand cargo terminal and find 3 numbered hatches.
- 5) Visit hatch 1 to get a baggage registration form. On this form you must list the contents of your baggage.
- 6) Visit hatch 2 to get baggage location forms.
- 7) You now go into the customs shed where each item of your baggage is searched and you get customs clearance.
- 8) Visit hatch 2 where they give you details of the storage charges you

have to pay (only small amount).

- 9) Pay the charges in the bank located in the customs shed.
- 10) Visit hatch 3 where you get a gate clearance pass.
- 11) In the customs shed 3 different people must sign the gate clearance pass.
- 12) Collect cargo.

Trucks can be hired at the cargo terminal for transport. Allow a full day to collect your cargo. Take a sense of humour with you or you're sure to go insane!.

### A.6 Formalities at the IMF

The LO is picked up from the IMF and various forms have to be filled in and signed by the leader. (The IMF is located on the airport side of Delhi and is awkward to find.) The LO checks his equipment and informs the IMF if he's happy with it. If you haven't got all the LO equipment for inspection then it can hold you up. The IMF gives the leader various report forms to be handed in after the expedition. Before departing from India the leader has to report back to the IMF with the LO.(Accommodation and simple food can be obtained at the IMF. When we were there it was filthy and I can't recommend it.)

### A.7 Agency

The porters, a cook, a mess tent and various pieces of cooking equipment were hired through Mount Support (note 7) which is based at Uttarkashi. Mount Support is run by Budhi Singh who provides an efficient and effective service which we can recommend.

The agency prices were:

High Altitude porter

Cook

Rps 100 per day per head
Rps 100 per day per head
Rps 60 per day per head
Rps 60 per day per head
Representative

Rps 90 per day
Representative

Rps 90 per day
Rps 90 per day
Rps 300

# A.8 Notes

- 1) The Indian Mountaineering Foundation Benito Juarez Road Anand Niketan New Delhi 110 021 India.
- 2) Peak fees for Indian peaks 1991 Below 6000m \$600 6001-6500m \$900

6501-7000m \$1350 7001 and above \$1800 Nun and Kun \$2250 East Karakoram \$3000

- 3) The High Commission of India
  Visa section
  India House
  Aldwych
  London
  WC2B 4NA
- 4) Mount Everest Foundation
  Hon Sec W H Ruthen Esq,
  Gowrie,
  Cardwell Close,
  Warton,
  Preston.
  PR4 1SH
- 5) Himalayan Kingdoms 20 The Mall, Bristol BS8 4DR Tel: 0272 237163
- 6) SOS Air Cargo Ltd
  Cargo Terminal
  Manchester Airport
  Runger Lane
  Ringway
  Altrincham
  WA15 8UX
- 7) Before the earthquake in October 91 (see postscript) the address of Mount Support was:
  Budhi Rama Singh,
  Mount Support,
  PO box 2,
  Uttarkashi 249 193,
  Garhwal,
  U.P
  India.

B EQUIPMENT USED ON THE BHRIGU PROW Ian Dring/Martin Moran

#### B.1 Personal equipment Martin Moran

Troll Rock Bottoms: Very warm, stretchy and quick drying; only wore thermal long Johns underneath on last two days of climb.

Berghaus GTX Super over trousers: Goretex full zip.

Berghaus Asgard Extrem Jacket: Inner mesh lining gives extra warmth compared to other jackets.

Berghaus Fleece Jacket/wool shirt/ Polarlite inner shirt/ ACL thermal vest: Kept me perfectly warm except on the last bivvy below the top.

Double wool balaclava: For bivvies, superbly warm.

Plastic coated work gloves: Worn throughout the climb, they gave a superb grip and were fairly warm; my hands would have been totally trashed without them.

Dachstein Wool mits/Goretex overmits.

Sun glasses.

Silk neck scarf.

Scarpa Vega boots

Scarpa Cobra Slippers: Very comfortable and widely adjustable for tight or slack fit.

Berghaus Expedition gaiters.

Phoenix lightweight helmet.

Troll step in harness.

Petzl head torch + spare batteries.

### B.2 Personal equipment Ian Dring

Mountain Equipment Ultra Fleece salopettes.

Point five Hollow fill salopettes: Mainly used for bivvies; in evenings wore inside my lightline sleeping bag.

Berghaus overtrousers: Goretex full zip

Berghaus Extrem caguole.

Berghaus Fleece jacket/Home made fleece jacket/Helly-Hansen Lifa vest/ Marks and Sparks thermal vest: This lot kept me nice and warm except for the final bivvy.

Helly-Hansen polypropylene balaclava/wool ski hat.

Wool inner gloves/ Dachstein wool mits/ Wild Country Goretex overmits. Koflach Extrem boots.

Hueco rock shoes: I didn't wear socks with these and got badly scuffed ankles.

Berghaus Expedition gaiters.

Silk neck scarf.

Bolle alpine sun glasses + spare

Phoenix lightweight helmet.

Petzl head torch + spare batteries

Whillans harness (convenient for wearing over a lot of clothing and putting on when wearing crampons)

Note: Unlike Martin I didn't ware protective gloves for sac hauling and climbing and consequently got very sore hands.

A duvet would have been useful for the bivvy without the sleeping bags.

#### B.3 Other equipment

2X 8.2mm 50m climbing ropes, 5X 9mm 50m fixing ropes, 2x 10mm fixing rope, 60 lightweight karabiners, 5 screw gates, pegs: 2X 2" angles, 2X  $1\frac{1}{2}$ " angles, 5X 1" angles, 5X 3/4" angles, 5X baby angles, 7 assorted lost arrows, 7 assorted knife blades, 5 assorted Leepers, 1 rurp, (We left about 30 pegs on the abseil descent as well as about 10 nuts), 2 sets rocks up to no 9, 2 sets of friends up to 4, (excluding size  $3\frac{1}{2}$ ), 2 sets of RPs, 5 assorted copper heads (not used), 2 sky hooks (not used), 1 hexentric size 10, 1 classic Moac (for good luck!), 15 3/16th star drill bolts with hangers (not used), 5 sewn slings, 100 meters thin

tape, bolt placement kit (not used), brodler (very useful for cleaning cracks), CMI lightweight peg hammer, 1 jumar and 1 prussik cord each, 2 pulleys (1 spare), 1 tuber, 1 Stitch plate, 2X 50cms axes 1 hammer head 1 adze, 2X articulated step in crampons (not used), 2 ice screws (not used), 4X  $5\frac{1}{2}$  litre water containers, 2X  $1\frac{1}{2}$  litre water containers, 7 EPI gas 250 butane/propane cans, Markhill Stormy stove, spare burner, stove repair kit, 6 days food, 1 Olympus compact 35mm camera, 1 Pentax compact with zoom, 10 rolls of film, 1 large Troll haulbag, 1 small haul bag, 2 Berghaus Alpine star rucsacs, first aid kit, sun cream.

# B.4 Bivouac gear

2X Phoenix Phreeloader Goretex bivvy bags, Ian: Mountain equipment Lightline sleeping bag (wore Point Five hollow fill salopettes in bag, with these comfortably warm), Martin: 2 season Rab sleeping bag, 4 season thermorest (good), assorted bits of 2 season Karrimat (bad, too cold).

C EQUIPMENT USED ON NE FACE BHRIGUPANTH Kevin O'Neale

- Tent Taken up above the icefall and used on glacier approach to 5800m. North Face 'Bull Frog', not really designed for high altitudes because of flat roof.
- Boots Both used Scarpa 'Vega'- very comfortable and warm, a bit sweaty, but inners easy and quick to dry.
- Gaiters Berghaus expedition.
- <u>Wind/waterproofs</u> Both used Berghaus 'Extrem' jackets. Martin used Berhaus 'Extrem' salopettes. Kevin used North Face 'Celestial' overtrousers.
- <u>Rucsacs</u> Martin used Berghaus 'Alpine Star'- too small. Kevin used Berghaus 'Cyclops Guide II' good.
- Sleeping bags Martin used Mountain Equipment 'Everest'. Kevin used Mountain Equipment 'Redline'. Because of the relatively mild nights the main problem was overheating.
- Bivi bags Both used wild country Goretex.
- Crampons Kevin Charlet Moser. Martin Grivel.
- <u>Ice axes</u> Kevin Alpine Axe 65cms, technical axe 50cms. Martin two technical axes both 50cms.
- Sleeping mats Kevin Thermorest 3/4 length full thickness good.

  Martin Thermorest full length 1/2 thickness poor due to a leak.

# C.1 PERSONAL CLOTHING

#### Kevin

1st layer: Patagonia Capelene lightweight

2nd layer: Patagonia Capelene Expedition Zip top. 3rd layer: North Face 'Renegade' nylon/ Polalite.

Legs: North face Polalite trousers and Berghaus 'ACL' long-Johns.

Head: Patagonia Synchilla balaclava.

Hands: Polalite Gloves, Wild country Mountain mitt (Goretex) with

Feet: Patagonian Hydrofil 'Alpine liner' lightweight sock.

Patagonia expedition weight Hydrofil wool sock.

Eyes: Vaurnet Classics.

### Martin

1st layer: Helly Hansen lifa top + bottom.

2nd layer: Polar plus pile on top + cut off sleeves on HH pile

jacket for body warmer.

Legs: Poly cotton trousers/longJohns/thin polarplus trousers. Head: "Yukon" cap/silk scarf to protect from intense sun. Hands: HH pile gloves/Dachsteins/Wild Country Goretex mits.

Feet: Loop stitched socks.

Eyes: Jublio high altitude glasses.

### C.2 TECHNICAL GEAR

Rope 50m X 8.2mm, Harness, Helmet, 2 long slings, 3 titanium ice screws, 2 short extension slings + crabs, set prussik loops each, abseil slings (approx 10 made up), 2 stoppers size 9 & 10, Friends 2 & 3, snow shovel, altimeter.

### D THE WEATHER Ian Dring

#### D.1 The monsoon system

In winter the cold land mass of Asia produces a high pressure area which results in a prevailing northerly wind over India. Through out the spring as the land mass warms up the pressure over Asia begins to drop. Eventually a pressure is reached when warm moist air from the Bay of Bengal and the Indian Ocean is able to penetrate into India. The Monsoon begins in Calcutta and Bombay around the 10th of June and then moves across India. It reaches Delhi on about the 23rd of June. To reach the Gangotri region a tortuous path is followed in which the air is forced to travel almost 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 land mass of Asia begins to develop again until the prevailing dry northerly winds again dominate in India. The Monsoon normally retreats from Delhi on the 10th of September and from Calcutta on the 25th of September.

### D.2 Gangotri weather

Generally September is probably the best month for rock climbing in the Gangotri. The monsoon normally finishes between the 2nd and the 8th of September, followed by a period of very calm weather. Through September afternoon clouds and showers can develop and it gets colder. A post monsoon storm often occurs at some point in the month. Its strength and duration is very variable, but large amounts of snow can be deposited to below 4000m. The temperatures are good for rock climbing in September, but are probably too warm for the best snow and ice conditions.

In October the weather is usually very settled, but it is cold. This means that for difficult rock climbing there are only short days. However the freezing conditions will be good for snow and ice climbing.

August is very risky. Monsoon failures have occurred in the area in the past in August and there has been successful expeditions in this month.

May can be a good month, but west and south-west facing rocks can develop verglas which will be present in the morning.

After mid-June, during the onset of the monsoon, the weather is unpredictable and often bad.

### D.3 Our experience

Up to Sept 1st	Prolonged light rain on all days.
2nd- 7th	Clear mornings cloud and drizzle developed by midday.
8th- 13th	Sunny and warm mornings. Cloud and light showers developing from mid afternoon.
14th-16th	Continuous rain at base, snow higher.
16th-19th	Gradually improving. Clear in mornings with some cloud in the afternoon.
20th onwards	Cold, clear and settled. Prevailing icy N wind.

# E FOOD AND COOKING Kevin O'Neale

#### E.1 Hill Food

The following was bought in Britain, predominately for hill food:
Kendal Mintcake 3doz @ 85gms, travel sweets 16 tins, mixed fruit and
nuts 3 X 2kg bags, Nescafe coffee catering tin, Dextrosol 50 bars,
Cluster bars assorted flavours 3 boxes of 30, 30 pkts instant custard, 3
large fruit cakes (baked by Martin Moran's mum and much appreciated), 5
pkts semolina, 3 boxes Readybrek, 30 pkts Tango Orange drink mix, 30
pkts Complan (chocolate and strawberry flavour), 250 tea bags, 10 pkts
instant noodles, 10 pkts pasta meals, 10 pkts veg burger mix, 5 tins of
tuna (Dolphin friendly), 10 tubes Primula cheese spread (various
flavours), 30 pkts smash, 120 Cuppa soups, 5 tins sardines, 30 pkts
chocolate drink (various flavours), 2 jars honey, 2 X 2kg bags muesli,
tub of isotonic replacement sport drink powder.

The pasta meals etc were all quick cook meals ie less than 5mins at sea level.

Calculations for quantities were based on 15 hill-days, or 60 hill man-days in total (15X4) with another 15 days at base camp. In the event we only needed 7 days of hill food or 28 hill man-days.

A typical days menu on the hill would consist of the following:
Breakfast: Tea, Readybrek, mixed fruit.
Midday: Trekker Bar or chocolate bar, some Kendal Mintcake, hand full mixed fruit and nuts, Orange drink
Evening: Cuppa Soap, Mash potatoes mixed with cheese or tuna, noodle meal or veg burger or pasta meal, Complan, Custard, sweet tea.
This seemed to work very well and provided us with sufficient energy for the climbs.

40 Epigas 250gm cans of butane/propane were taken for cooking on the hill. Ian and Martin Moran used a Markill stormy stove and Martin Welch and myself used a lightweight Epigas burner both proved to be OK. Two lightweight paraffin burners were also taken just in case there was a problem getting the gas through customs (not unknown). These were in fact not required.

# E.2 Base camp food

Fresh food for base camp and other supplies were bought in Delhi and Uttarkashi. Mount support (in particular Rana our Cook), had a better idea than us of the quantities of fresh and staple food required, so we were able to leave the buying of base camp food largely in his hands.

The following was purchased in Uttarkashi:Oats 2kg, rice 25kg, lentils 5kg, flour 10kg, oil 3 bottles, eggs 300,
potatoes 13kg, cabbage & peas & courgettes 10 kg total, garlic/green
chilli 250gms, spices/ginger 1kg, biscuits 50 pkts (a large quantity of
these were eaten by small furry animals watch out!), sugar 15 kg, milk
powder 5 X 500 gms, chocolate bars 50, 4 jars jam, lemons 4 kg, bananas
& apples (from Harsil) total 5kg, 10 pkts butter, 5 tins processed
cheese, salt 2kg, bread 3 pkts, tea 1kg, tomato ketchup 4 bottles.

Paraffin 50 litres, paraffin filter, boxes/sacks (for porterage), Matches 50 boxes, bidis (cigs for porters), candles 30, washing powder 500gms, mantles for gas lamp 24.

On arrival at base camp we found that 1/3 of our eggs were had been crushed. Careful packing and porterage is essential.

We arranged for a porter to come up on the 15th of Sept to resupply us with fresh fruit and veg and eggs and any other shortages. We were resupplied with the following:

paraffin 80 litres needed instead of 50, sugar another 5 kg, tomato ketchup another 5 bottles, oats for porridge another 2 kg, milk powder 5 extra tins @ 500gms, oil 3 extra bottles, eggs another 200, vegetables assorted, bananas and apples. These items were supplied in two trips by the same porter.

The following equipment was hired from Mount Support: Paraffin stove, pans, pressure cooker (essential), utensils, mugs, cutlery, lantern, mess-tent. (check stove, lantern and pressure cooker before departure if you hire these items.)

A great success and comfort was the ancient but trusty canvas mess-tent, a veteran of many campaigns, it stayed dry and warm in the heaviest of rain whilst our various high tech gortex, polytetrahedral 7075 aircraft alloy poled, seam sealed state of the art mountain tents slowly leaked. Whisky and cigarettes (or bidis) were very useful for distribution amongst porters, especially when moral was low, such as on our approach to base camp. We were told by our LO that the porters and cook were highly appreciative of our simple gestures and basic expression of concern for their welfare, not only providing whisky for a cold night after a long day, but sharing it with them in the mess tent! This probably tipped the balance when they were deciding whether to continue up to base camp after their damp and dispiriting day. The base camp food produced by our cook, Prem Singh Rana was excellent, it included: Omelets, chapattis, paranthas, dahlbhats, Sabzi and even chips. Every morning he cheerfully thrust a cup of steaming sweet tea through our tent flaps, even in the foulest of conditions. Half way through the expedition we lost his services for a week when he had to go to the funeral of his brother who had just died. Other bad news that we received at base camp was that Budhi Singh's wife died in child birth. It was to be their first child. This served to remind us of the tenuous life that the Garhwal people have to endure.

#### F MEDICAL KIT Martin Welch

# F.1 Drugs

Paracetamol, Asprin
DHC 120
Flagyl (2 courses)
Ciproxin (2 courses)
Immodium
Nylax
Triludan
Diamox
Rehidrate
Indigestion Tablets
Sanatogen
Diazepam
Throat Lozenges

Mild pain killers
Strong pain killer
Antibiotic
Antibiotic
Diarrhoea - slows digestion system
Laxative
Anti Histamine
(not used)
Rehydration sachets

Multi Vitamin Pills (one a day) Sleeping tabs

### F.2 Externals

Antimalarials

Sudacrem(antiseptic cream), optrex, Calamine and witch hazel lotion, Bonjela, athletes foot powder, Uvistat suncream (up to factor 15), lip and eye salve, Dettol, insect repellant.

#### F.3 Equipment

Eye bath, Thermometer, Aids prevention (syringes, needles, suture etc), Kaltostat dressings, stretch bandages, steri-strips, triangular bandage, micropore, Vaseline, surgical gloves, safety pins, tweezers, scissors, scalpel, cotton wool, melolin, ventalin inhaler, blister dressings etc, alcohol swabs, zinc oxide tape.

# F.4 General Hygiene

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!). The filter is recommended by the red cross. The 0.2 micron microporous ceramic filter element delivers 3/4 litre per minute and removes loads of harmful whats-its such as amoeba, cysts, fungi and Giardia.

At base camp we dug individual toilets.

### F.5 Notes

No serious problems arose on the trip, all the members acclimatised well and there was no altitude related sickness, other than mild headaches on the approach. Small cuts and scratches were treated with antiseptic cream before they became worse.

We could have done with additional painkillers as they were handed out to porters and locals etc for their aches and pains.

At the end of our trip we gave our medical kit to the Nehru Mountaineering Institute in Uttarkashi.

# F.6 Vaccines recommended for travel to India

Tetanus. Lasts 10 years get booster if required (injection). Polio. Lasts 10 years get booster if required (oral).

Cholera. Lasts 6 months, only 50% effective (injection).

Typhoid. Lasts 3 years (2 injections).

Hepatitis A. Lasts 8 weeks.

Meningococcal. Lasts 3-5 years depending upon vaccine (injection).

Japanese

Encephalitis. Lasts 3 years (2 injections).

Malaria. Tablets start 1 wk prior to departure and then 1 month after return.

Japanese Encephalitis is not common, but is passed by mosquito bites. Meningococcal is passed by coughing, sneezing and saliva. Malaria is passed by mosquitos. Typhoid, cholera, hep A and polio can be avoided by strict hygiene with food, water and toilet.

## F.7 Medical bibliography

- 1) MEDICINE FOR MOUNTAINEERING, Ed J.A.Wilkerson, The Mountaineers, Seattle, Washington, 4th ed 1982.
- 2) D.Shlim, Mountain No 128, letter 'Shit or bust' on stomach problems in the Himalaya.
- 3) J. Hillebrandt, Mountain No 125 'Planning an expedition medical kit'.
- 4) MOUNTAIN SICKNESS, P. Hackett, The American Alpine Club.
- 5) UIAA Mountain Medicine Centre Info Packs, from Dr Charles Clarke, St Bartholomews Hospital, London, EC1A 7BE.

### G OTHER EQUIPMENT Ian Dring

The following equipment was taken out from Britain:

Mole grips, Allen keys (for crampons), tent repair kit (material, glue), file, hacksaw, strong nylon line, washing line, hose pipe and funnel (for water collection at base camp), dustbin liners, carpet tape, sewing kit inc strong canvas needle, screw drivers (1 of each type), super glue, Swiss Army knife, seam sealent, lighters, pad locks, batteries (flat and round), Water bottles, tubes flammable paste for starting paraffin stoves, Bright orange/yellow marker tape, 150 polythene sandwich bags, 5 lrg Brillo pads, bag elastic bands, 15 wire sack ties, 10 dishcloths, 7 pan scourers, 2 teatowels, lightweight binoculars, SLR/compact camera gear and film (approx 15 films each), writing material, pocket calculator + spare batteries, collapsible ski poles, polythene sheeting, washing liquid, clothes washing liquid, can WD40, bag of assorted nuts and bolts for crampon repairs etc.

Walsh PB fell running boots were found to be ideal for the walk in.

Equipment brought in India: 4 umbrellas, 10 marker poles, sun hats.

An item that would have been useful would have been plimsolls for the porters (approx £1 per pair) as most of them only had flipflops (hard going on boulder strewn glaciers).

#### H TRAINING Ian Dring

As the only amateur on the trip I had to think carefully about training. The others spent the summer before the expedition stomping up and down big mountains in the alps , so I had to redress the balance to attain something like their fitness. My training program was as follows:

Mon evening Yoga ( Very good for breathing exercises-

useful at altitude).

Tues midday Swimming.

Tues evening 1hr high energy aerobics, 1 hr step Rebok

(aerobics with a step).

Wens evening
Thurs midday
Thurs evening

Rock climbing.

Swimming.

Thurs evening

1 hr Weight training, 1 hr high energy circuit

training.

Fri evening

1 hr step Rebok

Weekend

Climbing/fell running/mountain biking

In India I found that I acclimatised reasonably well and was sufficiently fit to enjoy the climbing.

# I EXPEDITION ACCOUNTS Martin Moran

		£	£
GRANTS:	BMC	800	
	MEF	1000	
	Bowline Club	250	2050
COSTS:	Air fares	2160	
	Insurance	427	
	Air freight	250	
	Travel in India	305	
	Meals/Accommodation in India	132	
	Porters/Cook and other agency fees	794	
	Food/Gas purchased in Britain	310	
	Food/sundries purchased in India	138	
	First Aid supplies	40	
	Ropes	234	
	Administration Costs	131	
	Peak Fee	713	5634
NET COST	OF EXPEDITION		3584

NOTES: 1) Personal spending of at least £120 each is excluded from the account.

- 2) 23 porters up, 12 down, plus a cook were used, plus mess tent, stove and utensils hire.
- 3) Personal equipment purchased for the expedition is excluded from the account.

### J GENERAL BIBLIOGRAPHY Ian Dring

1) A lot of useful information was obtained from: The Expedition Advisory Centre 1 Kensington Gore, London . SW7 2AR

tel:01-581 2057

For a small fee they will make up a fact sheet covering the country which you are visiting. They produce a very useful book (approx £12) that covers all aspect of planning and executing an expedition, from fund raising to writing your report.

2) The BMC produce a fact sheet on climbing in India:

Crawford House Precinct Centre Booth Street East Manchester M13 9RZ tel:061 273 5835

3) The alpine club library proved to be useful in researching our objective  $\boldsymbol{\cdot}$ 

Alpine Club Library and Himalayan Index

118 Eaton Square

London

SW1W 9AE

tel:0712595591

If you live up north then the Fell and Rock Library might be more useful. To obtain information on how to use this library contact: G.C. Watkins,

Hon Librarian F&ROC,

University Library,

Bailrigg,

Lancaster.

LA1 4YH

(In India the IMF has also got a good library)

- 4) INDIA A TRAVEL SURVIVAL KIT, Lonely Planets 1981.
- 5) PEAKS AND PASSES OF THE GARHWAL HIMALAYA, J Babicz, Alpinistyczny Klub Eksploracyjny, Sopot 1990. Distributed in the UK by Cordee.
- 6) January 1990 East Face Kedarnath Dome Expedition Report, D. Fletcher

# POSTSCRIPT Ian Dring

On the 19th of October an earthquake measuring 6.1 occurred in the Garhwal. The epicentre was near Uttarkashi. It caused wide spread destruction and much loss of life. In November I received a letter from Digambar Singh of The Nehru Mountaineering Institute stating that all the employees of the Mount Support agency and their families had survived the Quake.