

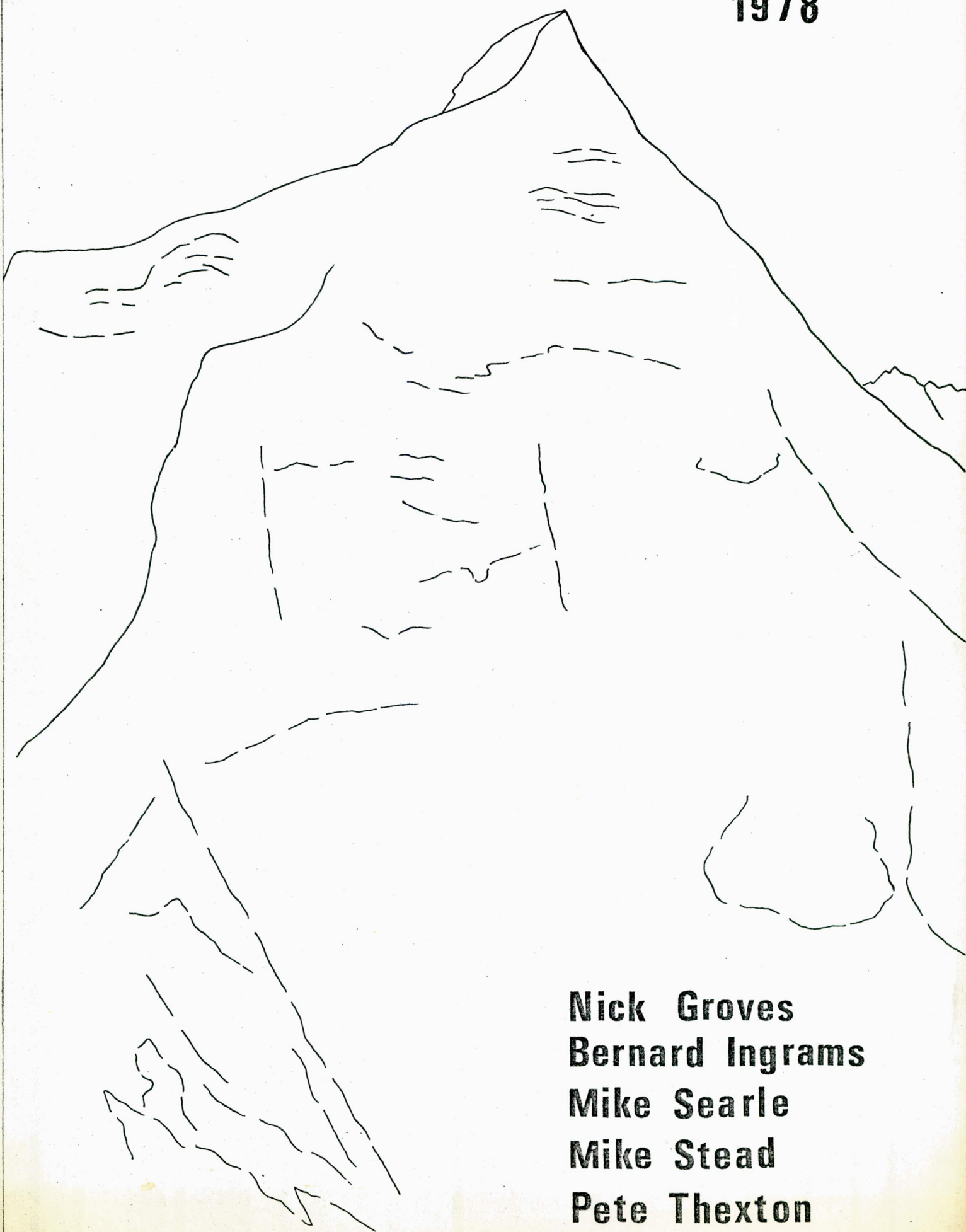
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THE SOUTH OF ENGLAND

EAST KULU EXPEDITION

1978

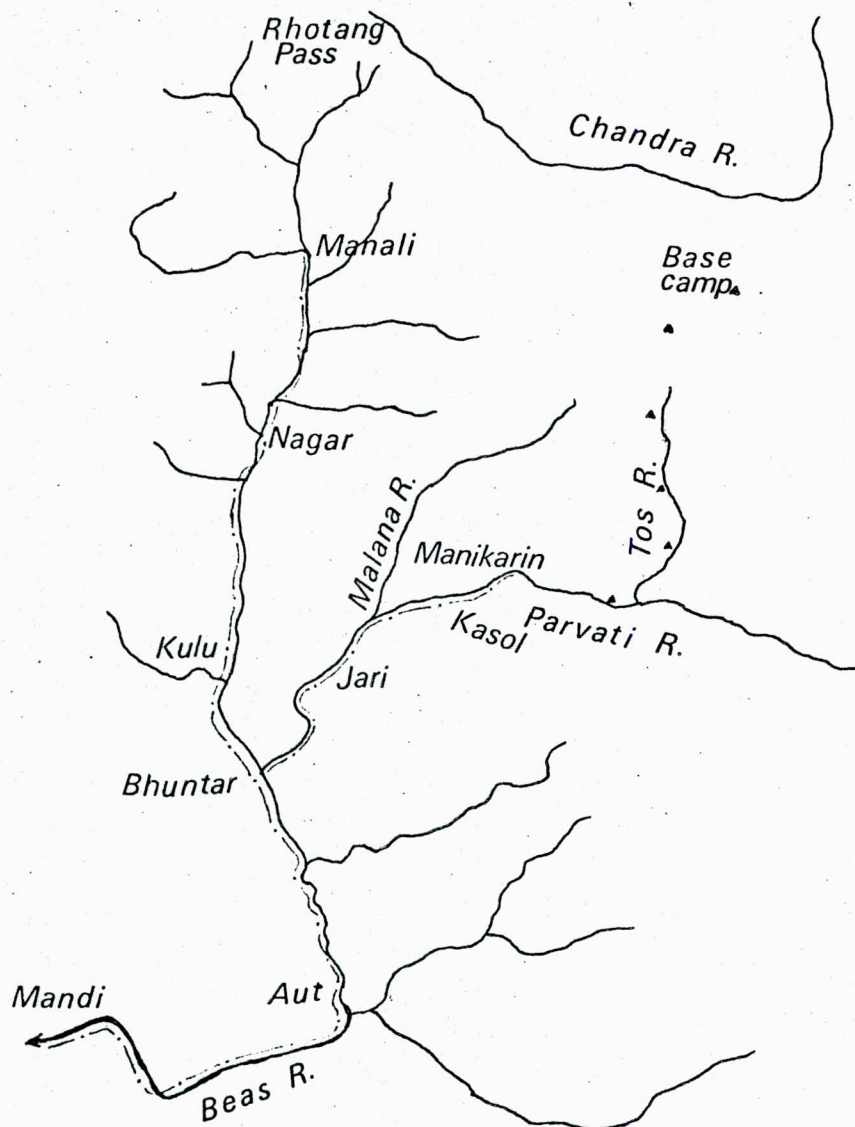


Nick Groves
Bernard Ingrams
Mike Searle
Mike Stead
Pete Thexton

739

What is he doing there and what right
has he to throw away the gift of life
and 10,000 golden opportunities in an
emulation which he shares only with
skylarks, apes, cats and squirrels?

The Times - 1865



KULU VALLEY

EXPEDITION MEMBERS

NICK GROVES (25)

3 Alpine Seasons. Expeditions to Patagonia and Peru.

BERNIE INGRAMS (27)

Computer Programmer. 6 Alpine Seasons. 1 Season in Kenya.

MIKE SEARLE (25)

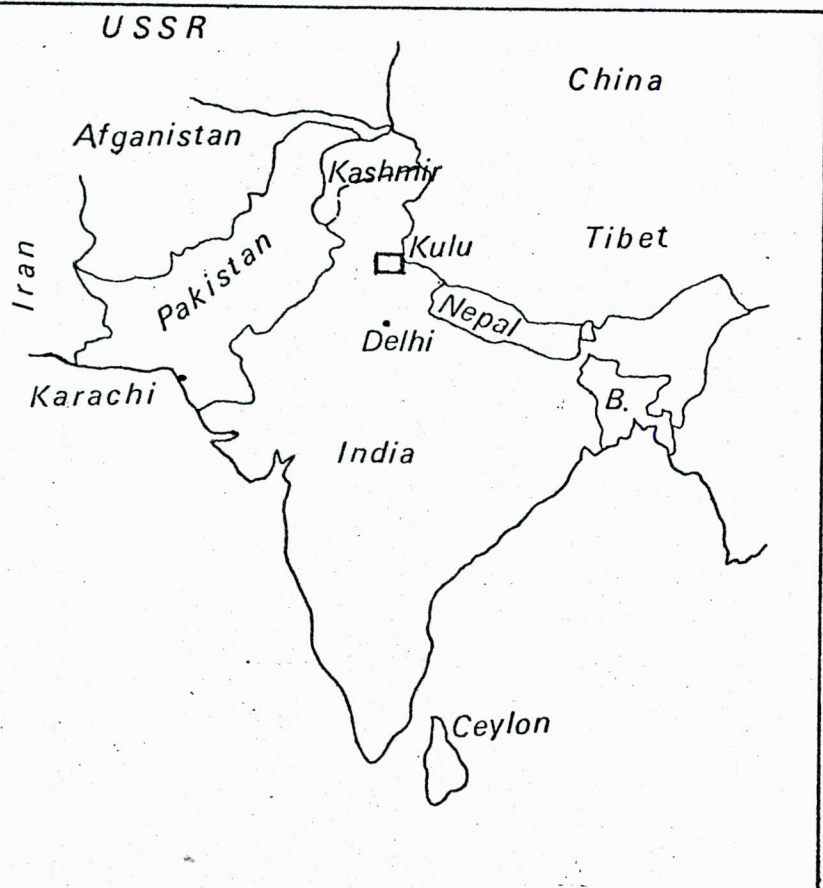
Geologist. 1 Alpine Season. Expedition to Patagonia.

MIKE STEAD (24)

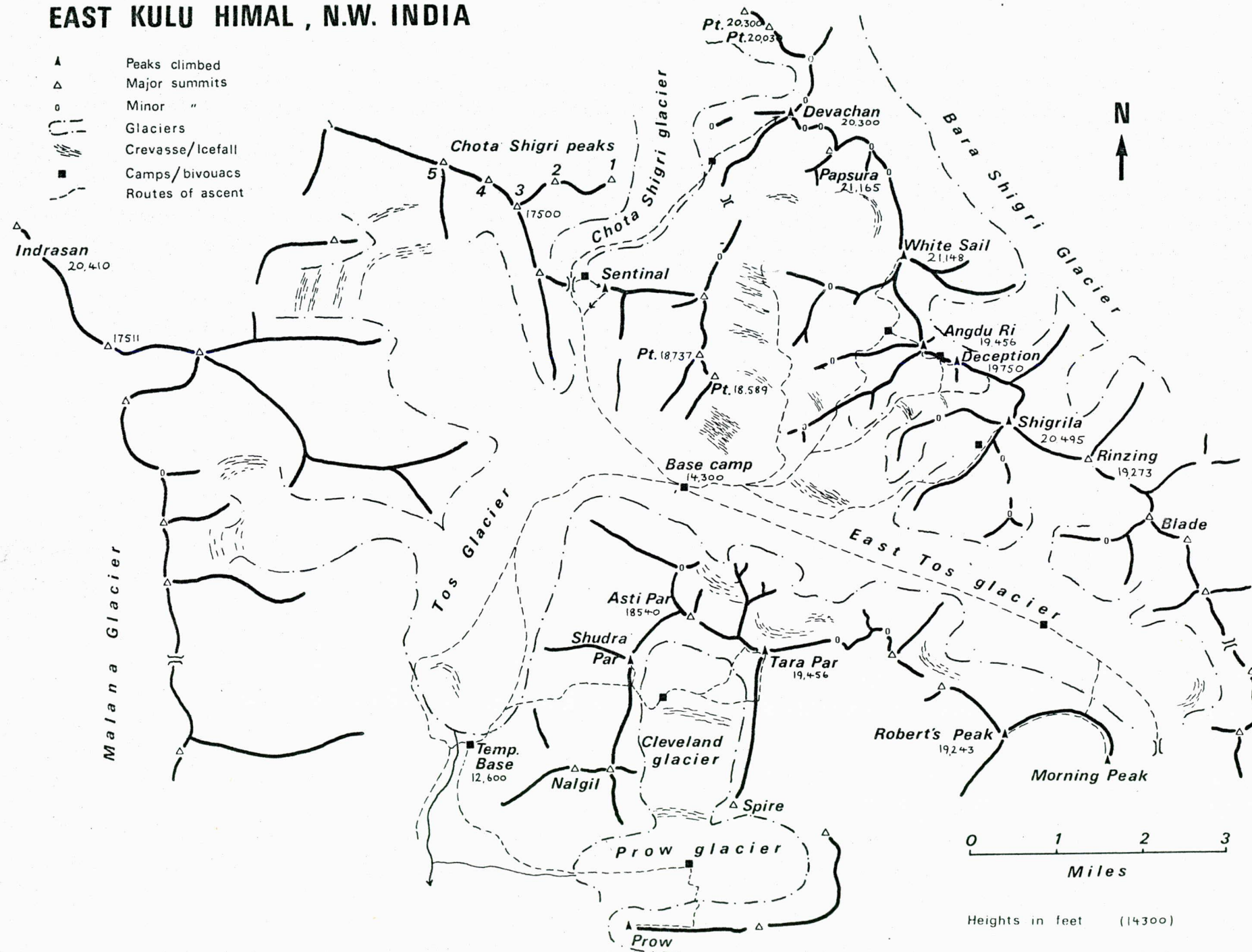
Petrochemical Engineer. 1 Alpine Season.

PETE THEXTON (25)

Doctor. 4 summer and 1 winter Alpine Seasons.



EAST KULU HIMAL , N.W. INDIA



DIARY OF EVENTS - EAST KULU 1978 EXPEDITION

April

26 Nick Groves and Mike Searle arrive in Manali

May

1 Nick Groves and Mike Searle leave Manali

2-7 Walk in and load ferrying to Temporary Base

6 Main Party leaves U.K.

8 Temporary Base established (12,600')

9 Nick Groves and Mike Searle make assault camp for Prow

10 Nick Groves climbs the Prow (18,230')

13 Nick Groves and Mike Searle climb Shudra Par (c.18,000')
and establish assault camp for Tara Par

14 Nick Groves climbs West ridge of Tara Par (19,456')

15 Arrival of Main Party at Temporary Base

19 Base Camp (14,300') established with all food

21 Entire group make assault camp for Angdu Ri/Deception Peak

22 Nick Groves and Mike Searle climb North West face of Deception Peak
(19,750') and Angdu Ri (19,450'); Pete Thexton and Bernie Ingrams
traverse Deception from East to West; Mike Stead climbs Angdu Ri;
Nick Groves and Mike Searle make assault camp for White Sail (21,148')

23 Nick Groves and Mike Searle climb White Sail via South ridge

27 Nick Searle leaves for the valley

29 All four remaining members make assault camp on South West ridge
of Shigri-La

30 Nick Groves and Pete Thexton attempt Shigri-La (20,495'), failing
200-300' from summit

June

2 Nick Groves and Pete Thexton make assault camp on Sara Umga Pass
below Sentinel

3-6 Nick Groves and Pete Thexton climb South West face of Sentinel
Peak (c.18,500')

3 Bernie Ingrams and Mike Stead make camp at end of Tos basin

4 Bernie Ingrams climbs Morning Peak (17,600')

5 Bernie Ingrams climbs Roberts Peak (19,243')

8 Bernie Ingrams and Mike Stead leave for valley

12 Nick Groves and Pete Thexton establish camp below Devachen

13 Climb North face of Devachen (20,300')

16 Leave Base Camp for valley

18 Arrive Manikarin - End of Expedition

INTRODUCTION

The most harrowing part of our spring Himalayan Expedition was undoubtedly the bus ride up the Beas River gorge from Mandi to Manali. After an age of travelling on Indian boats, buses and trains this final journey took the prize. The bodies were packed so tightly in that even a rat would have had difficulty getting aboard. We gave up and settled down amongst piles of sacks with the crowd on the roof. The single track apology for a road had been hacked out of the mountainside and was only kept open by gangs of Tibetan refugees, clearing away landslide debris that continually swept down to the torrential Beas River, over a thousand feet below. During one particularly awesome stretch the Punjabi ticket collector appeared out of a side window, and dodging the tunnels, climbed the overhang onto the roof and asked for our ten rupee fare.

Our plans had started in summer 1977 when Nick Groves and myself decided to spend the spring of 1978 climbing in the Himalayas. Initially we thought of the Karakorams in North Pakistan, attracted by the photographs of a magnificent array of peaks around the Baltoro-Biafo glaciers. We were rapidly dissuaded from this by the strict limitations imposed by the Pakistani Government upon climbing expeditions, notably high peak fees, compulsory insurance for porters and the need for liaison officers. It seemed that small, low-cost Alpine-style expeditions could not function here where long-walk-ins left one at the mercy of strike-prone porters.

After contacting the BMC, the area of the Kulu Valley in the state of Himachal Pradesh in north west India immediately appealed. Here were ranges of Himalayan peaks up to 22,000 feet, many of which still remained unclimbed, within relatively easy access of a suitable town as base. We decided upon Manali as a good, well supplied town - an attractive hill resort at 7,000 feet in the Kulu Valley.

The first thing was to recruit a few more members and we had little difficulty in persuading Pete Thexton, Bernie Ingrams and Mike Stead to join us. The BMC supplied details of previous expeditions to have visited the area and Nick was given a lot of useful advice by Paul and Dawn Bean, including that to contact Tara Chand, a local hunter and keen mountaineer in Manali.

The Journey to India

I left England in November to spend the winter working in the mountains of Oman in south east Arabia. Nick left in January to join me there, so the remainder of the organisation was left to Pete, Bernie and Mike. Pete, being our doctor, organised a comprehensive medical kit whilst Bernie wrote off dozens of begging letters to firms for items especially required. Much of the heavy equipment I had out with me in Oman, now being faced with the task of getting this all up to Manali.

We finally left Muscat on April 18th by British East India Co. ship to Karachi. Travelling 3rd class, unberthed, along with a veritable horde of Pakistanis and Indians who were returning home after working around the Gulf, we carried two rucksacs each, weighing around 100 lbs. Our two days on board were a physical endurance test, the main hazards being overcrowding (the only place to sit down we found was in the upper life-boat) and the red-hot Kerala curries. Arriving at Karachi was the culture shock to beat them all - from the empty deserts of Arabia to the seething hordes of the Indian subcontinent.

A further day travelling 3rd class on the Hyderabad Express brought us to Lahore and thence across the border to Amritsar. Despite the travel weariness I shall never forget that first day in India when we were lucky enough to witness the holy procession of Sikhs in the magnificent Golden Temple. Travelling north to Patankot, the road then turns east and runs along the base of the great Himalayan chain. It is here that one glimpses the tremendous snowy peaks behind Dharamsala - the first view of the Himalayas and with it that magnificent surge of excitement for things to come. As our rickety old bus lumbered along the twisting lanes through beautiful wooded foothills, I kept snatching tantalizing glimpses of the snowy heights through the masses of swaying bodies and half-open windows. A further few hours brought us to Mandi - a picturesque hill town on the banks of the Beas. The next day we were on the roof of the final bus, hanging on for grim life as it careered around the corners on our way up to Manali. After six hours it felt good to leap down once

more onto terra firma with the thought of no more Indian buses for a while.

We arrived at Manali on 24th April and immediately met Tara Chand who proved immensely friendly and helpful in every way. We rented a small cottage in the village of Koshala on the opposite bank of the Beas to Manali, commanding a splendid view of the upper Kulu Valley. Much of the winter snows still lay low on the surrounding hillsides, and with the famous Kulu apple trees in full blossom and the early spring flowers splashing colour onto all the fields, it was a great contrast to the hot, barren dryness of the plains, preparing for their months of summer drought.

We spent a delightful week in Manali, buying food and supplies, organising ponies and discussing the climbs of previous expeditions with Tara. Throughout the day the weather remained perfectly clear, occasionally clouding over in the late afternoon, and although it was pleasantly hot during the day, the temperature would drop abruptly once the sun sunk behind the valley sides.

The Walk-in

On 1st May we set off at last, humping our fifteen boxes of food, jerrycans of Kerosene and our own sacs onto the roof of the local bus (still not to be the last!). This took us back down the valley to Bhuntar where we had to off-load everything, carry it across the bridge and put it on another bus which took us up the Parvati Valley to Kasol. At Kasol we had our last night of luxury, staying in the forestry bungalow, sleeping on a bed and being waited on by the chaukidar.

The next day we left Kasol with a local farmer, Durga, and his five ponies laden with our boxes and gear, managing about 40-50 kg on each beast. We carried our own personal gear and food for the journey - a somewhat lighter proposition. Just as we left, a Hindu procession from the temple at Manakarin passed by, accompanied by banging drums and blowing conch horns. Opposite Manakarin the road stops and a narrow mule track continues up the Parvati to the villages above.

The walk-in was completed as far as the winter snows would allow the horses to travel, four easy days along beautiful Himalayan valleys where the trail passed through dense woods of blue pine, tall deodars and white oak showing a hundred shades of green. A few small villages clung to the hillsides, the houses being built of local stone and timber with huge roofing slates of mica schist to bear the weight of heavy winter snows. Spruce and silver fir clad the upper slopes of the Parvati and beyond the village of Barshani the path splits, we turned north to follow the steeper Tos Nala.

At Tos village we negotiated with the head man for two able-bodied porters to meet us at the snowline on the following day, and after considerable haggling we managed to procure Puran and Gopi Chand for twenty rupees a day providing them with bumper-shoes and goggles for the deep snow above.

That afternoon we encountered the first snow drifts among the trees and the ponies began to flounder, with our precious loads threatening to be catapulted down the slopes to the thundering Tos River below. After pushing the poor beasts through a couple of drifts we came out of the forest onto the upper meadows and unloaded. That evening our two porters faithfully arrived and we all sat around the campfire whilst Durga taught us the delicate art of making circular chapatties. The next morning Durga began the return journey to Kasol and we were sorry to see the last of his continually smiling face. The next three days saw all four of us ferrying loads up to Shamsi - a broad snow plateau at the snout of the Tos glacier where we decided to establish a temporary base camp. On 8th May the porters returned to their village while Nick and I moved up with the final loads to spend the first night of many sleeping on snow. We made two climbing trips to peaks below 20,000 feet while we waited for the arrival of the others from England, so by the time Tara arrived with Pete, Bernie and Mike a week later we were somewhat more acclimatised to the altitude. These first two trips I found particularly difficult with the sudden ascent to 18,000 feet, the worst effect being a crippling headache made worse by the fact that Nick felt no ill effects at all.

By 15th May the whole Expedition was assembled at temporary base, some members meeting each other for the first time. Three days later with the additional help from Tara we had moved everything but a cache of rice and dal up to our Base Camp at 14,300 feet on the East Tos glacier, where we were to live for the next five weeks, Tara unfortunately having to return to the valley in order to attend to his crops.

MIKE SEARLE

THE PROW (18,230 ft) 9th-10th May

Coming into view for the first time during the initial load carry to Temporary Base this fine peak looked all of its 18,230 feet, the summit jutting through wreaths of afternoon cloud which hung around its smooth granite flanks sweeping down to the glacier. Otherwise occupied with the 25 kg. load I paused only to take a photograph, with little thought of it as an ideal peak for acclimatisation once the donkey work was over.

Only four days later, powered by a breakfast of hot chapatties and jam, Mike and I began the slog towards this mountain, having decided that its relatively low height, combined with its assumed virginity, would make it an ideal starter before the arrival of the others. Soon we found ourselves ploughing through knee-deep snow, the penalty for rising at a civilised hour, while further up the approach glacier unmelted snows of winter reached our waists. Mike's enthusiasm for this venture began to wane while trying to swim up a bottomless powder snow slope with only minimal success.

At the first level, reasonably avalanche free section on the glacier we called it a day, Mike collapsing into the hastily erected hoop tent with a throbbing headache while I made supper and inspected a possible route on this, the northern side of the mountain. The original intention was to 'look around the back' for an easy way, since along much of its faces, the mountain is guarded either by smooth and very steep granite cliffs or else with bulging serac walls issuing from the hanging glaciers which pour off the summit ice field. But directly above our random bivouac camp the cliffs are cut across by an upward trending ramp of snow, this diagonal break looking considerably more inviting than a continual slog up the glacier tomorrow. Threatened by large seracs which end abruptly at the cliff edge directly above this exposed ramp, this line of approach would only be feasible first thing in the morning; a quick dash to reach the safety of the upper snow field which drops from the summits heavily corniced ridge.

Unfortunately the whole venture was jeopardised by Mike's continuing headache and nausea obviously as a result of the altitude (c. 16,000 ft.) and lack of acclimatisation.

The morning looks perfect, as they all have since we arrived in the Tos Valley; a day too fine to miss, so while Mike gloomily announces that he doesn't feel up to the climb I decide to go up and look at the ramp. The greyness of approaching dawn spurs me to hurry up the initial snow slopes towards the base of the cliffs, gasping as the cold air painfully fills over-sensitive lungs; now it's my turn to feel the adverse effects of steep cramponing over 15,000 feet.

Harder and steeper than I had anticipated, this snow ramp occasionally petered out to reveal the underlying loose rock, frozen in a matrix of old, hard ice thankful of recently sharpened crampons and the decision to bring an ice hammer. Slow work along this break, early morning sun striking the seracs several hundred feet directly overhead; pretty only from a suitable distance. Combined with the vertical drop below, it was sufficient to keep interest from flagging and thoughts of what lay ahead at the back of my mind. A final pull over some rock signalled goodbye to the ramp and its associated pleasantries, now only a smooth slope leading to a beautiful sinuous line of cornices to contend with. Through these snow bulges at their only vertical break, time now to rest and bask in the early morning sun. A fine place to be on a day such as today, a first glimpse at the sea of snowy peaks to the south, surprised by

these dazzling multitudes since our area is supposed to be situated 'on the edge' of the Himalayas - a broad and impressive 'edge'. Wondering if the snow pyramid at the culmination of this ridge is in fact IT or whether hidden delights lie beyond, so deceitful these mountains can be.

I discover my limits of acclimatisation on this final stretch to the summit counting paces to my next panting stop, their number decreasing with height gained until the Himalayan Slog Routine asserts itself (viz. 10 paces - stop - gasp - pant another 10 paces and a repeat performance). And only at 18,000 feet? What will I feel like on some of our more elevated objectives during the next few weeks? A short icicle draped wall bars further progress in this manner, being forced to tunnel through the final soft 8 feet; belly-rolling onto the snow above; and then no more as the top suddenly appears, belying previous doubts about hidden summits.

Views all around (what other reason to be there?), endless panoramas of white summits, some recognisable while the great majority merge to form a solid barrier of mountains - the Lesser Himalayas. Across the valley westwards is the rocky lump of Ali Ratni Tibba, then Deo Tibba and Indrasan, both over 6,000 meters, and to the north the peaks whose lofty summits we hope the gods will permit us to visit - the elegant snow cone of White Sail, the broad dome of Papsura, Devachens symmetrical pyramid and Shigrilas rocky and complex south face. All over 6,000 meters with plenty of smaller but equally interesting peaks as neighbours should we dispense with the aforementioned summits within the first week!

Going down from altitude is always a pleasing experience, the pleasure, however, probably arising more from the prospect of that distant brew than from any altitudinal changes. Not wishing to repeat the morning's delicate traverse under the seracs I decide to look over the eastern peak for an easy way down. But with no rope and little desire to kill myself I spend a considerable time searching for a break in a sudden band of cliffs which appears, hidden from above, eventually rewarded with 100 feet of steep, nerve-wrecking scrambling and 30 feet of desperate leg-jamming finishing with an overhung layback to bring me sagging gently onto terra firma.

Henceforth the day became one long, arduous descent down snow of every variety and consistency, heart-in-mouth snow bridges across gaping crevasses upon arrival at the glacier; the least attractive aspect of solo mountaineering. After collecting the tent and the rest of the gear Mike left behind in his hurried departure for lower levels, I followed suit myself, dreaming of that hot, sweet mug of chai for the final boulder-strewn hours. This good day on the hill being further enhanced by punctually arriving back for tiffin; even on the East Tos certain aspects of the Raj live on.

NICK GROVES

TARA PAR (19,450 ft.) 13th-14th May

Next came Tara Par while awaiting the arrival of the others; previously climbed but undoubtedly a fine viewpoint from which to study the peaks north of the Tos glacier. Yesterday Mike reached his first Himalayan summit, above the Cleveland Glacier, virgin or otherwise he named this peak Shudra Par (The Untouchable Mountain) (c. 18,000 ft.).

But now it's morning and once again I leave Mike in the comfort of his pit as I set out on Tara Par's west ridge. I'd forgotten just how unpleasant early starts can be, fighting with frozen outer boots while Mike's singles were just too solidly refrigerated to get on, our nylon overboots having not yet arrived with the main group. The west ridge looked slightly more interesting than the obviously straightforward south ridge, and any deficit in technical difficulty being more than compensated for by the spectacular array of twenty thousanders to the north, a row of glistening bluish-white peaks all resplendent in their new coats of icing-sugar snow after last night's storm. This soft, dry powder snow helped keep my feet in perpetual deep-freeze only on the crest of the ridge was it blown clear, the wind sending great white plumes across the abyss on the left.

But no wind on the summit so I'm able to lie back and bare my numb toes to the sun while surveying nature's grand display of rock and ice sculpturing all around. If the Cleveland glacier is no place to be at 5 am on a Sunday morning then the summit of Tara Par is definitely THE place to be six hours later..... an emotion shared by a particularly high flying butterfly who shoots over my head, intent on going somewhere this fine morning - at nearly 20,000 feet?

No sign of Mike after an hours sunbathing on top (it is Sunday), so I begin to descend the easier south ridge, meeting my struggling partner 800 feet below the summit. Once again the altitude proves too much for him, especially combined with the effort required to wade through ever-softening snow at this late hour. Reluctant to lose those hard-won steps he is forced to return with me to the bivouac tent, his second disappointment; hopefully soon to be remedied.

NICK GROVES

TRAVERSE OF DECEPTION - ANGDU RI - WHITE SAIL 21st-24th May

"I brought an extra bar of chocolate just in case" I muttered to Nick as we plodded up the Tos glacier. What started out as an attempt to climb the shapely Deception Peak (19,750 ft.) became a high-level traverse of Angdu Ri and White Sail as well. Our planned one day climb grew into $3\frac{1}{2}$ days, mostly spent above 19,000 feet including 3 bivouacs and 3 peaks culminating in the ascent of White Sail (21,148 ft.) and enabled us to experience the rather masochistic joys of living at altitude.

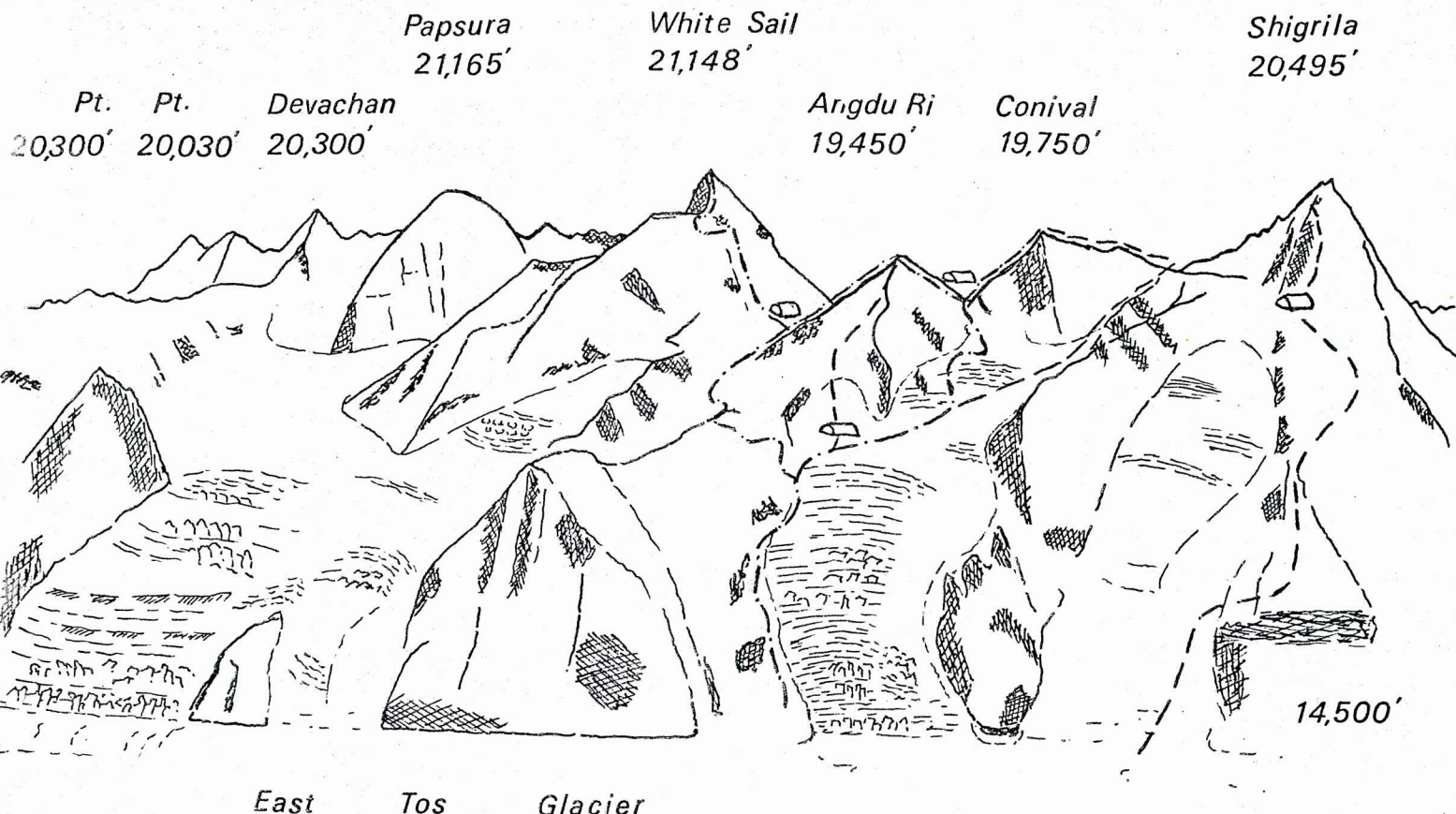
All five of us left camp together for various objectives near White Sail, soon we were strung out on the icefall from the Deception-Shigrila glacier system, moving at varying speeds over this unpleasant terrain. Overhead tottering seracs, some laced with long icicles kept us on the move, while the moraine to the left was equally dangerous and incredibly loose so we zig-zagged up a snow-filled couloir between the two, dodging boulders unleashed from above. Three hours snow plodding brought us all to a large snow plateau below Angdu Ri and Deception where Nick and I left the others to put up an assault camp for Angdu Ri while we continued upwards. It was here I discovered that Nick had thrown in an extra packet of soup as well, so providing the weather held, we decided to attempt all three peaks.

A snowy col between Angdu Ri and Deception looked an ideal place to bivouac the first night, although a further two or three hours of slogging up the glacier was necessary before we reached the bergschrund at the base of a broad snow gully leading down from this col. It was exhausting work but at about 4 pm we emerged onto a nice broad col with fantastic views across the desolate mountains of Lahoul, Spiti and the Tibetan border. Clouds were swirling around us and an icy wind blew from the north west as we struggled to erect the bivvy tent. Occasionally through the mist the immaculate ice ridge curving up to the summit of White Sail appeared. As the sun set the summits of the Bara Shigri peaks turned golden-yellow but my gaze kept returning to the elegant snow pyramid of White Sail, soaring up so far away and above us.

The night was desperately cold and windy, during which time the inner part of our totally inadequate bivvy tent collapsed more than once. The primus refused to function at this altitude (c. 19,000 ft.) and it took an hour to melt snow for a tepid brew which was promptly knocked over inside the tent.

At 4 am we 'woke' and after a quick bowl of cold muesli, donned boots, overboots and crampons, emerging into the freezing twilight. It was still very cold (we wore duvets while climbing) but the morning was clear and the sunrise stupendous. For a few minutes of isolated splendour White Sail was bathed in sun, sweeping upwards in graceful, snowy arcs into the blue morning sky - its face glazed in turquoise water ice and its corniced ridge cutting up to a fine tapered summit.

Our climb from the col to the summit of Deception looked relatively short but in true Himalayan fashion it proved totally deceptive. The climbing was superb - front pointing up 40-50° hard névé with a thin layer of powder snow on top. At 7 am we clambered onto the summit rocks and I immediately took off my boots and began the agonising process of rubbing life back into numb toes. The views



in all directions were absolutely superb and the weather totally clear. Peering down the north face to the Bara Shigri glacier was especially mind-blowing. Eastwards, beyond Shigrila, a maze of impressive mountains stood out and northwards lay the endless width of the Himalayas across Lahoul - Spiti to the snowy wastes of Tibet. Westwards, White Sail dominated the views but Indrasan and Deo Tibba appeared beyond the Tos nala, and the imposing north face of Tara Par to the south, laced in hanging glaciers forms one of the most impressive rock and ice walls I've seen.

After half an hour on top we began to descend by the same route, unaware that Pete and Bernie were nearing our fine viewpoint via the east ridge, and soon reached our tent in the col. The rest of the day was spent plodding up to the snow dome of Angdu Ri with Mike who came up on his own after the others decided to switch objectives to Deception Peak. It was snowing by the time we reached the west col of Angdu Ri, setting up tent for the second night. My altitude headache again lasted all night so at least there was no difficulty in waking up. At 3.30 am I woke Nick and an hour later we started up White Sail. It was tiring work but the sheer grandeur of the immaculate Himalayan views as the sun slowly appeared above the eastern horizon was all the stimulus I needed. Slowly, so slowly we climbed level with Angdu Ri, then level with Deception Peak, then level with Shigrila whilst everything else whittled away to obscurity below us.

The next section looked more difficult with a band of exposed and steep ice-seracs. We climbed two pitches with only the tips of our front-points biting into the hard ice and I struggled up to where Nick was hanging precariously onto an ice-axe belay. We decided we'd have to try another way and both had epics descending back the 150 feet so painfully gained, without ice-screws to abseil from. It was an incredible breathtaking effort of downward climbing at over 20,000 feet. When we recovered and sipped the last drops of our water we had a long horizontal detour under a wall of ice seracs before being able to climb up through there and gain the south ridge. By now it was midday and somehow our fantastic luck with the weather held. The final plodding up to the top took us over two hours with 20 then 15 then 10 steps at a time before collapsing over the ice-axe and panting for breath. The mountains looked strange from upside down, leaning on my axe with a few mild altitude hallucinations as well.

Slowly the summit came nearer and immense effort was required to stretch across a couple of crevasses barring the way, then at last nothing above but clear blue sky. A few moments to recover, as air is scarce at 21,150 feet and then the dawning of appreciation - the mountain climbed - the height we were at - those fabulous views in all directions, and seemingly nothing else between heaven and earth. Through the exhaustion the complete moment of exhilaration.

SHIGRI-LA (20,495') - ATTEMPT ON SOUTH RIDGE 29th-30th May

We were all glad of a rest after our last exploits, Nick and Mike relaxing after their marathon traverse and the rest of us recovering - myself in particular - from our first taste of altitude. However, after a week of bad weather, we had had enough. Mike Searle gave up and left to go trekking up the Parvati River

At last the weather cleared, leaving only a little fresh snow - most of the snow that had fallen had rapidly melted during short sunny spells. We decided it was time for an attempt on our first planned objective. The north side of Tara Par was very daunting, so we turned to the south ridge of Shigri-La. This looked quite straightforward except for the last section, which could not be seen clearly from the glacier. However, we had seen one side of it from Deception Peak and, as far as we could remember, it looked feasible. A Polaroid camera would be useful!

The ridge gained nearly 6,000' in height from the glacier up to the summit at 20,495'. Up to about 18,500' it looked like an easy snow plod, and then it steepened and became more mixed. The four of us set off from Base Camp at dawn, hoping to camp that night below the final steep section. However, it all took longer than expected as usual. The sun soon softened the snow, making progress very laborious by afternoon. Mike Stead was again badly affected by the altitude, and was soon only a dot far behind.

Nevertheless, by about 5.00 pm, Nick, Bernie and I had reached a perfect campsite on a level shelf, sheltered below the ridge at about 18,000' - not quite as high as we had hoped, but good enough. Mike staggered up feeling rough an hour later to have a brew thrust straight into his hands.

We were treated to a fabulous sunset over beyond Indrasan with some spectacular cloud effects. As usual, once the sun had vanished the temperature plummeted, hastening us to bed. I was pleased to find that acclimatisation was under way, as I found myself spared the headaches and nausea of the night on Deception Peak, although we were sleeping higher. The dawn was cold and clear. Mike Stead was still feeling rough with severe altitude symptoms, so he and Bernie decided to descend later in the morning. As it happened, they did not miss much.

Nick and I soloed up the ridge of mainly straightforward steepish snow, to a col below steeper ground leading to the summit ridge. By now, clouds were rolling in from the south west - we were obviously in for a storm. We continued. From the col a steep step in a very exposed position above the south east face led onto steep unconsolidated snow on ice - a legacy of the bad weather. After two pitches up this, we arrived at a steeper section - the easiest line seemed to be an iced-up chimney line. Nick engrossed himself in this while the storm raged around us and I froze. After much struggling he was up - it was difficult. I thawed slowly as I followed. An easier pitch led to a level corniced ridge, dropping slowly on the far side and leading to the summit block.

Below the final 200-300' we sheltered in a corner for a snack. The weather was grim and bitterly cold with high winds and driving snow. I struggled a short way up steep rock above, but could find no easy way, and it soon became obvious that if we continued, we would be out for the night. Hoping for a rapid ascent and descent, we had unwisely left sleeping bags and tent at the camp, and so did not fancy the prospect. Defeat and descent were disappointing but wise. Some bitterly cold abseiling followed, necessitating frequent stops to warm up hands nearing frostbite in frozen gloves. Continuing down through the cloud, we located our camp mainly by luck. Then ironically the clouds rolled away for a fine sunset.

After a damp and hungry night we had a breakfast that was leisurely (because of the obstinate stove) and then descended to Base Camp. We decided not to attempt the final section again as we were exhausted, and anyway it was now covered with more fresh snow. We had been so close to success, but I was glad at least to have been over 20,000' with no ill-effects.

SENTINEL PEAK (c.18,700') - 1st ASCENT BY THE S.W. FACE 3rd - 6th June

The impressive skyline of Sentinel Peak had dominated the load-carrying days spent establishing Base Camp. I had been attracted to it since we had first seen it on the third day of the walk-in. Although the peak is relatively low at approximately 18,700', the west ridge rising from the Sara Umga Pass at about 16,000', and the north and south sides of the mountain, offer some of the most impressive rock scenery in the area. Only the east ridge looks straightforward.

After our near miss on Shigri-La, I was keen to try the west ridge, or anyway the most uncomplicated looking line from the Sara Umga - if there was one. Nick and I were now both reasonable acclimatised, and hoped to be able to cope with difficult rock-climbing above 18,000'. Nick reluctantly agreed to humour me in this venture, so previously redundant and seemingly surplus rock gear was pulled out and packed in sacs which rapidly became, cripplingly heavy with several days food (wish there had been more), tent, stove, fuel, clothing, ropes and sleeping bag. We finally left Base Camp in the heat of the afternoon, leaving Mike and Bernie preparing for a trip up to the far end of the East Tos glacier the next day.

Four hours hot and sweaty walking saw us struggling up the final slopes to the Sara Umga, with the south west face of the Sentinel towering above us looking very formidable indeed. The only feasible route seemed to be a tenuous line linking snowfields separated by steep walls in the lower part with a huge corner in the centre part of the face leading past a massive overhang to a crack/chimney line splitting the headwall. It did not look easy, but it seemed to be the only line worth trying unless there was something easier out of sight on the north side. There wasn't.

We arrived at the Sara Umga as the evening sun left it, although it still lit the great tower above us with an orange glow. The sudden chill was more than compensated for by our first view of the Chota Shigri glacier with White Sail, Papsura and Devachen in a proud row on the skyline with unclimbed peaks beyond - all over 20,000'. A large powder avalanche swept down the even more impressive north face of the Sentinel as if to emphasise its impregnability. We had plenty to ponder on as we ate a supper of various dried foods.

The next day dawned clear and still but cold until the sun reached us as we were kicking our way up the initial snowfield leading to the first rock-barrier. There were no lines, so we traversed right under it, and further and further to the right until Nick found a corner above which led through to the next snowfield. He led across to it and up - it seemed awkward with cold hands. The only way on was an overhanging chimney with a large loose-looking flake hanging in it. My notion of sticking to alternate leads as I was comfortably belayed, was of no avail, and I found myself struggling in the chimney. It took a lot of time and effort, and I was not helped by double boots and a heavy sack. In the morning sun E.B.s and shorts seemed more appropriate. However, devious methods finally got me onto easier though snow-covered rock. Nick followed more quickly and took the only fall of the route when a nut pulled out. The ice that it had been jammed against had melted! No harm was done, so Nick led across the next snowfield. An easy pitch followed and then Nick led up a stretch of beautiful warm orange granite to the bottom of a short but steep and holdless jamming crack.

This looked so tasty that I left my sack behind to have the maximum chance of free-climbing it. Makulus would not fit so knees had to do, but aid was not necessary. This was reminiscent of, though harder than, the first pitch of Curving Crack, and a lot more exposed! Nick grunted his way up mumbling his appreciation, and Chamonix and Tremadoc seemed a long time ago.

Nick moaned as he fought with a dripping corner leading the great central snowfield about half-way up the face. As it was already late afternoon, Nick started wittering about abseiling off - we had naively hoped to do the route

in a day. I ignored him, and as there did not appear to be any decent bivvy sites for a long way above, started to cook supper. We did not fancy sitting on a rocky ledge all night, so Nick set to work cutting a place for the tent in the steep snowfield. This took a great deal of effort and some foul low mutterings, but was well worth it. We had a very comfortable night and nearly overslept.

In the morning, an awkward gully led to the foot of the huge corner with overhangs "beetling" above. Nervous forays to right and left revealed no easier alternative, so off I went cheating my way up most of the first pitch. Nick declined the next, feeling that retreat was more appropriate, so I led what was probable the best pitch of the route - jamming and laybacking up the corner to the lip of an overhang and then delicate fingery climbing out across the right wall precariously perching on tiny holds in clumsy boots. The sack seemed to be on gravity's side.

The rest of the corner seemed to be very loose so we continued up the right wall at first easily and then with increasing difficulty as it became steeper and also very loose. It was so unpleasant that Nick went off on a survey trip round to the right which occupied a considerable time but found no better alternatives. We were not going to reach the top that day either!

I followed a horrifically loose pitch, hoping that mine would be better. It wasn't, and it included a collapsing ledge and an awkward wide crack, but thankfully finished on a wide terrace just above the level of the large rectangular overhang in the corner. It did not look too far now to the top, but we decided to stop for the night in comfort! rather than gamble on finding accomodation further up. There was no room for the tent, so we had a fine view of the sun setting beyond Indrasan and Deo Tibba from our sleeping bags. Ali Ratui Tibba could be seen sticking up like a sore thumb to the south, the weather still being miraculously perfect. For breakfast we ate our last food - soup and macaroni. We would have tried to stretch it further if we had known that we would not reach Base Camp for nearly two days!

All the way up we had found that the only reasonable route was the one we had worked out from the glacier below and the final section. What had looked like a crack splitting the headwall turned out to be more of a chimney - just as well, as on either side were smooth walls of orange granite. Two very enjoyable pitches led to an overhanging corner which succumbed to the usual trickery. One more long pitch and we were on the summit ridge, although all was not yet over. A pitch of steep, sugary snow in a very exposed position above the north face was followed by an abseil. At last the weather was breaking - clouds were rolling past and soon it started to snow. A long traverse across more unconsolidated snow and a last rock step brought us to the summit. The moment of triumph was somewhat soured by the white-out.

It was now mid-afternoon on our third day, and all we wanted to do was to get down. However, we were reminded of the saying "more haste, less speed" for we suddenly found ourselves on a ledge in the middle of the south face with the abseil ropes stuck above us. By now, the weather was foul and by the time we had freed the ropes we were cold and tired, and only tried half-heartedly to climb back up to the ridge. We came to the realisation that we would reluctantly have to spend another night out, and then climb back up when the weather had improved. We had no food left, so spent a miserable damp night feasting on half-a-dozen Dequadin lozenges each! Luckily the weather cleared for us in the morning, and Nick led a steep ice pitch to get us back on the ridge.

Once back to this point, the descent was straightforward, and we enjoyed superb panoramic views in all directions which we had missed in the cloud the day before. A couple of abseil over rock steps and some exhausting slopes of serrated snow seemed to take for ever in our hungry, thirsty and exhausted state. When we finally reached easy ground, Nick collapsed asleep on the snow.

What had been intended as a one day route had taken two and a half days up and another day down, but was without doubt one of the finest climbs that either of us had done. The gentle uphill grind back to Base Camp seemed interminable but finally worthwhile after two or three brews relaxing in the sun with Mike and Bernie who were back from their trip up the glacier. Bernie had managed solo ascents of Morning Peak (17,600') and Roberts Peak (19,243'), while Mike Stead was unfortunately stricken with a combination of altitude and a stomach complaint which had prevented him from accompanying Bernie on these climbs.

PETE THEXTON

ROUTE DESCRIPTION - Sentinel Peak (c.18,700') S.W. Face TD Sup.

The west ridge rises steeply from the Sara Umga. The route described climbs the face to the right. In the lower part of the face there are several snowfields separated by steep rock-walls. Above the highest snowfield, in the centre of the face, is an obvious large corner leading past a large rectangular overhang to a crack/chimney line splitting the headwall.

Start: from the Sara Umga, climb up steepening snow trending right beneath the first rockband to find a right-facing corner above (IV) which leads to the next snowfield. Climb a steep left-facing chimney with a large flake in it on the right (VI, AI) exiting diagonally (R) (IV) to more snow. Traverse round to the right and up a short slab (III) to belay on a flake. Up left (IV), step back right (IV) and climb a short steep hand-jamming crack (VI). A corner on the right (V) leads to the central snowfield and bivvy sites. Climb the gully above on the left (V, AI) and then snow to the bottom of the huge corner. Up this (V, AI) (VI) and then out delicately across the right wall. Continue up the right wall (III, IV, V), some very loose rock, up a wide crack to a terrace just above the obvious large rectangular overhang in the corner. Bivouac sites. Next the obvious chimney/crack line (V, IV, AI, V) leads to the summit ridge. Follow this past one rock step to the summit. Approximately 20 hours climbing (over $2\frac{1}{2}$ days) and 21 pitches.

Descend the east ridge (some abseiling) and then south down a steep glacier to rejoin the East Tos glacier.

ROUTE DESCRIPTION - Devachen (20,300') N.W. Face (1st ascent) D Sup.
2nd ascent of peak.

Approach: via Sara Umga col and Chota Shigri glacier. Then up to snowy plateau below N.W. face (camp).

Climb: 15 pitches from Bergschrund diagonally across N.W. face (ice 50° - 60°) to a gully leading through final rocks. Up this and onto North ridge - 3 pitches to summit. Descent down South face.

DEVACHEN (20,300) - 12th - 13th June

Upon returning from the Sentinel climb, I made it quite clear to the Doc that it was too be my grand finale this trip, since the lust for pastures green greatly surpassed my desires to "knock off a couple more". And yet, softened by a few days at Base Camp, I eventually agreed to accompany him through the Sara Unga pass to look at a few "twenty thousanders" beyond as the rest of our little team had left or were about to leave - I did not have much option but to oblige.

Thus, labouring under the heaviest rucksacs yet, due no doubt to the great wedges of bivouac chapatties prepared for this trip (luxury foods finito) we moved slowly to beneath the Sentinel, giving her a wide berth this time lest she should have a change of heart and decide not to let us off so easily.... she was even more impressive from through the col, reminiscent of Patagonia. Abandoning plans to place a high camp between Pt. 20,030' and Devachen due to the lateness of the hour and the associated softness of the snow, we left our options open for the morrow by erecting the hoop tent nowhere in particular.

Pete Thexton, enthusiastic as ever, was crunching around outside the tent at some ungodly hour, while I dreamt of green meadows and pretended to be asleep until a cup of something hot was thrust through the tent door. Hint taken, I rose and performed the pre-dawn rituals which accompany such esoteric pastimes - i.e. an early morning ice-shower from the interior decorations of hoar frost, struggling with the wrong boot, or the wrong foot, or even both, or commencing to put on crampons before over-boots etc. ad nauseam, cursing to keep myself warm.

Finally away, with good snow to romp up compared with yesterday afternoon's slush. We were still undecided as to which peak we should focus our attention upon until it became apparent that the choice was not ours - Pt. 20,030' and its neighbour Pt. 20,300' lie considerably further back than the rest of the range, separated from this by a deeply cut glacier system. No Through Road by this approach, a fact not appreciated by map studies of the area. So we abandoned dreams of distant virgins and contented ourselves with the second ascent of Devachen via a proposed new line.

An exhausting ice-crust of usually insufficient strength to support our weights overlay deep, cold powder snow. Pete ploughed ahead to the base of the N.W. face while I looked around for excuses, feeling inexplicable dizzy - surely not the altitude after so many weeks of acclimatisation? More likely a surfeit of Himalayas (better than lampreys) after the last five weeks' activities. But despite my worries over the rapidly changing weather to the South, we crossed over the bergschrund, and all too soon climbed up into the clouds which were appearing as if from nowhere. "Only a short section of ice here" Pete announced, but the next 13 full-length pitches required ice-screw belays and sharp crampons. Mine, no longer possessing this quality, made for some exciting moments on the really hard ice - fortunately at these times I found myself with Pete firmly belayed above, usually invisible in the flurrying snow showers, reminding me of an Indian rope trick as the thin red line disappeared into the whiteness above.

This deteriorating weather did little to boost my flagging enthusiasm for the project, but Pet is not so easily dissuaded by a few flakes of snow, so we pushed on up the surprisingly steep and long face. The monotony of the ice was occasionally relieved by fleeting glimpses through the clouds to the peaks opposite; the un-named and possibly unclimbed Pt. 20,300' and Pt. 20,030'. But I especially noticed the view from between blunt crampons as the face unfolded in one enormous frozen wave of ice, and regretted my laxity in not having sharpened them beforehand.

At last the ice gave way to softer snow - time for food and a rest of cramped and aching leg muscles after so many hours on unrelenting front points; however, the pleasure of the moment was somewhat nullified when I fished out the watch to find there only remained one hour of daylight. The climbing was mixed from here on, either deep snow or else ice-glazed rock, a slow and

awkward business which, combined with the biting cold wind and rapidly approaching dusk, we could have done without.

As was usual, the clouds of the day rolled away just before sunset; wedged behind a deep flake on the ridge while the Doc struggled ahead, I was able to appreciate the full majesty of the scene stretched at my feet. The last rays of the vanishing sun were catching the highest peaks, resplendent with their long, streaming banner clouds trailing from the ridges. It sounded difficult above - crampons scraping frantically on smooth rock, unintelligible shouts through the strong wind....but then it was my turn to lunge and scrabble before sagging into some soft, easy snow. Up and over the knife-edged summit - no place to linger at this time of the evening. Papsura's enormous hulk vaguely registered in the gathering gloom, but we had no time (or desire) for sightseeing tonight as thoughts were mainly of a downward nature. We descended rapidly from 20,300' and the chilling of the evening wind, and managed to locate an easy gully which, although icy in its upper reaches, soon led to lower and more sheltered levels. Guided by the light of a half moon we slid in a semi-controlled manner into the darkness. Over the bergschrund with a bump - the moonlight distorted the distances and slope angles so that I completely misjudged the drop from the bergschrund's rim, and landed considerable further downhill than I had intended. We wandered around the glacier in search of our gear and tent dump being deceived by every likely looking boulder until eventually we located the real thing, three-quarters buried by the deep snowfall. Then, just before midnight and after more than 20 hours on the go, I dragged my aching body into the pit while Pete struggled in vain for a further hour with the recalcitrant primus.

Lying there, exhausted but content, I felt the pure feeling of relaxation which comes after a period of intense mental and physical exertion....at last I had earned my long-awaited return to the valley. The gods of Kulu were lenient upon these five strangers from a distant land who came to climb, but not violate, their fine mountainous abodes, and we were allowed to return home - hoping to return at some time in the future.

NICK GROVES

POSTSCRIPT

Three days after the Devachen climb, my wish to sit on grass by a burbling stream was realised, gazing back at the mountains which had, for the previous six weeks, so adequately entertained us. The walk down, on which we were bent double under crippling loads (no porters being used), was only made bearable by the profusion of wild flowers which had taken the place of the winter snows during our six weeks' absence from these levels. A visit to Manakarin Temple hot baths could not have been bettered as a way of finishing off the trip, after which Pete and I returned to rest in the very pleasant village of Koshala in the Kulu Valley as guests of Tara who had given us so much help in the early stages of the expedition. This was a time to relax and look back on the previous two months' activity; the expedition was undoubtedly a success with ten peaks climbed (not including Shigri-La), including three first ascents, and a wide variety of climbing had been encountered, ranging from the ubiquitous snow-plodding to the technicalities of the Sentinel's granite buttresses.

Mike Stead and Bernie Ingrams were already back in Blighty after a lightning trip to the Taj, Mike Searle was suffering Turkish buses after a brief sojourn in Kashmir, and Pete was soon to leave Koshala for Pakistan, where he was to meet up with the Sheffield expedition to Latok II in the Karakoram range. I trekked over the Rhotang Pass to Leh, entering the state of Kashmir by an original-but-not-to-be-repeated slide/roll/bounce down steep ice from an 18,000' pass. In contrast to trekking, boating on Srinagar's idyllic lakes comes fairly low on the hazard list, but I would suggest that it deserves a place on any expedition's list of objectives.

NICK GROVES

APPENDICES

I FOOD

Virtually all food was purchased in stores at Manali. Quantities were estimated on the basis of 175 man/days (actually 180 man/days were spent on the expedition).

<u>Substance</u>	<u>Quantity</u>	<u>Comments</u>
RICE	35kg (inc. 10kg for porters)	12kg excess as only 2 porters hired for 3 days
DAL	10kg (inc. 3kg for porters)	2kg excess
FLOUR	15kg	O.K.
PASTA	8kg	3kg excess
SUGAR	20kg	3kg excess
MILK POWDER	10kg	O.K. "lactogen" proved best mixer
GHEE (veg.fat)	2kg	More useful
TEA	1.4kg	250 grams excess
COFFEE	1kg	400 grams excess - chai or Bournvita more popular
BOURNVITA	1.5kg	Just sufficient, good bivouac brew
MEAT	20 x 400 gram tins of sausages or corned beef	Embellish rice and dal
SARDINES in oil	16 x 105 gram tins	Hill food, not enough
EGGS	120	Excellent (5 broke, 25 eaten by visiting marmots)
POTATOES	10kg	Pleasant change from rice
ONIONS	10kg	Good with dal
UK DRIED POTATOES	20 pkts. "Smash" (1 meal for 2)	For bivouacs
DRIED ONIONS	16 pkts. (1 meal for 4)	For bivouacs
DRIED SOUPS	10 pkts. (5-6 servings)	O.K.
UK STOCK CUBES	25 pkts. "Knorr"	Good bivouac brew
UK SOYA PROTEIN	22 pkts. (1 meal for 2)	For bivouacs
OAT FLAKES	8kg	Expensive necessity for muesli as well as for morning "pog"
WHEAT "PORRIDGE"	35kg	Reasonable
RAISINS	2kg	Expensive
DRIED APRICOTS	1kg	O.K.
PEANUTS	1.8kg	Not enough
BISCUITS	7kg assorted (c.70 indiv pkts)	Bulky but good
JAM	8 x 450 gm. tins assorted	O.K. - rationing necessary
SYRUP	2 x 1kg tins	O.K. with "pog"
JELLIES	15 pkts. (5 servings each)	Good
CUSTARD POWDER	2 x 450 gm. tins	A winner with jelly or apricots
BOILED SWEETS	2kg	More useful
CHOCOLATE	100 individual bars	Major expedition expense
BUTTER	1kg	For Sunday chapattie sessions
UK DRINK CRYSTALS	15 pkts. "Rise and Shine"	Many more needed
SALT	1kg	O.K.
TOMATO SAUCE	3 bottles	Not enough! Essential with rice
VARIOUS MASALAS	(spices for dal)	Watch the hot ones
PARAFFIN	30 litres	5 litres excess, running water at base
MATCHES	4 dozen boxes	Avoid Elephant Brand
CANDLES	3 dozen	

Weight circa 250kg

Cost circa 2,300 rupees (± £150)

FOOD (Contd.)

A basic but quite adequate diet for our light-weight and, by Himalayan standards, low level expedition. Very little was purchased in the U.K. since everything can usually be unearthed in Manali Bazaar (with a little patience, ask Iqbal at Consumer Stores for his readily given help). Certain items (eg. chocolate and porridge oats) proved expensive - perhaps bring out 200 Mars bars as hand luggage! Dehydrated bivvy food cannot generally be bought in Manali, so it is advisable to bring out sufficient from the U.K. or possible Delhi.

The eggs seemed an unnecessary luxury, but were on top of the menu during the rest days (eg. fried eggs on, under or between chapatties, etc.). The small, furry animal with a passion for raw eggs was almost inadvertently the cause of a major rift in the expedition when accusations of "midnight egg thievery" were being bandied about; solved only by tell-tale footprints in the refrigerator cave....!

The rice, dal, pasta and sugar surpluses were mainly the result of the small number of porters requisitioned for our carry-in (ie.2), coupled with the fact that the friendly souls brought along their own food supplies. A pressure cooker is essential for successful rice and dal, and also useful for rice puddings.

Since there were no major grouses concerning the quality or quantity of the food, and as none of us died as a result of eating it, I can only conclude that this aspect of the expedition was adequately catered for.

II EQUIPMENT

As most of the equipment was brought out to India in personal baggage allowances (44lbs.), only the bare essentials were taken. With a generous amount of hand luggage/extra clothing being worn, it gave us about 70lbs. each. This helped to keep financial and customs problems to a minimum, as well as imposing limitations on unnecessary items of clothing etc. which would, at a later date, burden the porters and ourselves.

The tentage proved just sufficient, although a large base camp tent would have been a help. Two Vango "Force 10s" (No.3&4) acted as base camp, and for the hill a couple of Ultimate bivvy tents were used.....the hoop tent was easiest to use as it could be erected without any pegs, although being single, it suffered from condensation. The Ultimate tramp tent was inadequate for deep snow, as it needed several pegs for successful pitching, and despite its double skin, it also suffered quite badly from condensation. These tents weighed only $3\frac{1}{2}$ -4lbs. each, which was of prime importance.

Damart thermal underwear was used, and found to be very warm. Nylon overboots were vital to prevent wet boots on multi-day routes, which could have led to frostbite. 2 members had only single boots, and these proved barely adequate at times. The overboots were also very useful camp slippers and for midnight excursions outside the tents. Duvets were far from a "luxury" - one member did not have one, and frequently wished that he did!

For most of the peaks nothing more than ice-axe, crampons and a rope were used. However, on the Sentinel, all the rock climbing gear was used, including a few pegs, and on Devachen, ice screws were needed for belays. None of the glaciers we set foot on were badly crevassed, and jumars were not necessary.

A locally obtained 2 pint primus (£3) was used at base camp, and small $\frac{1}{2}$ pint ones for the mountains.....the local paraffin was O.K. but trouble was encountered in keeping the stoves alight above 18,000', where water could only be obtained from snow - a long, tedious process.

III WEATHER AND CONDITIONS

A pattern of clear, cold mornings with cloud gradually building up from the south was prevalent throughout most of May....many days remained perfectly clear over our mountains while great banks of dark storm clouds could be seen down valley, it also being clear to the north. Three periods of heavy snowfall kept us confined to camp for a total of 8 days, but this soon cleared once the sun reappeared, and never seriously hampered the climbing. (Out of the 38 days on the glacier, 24 were perfect from dawn to dusk, 6 had extensive afternoon cloud, and only 5 were "bad".)

The ascents toward the end of the trip (Shigri-La, Sentinel and Devachen) were, to a greater or lesser extent, affected by inclement weather, although in all cases this proved to be merely rather angry clouds and was clear again by sundown. Winds were seldom strong, apart from the high, exposed ridges on the main massif, and then they usually died soon after dawn.

Snow conditions were very variable, ranging from the unexpectedly hard neve/water ice on Devachen to the impossible deep and unstable "ice-leaves" encountered on the descent from Sentinel Peak. Obviously the snow is considerably better first thing, and soon deteriorates when the sun gets high; although tiring, it very rarely reached the quality of the found in other places eg. the Peruvian Andes.

We arrived in early May for the pre-Monsoon period, and therefore had to contend with deeper and lower-level snow than we should have later on. This could be a mixed blessing, since load carrying on the Tos Clacier was made very much easier by the smooth snow blanketing (but only early morning!); by June this had virtually all melted, revealing a chaotic jumble of ankle-twisting boulders.

This year the Monsoon arrived in the Kulu valley towards the end of June, and dragged on to the middle/end of September when I finally left. This post-Monsoon period contrasted with the generally excellent weather we were fortunate enough to experience during our trip.

IV EXPEDITION EXPENSES

In England

	£
Tent	40
Postage	7
Insurance	10
Food	5
Socks/Goggles	7
	<u>£69</u> (= 1,035 rupees)

In India

	Rupees
a) Advanced Party	
Food	2,034
Primus	45
Sacks, pans etc.	75
Paraffin	51
Transport Manali - Kasol	50
Horses (@ 18 Rp/horse/day)	405
Porters (@ 20 Rp/man/day)	160
	<u>2,820</u>
b) Main Party	
Food	267
Sacks, pans etc.	8
Manali - Kasol	40
Horses	200
	<u>515</u>

Total cost of these items:

4,370 Rupees.

Personal cost of expedition from Manali to Manali = 874 rupees, or £58 each.

Income

	£
BMC grant	100
MEF grant	100
Sale of gear	<u>5</u>
	£205

This expenditure breakdown of course ignores such additional expenses as were incurred prior to arrival in Manali. For example, the return air fare for two of our members cost £260 each, plus a further £30 spent in getting to and from the Kulu valley. In particular, specialist items of equipment purchased for the trip (eg. double boots, overboots, bivouac tent, Damart thermawear etc.) represents a major part of the total cost.

Three members travelled by diverse routes to and from India, combining the expedition with other ventures. The costs for the other two, who came directly to India and left straight after the expedition, are as follows:

	£
Return Air Fare	260
Expedition and special equipment	60
Other expenses in India	<u>30</u>
	£350
Subtract individual share of MEF & BMC grants	<u>41</u> £309 each.

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W.B. Pharmaceuticals Ltd
Tate and Lyle Ltd
Ultimate Equipment
Rohan Ltd
Swiss Cutlery Ltd
Marks and Spencer Ltd
Snowdon Mouldings
Star Sportswear
Damart Thermawear Ltd
Cadburys Ltd
Karrimor International Ltd
Tetley Breweries Ltd
Keeler Instruments Ltd
Mr. Lowe
Dr. J. Sirs

