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Masherbrum
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BRITISH MASHERBRUM KARAKORAM EXPEDITION, 1985

Members:

Mike Searle (G.B.)	Leader	Geologist/Climber
Tony Rex (G.B.)		Geologist/Climber
Dana Coffield (U.S.A.)		Climber
David Mould (G.B.)		Climber
Owen Boyd (G.B.)	Med. Dr.	Climber
Brian Windley (G.B.)		Geologist
Paul Hoffman (Canada)		Geologist
Rein Tirrull (Canada)		Geologist
Marc St. Onge (Canada)		Geologist
Amy Starr (U.S.A.)		
F/O Attaul Haque (Pakistan)		Liaison Officer

Objectives:

- (1) Conduct a geological survey of the Baltoro - Muztagh Karakoram from K2 and the Gasherbrum Group to the Shigar and Indus Valleys. Collect samples for geochemistry, microprobe, fission track and radiometric dating purposes.
- (2) Climb Masherbrum (7821 m.) via a new route on the Northern (Baltoro glacier) side.

Chronology of events

28	April	MPS and BFW flew to Islamabad.
1-5	May	Negotiations with Ministry of Tourism. Other members arrive Islamabad.
6-9	May	Drive Rawalpindi - Skardu
13	May	Start walk-in from Dassu
-23	May	Arrive Concordia - 1st Base Camp
27	May	P.H. and M.S.O. leave for Canada
28	May	Helicopter evacuation of B.F.W. to Skardu. (Altitude sickness)
24 May-1	June	Geological work around Concordia
2	June	Move to K2 Base Camp
5	June	D.C. and D.B. leave for Masherbrum recce.
6-9	June	M.P.S. and A.J.R. on Abruzzi Ridge K2
15	June	Expedition assembles at Urdukas - 3rd B.C.
16	June	R.T. leaves for Askole to do geology. O.B. leaves for England due to severe gallstone.
18	June	Establish 4th B.C. on Yermanandu glacier
19-24	June	Load carrying up Yermanandu glacier
30	June	Masherbrum climb abandoned. D.C. and D.M. leave for Urdukas. D.M. leaves for U.K.
1-8	July	M.P.S. and A.J.R. trek to Gasherbrum B.C. and explore Vigne glacier and Mitre Peak.
6-8	July	D.C. and A.S. explore Younghusband glacier
11	July	M.P.S., A.J.R. and D.C. explore Dunge glacier and Trango Towers
13-18	July	Walk-out Urdukas to Dassu
22-23	July	M.P.S. and A.J.R. drive to Hushe Valley
24-27	July	M.P.S. and A.J.R. drive Skardu-Gilgit-Hunza-Peshawar
30	July	Debriefing at Ministry of Tourism Islamabad

THE CONCEPT

The only previous detailed geological study of the Karakoram Mountains along the Baltoro glacier basin was conducted in 1953 and 1954 by Prof. Ardito Desio and his Italian expedition during the first successful ascent of K2 via the S.E. (Abruzzi) Ridge. During the 1970's and early 1980's the geology of the Himalayan Ranges south of the Karakoram has become reasonably well known but the main Karakoram Range North of the Indus, Shyok and Gilgit Rivers has remained practically unknown. Geologists from the University of Leicester in U.K. have been studying the Western Himalaya for 5 years and the time had come to study the Karakoram Mountains using modern techniques in structural geology, geochemistry, isotope geology and radiometric dating that were not available to Desio's group in the 1950's.

The Baltoro and Goodwin-Austin glaciers cut right across the Karakoram Range in Northern Pakistan flowing from the southern flanks of K2 - the world's second highest mountain at 8611m - ESE to the Braldu and Shigar Valleys to drain into the Indus River at Skardu. It forms a perfect access route to study a geological transect across the Karakoram. During August - September 1984 I made a reconnaissance trek up the Shigar and Braldu Valleys to Askole, thence up the Biafo glacier and Uzun Brakk - Brainta Brakk glaciers to the Ogre and Letok group. During that trek I decided to mount a large scale expedition up the Baltoro the following year. For logistical purposes it would be necessary to have several Base Camps and to stay for 3 months would entail a large number of porters. Access to the rocks would involve mountaineering, and crossing the large glaciers off the regular paths would involve some steep ice climbing and a lot of extremely difficult terrain. It seemed a perfect opportunity therefore to combine a geological expedition with a climbing expedition.

The North Face of Masherbrum is one of the most beautiful and spectacular walls of rock and ice that line the Baltoro glacier, and despite several attempts, has never been climbed. Masherbrum had had two ascents to date, both from the easier southern route with access up the Hushe Valley. The North Face is steep and extremely prone to avalanche and any route up it faces extreme objective dangers. However, the photographs taken from the Baltoro show two magnificent ice ridges descending eastwards to the Masherbrum-la and westwards to the Liliwa glacier which drains north into the Baltoro glacier. I decided to make a reconnaissance of both these ridges before deciding which route to attempt. Permission from the Ministry of Tourism in Islamabad arrived in March 1985 and the team was assembled very hurriedly, and at short notice, to travel to Pakistan during

the first week of May. The geological team from the University of Leicester (Mike Searle, Tony Rex and Brian Windley) was joined by a team from the Geological Survey of Canada in Ottawa (Paul Hoffman, Rein Tirrul and Marc St. Onge). A medical doctor (Owen Boyd) and climbers Dana Coffield and Dave Mould made up the team.

APPROACH

One week was spent in Islamabad finalising details with the Ministry of Tourism and buying gear and provisions for the expedition. Our Liaison Officer - Flying Officer Atta-aul Haque - joined us in Rawalpindi. We drove up the Karakoram Highway to Gilgit and along the spectacular gorges of the Indus River to Skardu, arriving on 9th May. We hired 70 porters for the 10-day walk into our first Base Camp at Concordia. Owen Boyd, our doctor, was kept busy at every village with his impromptu clinics and did an excellent job attempting to cure the sometimes chronic illnesses of the Baltis. The weather on the walk-in was generally good but conditions on the upper part of the Baltoro glacier were terrible. There was still a lot of winter snow covering the glacier and numerous times people fell into crevasses hidden under thin snow or slush. The last stage from Goro to Concordia was especially bad - the porters getting completely scattered across the Baltoro and becoming benighted. The expedition became split, reuniting at Concordia the next day. Several large rivers had to be crossed and everyone got extremely wet and cold. At one crossing Brian Windley fell in completely and during the walk to Concordia developed hypothermia, exhaustion and altitude sickness. His condition deteriorated the following day and on 28th May he was evacuated by helicopter to Skardu. He recovered completely and flew back to the U.K. Two of the Canadians - Paul Hoffman and Marc St. Onge also left to return to Canada, mainly because of the extreme difficulty and inaccessibility of the rock outcrops along either side of the glacier. This was very true and even during the latter half of the season we spent over 50% of our time actually crossing glaciers and rivers or climbing to get at the rock outcrop. Once off the main porter tracks up the Baltoro, crossing the glacier was extremely difficult and hazardous.

CONCORDIA and K2

With the departure of three of the geologists there remained only Mike Searle, Tony Rex and Rein Tirrul of the geology team. We had planned to spend about one month up at Concordia and K2 then move down to attempt Masherbrum during late June and July. It was decided that Mike Searle and

Tony Rex would work on the geology of the Baltoro glacier while Rein Tirrul would work on the geology around the Braldu, Panmah and Shigar Valleys. Owen Boyd and Dana Coffield, with Dave Mould who arrived at Concordia on 10th June, would carry out a reconnaissance of Masherbrum via the Yermanandu glacier and the Liliwa glacier and decide on a reasonable approach route. From 24th May to 1st June we conducted geological work around Concordia mostly around the Crystal and Marble Peaks and the southern flank of Broad Peak.

On 2nd June we moved up to K2 Base Camp where we based for 9 days looking at the geology all around the southern flank of K2. On 5th June Dana Coffield and Owen Boyd left for the lower Baltoro and Askole. Tony Rex and Mike Searle moved up to the base of the Abruzzi Ridge on 6th June and spent two days on the Abruzzi Ridge climbing to a height of approximately 6500m. We made a short recce around to the east face of K2 where we could look across to Skyang Kangri and Windy Gap - the border with Chinese Sinkiang. We witnessed some enormous avalanches sweeping off the east face of K2 and the west face of Broad Peak, some sweeping right across the Goodwin-Austin glacier. Lack of permission, bad weather and some stomach problems for Tony prevented us going higher on this superb mountain. We moved back to K2 Base Camp on 9th June where we were royally entertained to a cheese fondue by the extremely hospitable Swiss K2 expedition. During our time at K2 we dug up frozen tins of Polish pork, Spanish sardines and processed cheese which added greatly to our dull diet of boring rice, dal and dehydrated food. On 10th June we went back down to Concordia to find most of the expedition had already left for Urdukas, taking advantage of some porters returning from a Gasherbrum expedition. On 15th June the whole expedition met at Urdukas. The reconnaissance party reported that the West Ridge of Masherbrum was impossibly long and the approach route up the Liliwa glacier was totally unfeasible. We therefore decided to attempt the East Ridge from the Yermanandu glacier.

MASHERBRUM

We spent two rest days at Urdukas on 16th - 17th June preparing food and gear for our Alpine-style attempt on the east ridge of Masherbrum. During that time Owen Boyd had a severe attack of gallstone pains and had to be given painkillers. He decided to return to U.K. as soon as possible and left with two porters the following day. The four climbers left - Mike Searle, Tony Rex, Dana Coffield and Dave Mould, set off with our Liaison

Officer Atta and 8 porters on 18th June for the double stage up to the Yermanandu glacier. It was cloudy and snowing but we coaxed the porters on as far as we could and established a Base Camp below the icefall.

The following few days were spent hauling loads through the icefall to the upper cwm of the Yermanandu. It was a spectacular place with the awesome north wall of Masherbrum looming directly above us, avalanches continuously peeling off its hanging glaciers. Our route on the east ridge looked daunting - being over 4 miles long and with several subsidiary bumps on the way, crowned by a 1000 ft. sheer wall of blank-looking granite. Across the Baltoro the deceptive Muztagh Tower rose high above the granite spires of the Lobsang Group. A Japanese expedition had already been on the Masherbrum North Face route for 3 weeks and we could occasionally see climbers on the Face. Their route appeared to be critically threatened by hanging seracs and avalanche tracks and we did not envy them. Some of them had been on Masherbrum before when several climbers died in avalanches. This time they were quite happy that they'd got high without anyone being wiped out.

For four days after we set up base camp it clouded in and snowed almost continuously. Snow conditions were appalling. It wasn't freezing properly at nights and consequently there were about 2 ft. of soft unconsolidated powder snow. Our tracks up to the base of the ridge often appeared like a trench. We discovered that we'd miscalculated on the amount of rice we needed so Tony and I went all the way back to Urdukas to pick up more. We made two dumps of food and gear until on 25th June we all occupied our final campsite below the Masherbrum Face. For three days we were confined to tents as white-out conditions descended and it snowed almost continuously.

At last on 28th June it dawned magnificently clear with blue skies and no wind. The mountains looked pristine with a thick blanket of new snow mantling everything. There was no sign of our 2 ft. deep trench of tracks coming up only three days before. During that day avalanches fell every few minutes. One large slab avalanche came directly towards our camp and we all sat open-mouthed at the awesome sight. It stopped less than 100 yards away but the wind hit us with tremendous force, piling spindrift into the tents which were flapping wildly.

We picked out a route that looked relatively free of avalanche danger that ascended to the Ridge west of the Masherbrum-la and packed up ready to leave at midnight. We took food and gas for 10 days, bivouac sacs and no

tents, planning to dig snow caves all the way up. Atta insisted on joining us so we made up two ropes. We had not the man_power, time or resources for siege tactics; it was going to be pure Alpine-style or nothing.

None of us slept much that night. We were up at 11.00 p.m., had a brew and left at midnight but every step sunk in up to the knees and as soon as we were on steep ground it was waist deep, sometimes chest deep. It was one step up, two down, every time. To maintain upward progress we had to crawl or swim through thick powder snow. Conditions were so bad that we were using up five times the amount of energy that should have been necessary in good freezing conditions.

We climbed continuously through the night by headtorch and starlight. It was incredibly exhilarating, despite the enormous efforts required to climb, to be on a new route on such a stupendous mountain and in such fabulous surroundings. It was a strange sensation climbing at night. One doesn't get the normal feelings of wide open space and vertigo because you cannot see the surroundings - only a yellow ball of light from the headtorch in front. We crossed several large crevasses on dubious snow bridges, usually on hands and knees. At about 4.00 a.m. we came to a huge bergschrund which Dave promptly fell into as I held him on the rope. Once we'd crossed it I led a 500 ft. slope of 55° snow on ice. It was exhausting work but exhilarating in the extreme. The first dim rays of morning light lit up the distant peaks - Broad Peak and K2 appeared over in the north-west. Masherbrum loomed above us bathed in a magnificent orange glow, clouds swirling around the summit pyramid. We could look down at the Masherbrum-la to the east and look along the whole length of our ridge which looked absolutely incredible - one of the most spectacular unclimbed ridges in the Karakoram. We felt the route would go but in such horrendous snow conditions it would take us weeks of superhuman effort. In good conditions who knows - we may even have done it.

Dave took over the lead at the top of the face where we had to traverse right above one huge serac barrier, below another. Snow conditions worsened and we belayed while Dave ploughed through a 2 ft. pile of soft unconsolidated powder on 40° ice. The four of us waited impatiently below threatening seracs while Dave thrashed around putting ice screws into the hanging wall of the bergschrund. We still had another 2 hours traversing under threat from seracs above all the way. It was clearly very risky and a short discussion followed. The sun was just about to hit and already the first of the morning avalanches was pouring down Masherbrum's North Face. The call was made for a retreat. I suggested traversing east down to the Masherbrum-la but this was about the same distance and equally dangerous.

We were surrounded above and below by seracs and icefalls with no safety up or across in either direction. The sensible decision prevailed and we decided to retreat. The conditions were so bad that our climbing was taking twice as long as it should even though we were all fit. I was taken by surprise at the speed of the decision to retreat, but where peoples' lives are at risk it's a purely personal decision and it was no time to be adamant. It was an extreme disappointment in any case as we hurriedly front-pointed down to the Yermanandu glacier out of avalanche danger. I lingered on for a while watching the others walking back to camp - three tents and one igloo stuck in the middle of a large desolate ice field.

Back at camp we decided that climbing was hopeless in these conditions and one by one everyone decided to pull out and go back. Next day on 30th June we all left for Base Camp.

GASHERBRUM AND TRANGO TREKS

After our decision to abandon the Masherbrum climb Dave decided to go straight out to Skardu and Dana returned to Urdukas with Atta. They sent up five porters to take our gear out to Urdukas. Tony and I now had an extra two weeks to complete our geological survey and we left our Base Camp on 1st July for the trek up to Gasherbrum Base which took four days. We spent three days exploring the Abruzzi and South Gasherbrum glaciers above Concordia and made a very long day's excursion to the Vigne glacier and all around the base of the Mitre peak. We hired one porter from Gasherbrum Base Camp to help us carry rock samples down and arrived back at Urdukas on 8th July. We were both absolutely exhausted and our backs and shoulder muscles were in almost complete ruin. We had walked four times up and down the Baltoro glacier from Urdukas usually carrying 25 kg. rucksacs; we had trekked up every major glacier on the Upper Baltoro, and visited the Base Camps of K2, Broad Peak, the Gasherbrum and Hidden Peak, as well as climbing on the Abruzzi Ridge of K2 and the east ridge of Masherbrum. We had also collected about 200 kg. of rock samples which required 8 porters to carry out to the roadhead at Dassu.

We had one more trek planned - a day's trip from Urdukas across the Baltoro to the Dunge glacier below the spectacular granite pinnacles of the Trango Towers. After two well-needed rest days at Urdukas, Dana, Tony and I set off once more across the Baltoro. It was a long 13 hour day's walk but well worth it as we gaped up with awe at the amazing towers - sheer walls of granite rising straight up from the lateral moraines. We also had great fun climbing the lower few pitches of the Cathedral opposite Trango. The Dunge glacier must be one of the most spectacular valleys anywhere in

the world. After one more rest day at Urdukas we left on 13th July with 17 porters, 10 of whom carried nothing but rock samples.

The walk-out lasted 6 days walking mostly double stages. We had to cross the swing bridge at Julay as the Panmah River was too deep to wade and from Askole kept on the west bank of the Braldu all the way to Dassu. We also spent several hours wallowing in the delightful hot springs at Chongo. We arrived at Dassu on 18th July and got a tractor-trailer to Skardu the following day in teeming rain. The adventure was over.

Meanwhile Rein had spent a month exploring the lower valleys around the Pamah and Braldu river gorges. He had been thwarted in his attempt to wade across the Braldu to continue his geological work up the Chonking Valley. By June the rivers were all so high that crossing became a major problem. Instead he explored the Panmah Valley including many of the side nallahs on the east and the Mango Valley leading up towards Mango Gusor. From Askole he ascended the Skoro-la, but deserted by porters, was forced to return, then went down to Shigar and worked up the Baumaharel Valley. Between the three geologists - Rein, Tony and myself - we were able to produce a reconnaissance geological map of the complete transect of the Shigar - Braldu - Panmah - Baltoro and Goodwin - Austin Valley systems.

We all met up in Skardu on 21st July and spent a few days relaxing, swimming and picnicking at Satpara Lake, pulling jeeps out of raging rivers and driving to the Hushe Valley to see the southern slopes of Masherbrum. We finally left Skardu on 24th July, Rein, Atta, Dana and Amy by local bus to Gilgit and Pindi, Tony and I driving our Daihatsu laden with rocks to Pindi and Peshawar. Driving along the Indus gorge we came across what we took to be a madman standing in the middle of the road yelling and wildly gesticulating. As we sped past a tremendous explosion ripped open the road immediately behind us - a routine road gang dynamiting the road. We had missed being blown into the Indus - and almost certain death - by about 2 seconds. The dangers of the Baltoro had already faded into history.

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