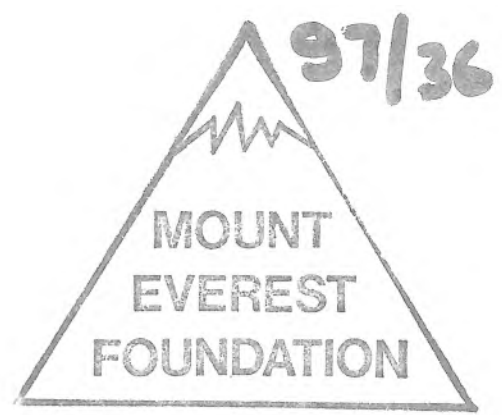


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Mount Everest Foundation

Expedition report of:

New Zealand Aghil Expedition 1997 Xinjiang, China

John Nankervis and John Cocks, July 1998

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Mount Everest Foundation

New Zealand Aghil Expedition 1997 Xinjiang, China

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1. Summary

During September and October 1997 seven New Zealand climbers spent six weeks mountaineering in the Aghil Mountains and the South East Skyang Glacier area in the Chinese Karakoram. The area was selected because of the few recorded expeditions to the area and the potential to explore and climb previously unvisited mountains. The time of year was selected in anticipation of avoiding difficult river crossings and getting predominantly fine weather.

The first objective was to explore the Aghil Mountains, in an area between the Shaksgam and Zug Shaksgam Rivers from a base camp at or near a place named Durbin Jangal, and climb one or more unnamed peaks.

The secondary objective was climbing an unnamed peak between the South East Skyang Glacier and the North Gasherbrum Glacier

The expedition was planned to be lightweight and to attempt peaks in the 6,000 to 7,000 metre range. Whilst contact was made and information obtained from others who had visited the area in recent years, little information was gathered about specific access routes into the mountains from the Shaksgam River. This enhanced the prospect of exploration but also added to the risk of the objectives proving unrealisable for a lightweight expedition on a tight timetable.

Permission to climb in the area and all travel in China, from Beijing to the base camp in the Shaksgam River, were arranged by the China Xinjiang Mountaineering Association. With the exception of a cancelled flight in China delaying our departure, all arrangements went to plan. Most importantly, formalities and travel into and out of the mountains were organised efficiently and thoroughly.

The expedition gathered in Kashgar and there obtained most food provisions. Travel to and from a base camp in the Shaksgam River valley was by road for two days and then by camel for four days. From a base camp at Durbin Jangal three days were spent in vain exploring possible access routes into the objective area of the Aghil Mountains. Access was either barred by precipitous gorges with waterfalls or made hazardous by landslides of loose rock.

The expedition then established an advanced base camp a day's trek further up the Shaksgam River valley at the snout of the South East Skyang Glacier, with the assistance of camels. From this base, the expedition climbed two peaks (Peak 5,959 - second ascent and Peak 6,068-first ascent) on the divide ridge between the South East and North Skyang Glaciers, and the peak which was the expedition's second objective (Peak 6,648-first ascent). All climbing was on snow and ice. Peak 6,648 (Photo 1 on page 5) was climbed by the East Face and the South-East Ridge from a tributary of the South East Skyang Glacier.

The expedition then moved a little further up the Shaksgam River valley to just beyond the terminal of the North Gasherbrum Glacier. Four members climbed an unnamed peak of $\pm 6,340$ metres (Photo 2 on page 5) while the others climbed a hill (4,798 metres) between the North Gasherbrum and Urdok Glaciers which provided a readily accessible and magnificent vista.

The weather at the beginning of the trip was hot during the day and cool during the nights. The wind was predominantly from the south-west, with some cloud on the higher peaks. Towards the end of the expedition the weather became distinctly cold, with ambient temperatures approaching zero centigrade during the day and colder at night. During September, three 24 hour disturbances resulted in light snowfall and delays to climbing. At the end of September and early October, the days were perfectly clear with little wind.

During early September, on the walk in, the Shaksgam River had a moderate flow but carefully selected crossing points enabled safe crossings by foot. On the walk out, the river had fallen dramatically to a low flow.

There were no accidents or serious illness to the expedition members, camel drivers or camels.

In conclusion, the area provided exciting and rewarding exploration and climbing. There is much to be achieved there, both in terms of determining access routes into the mountains and first ascents or new routes.



Photo 1: Peak 6648m on left with K2 on right

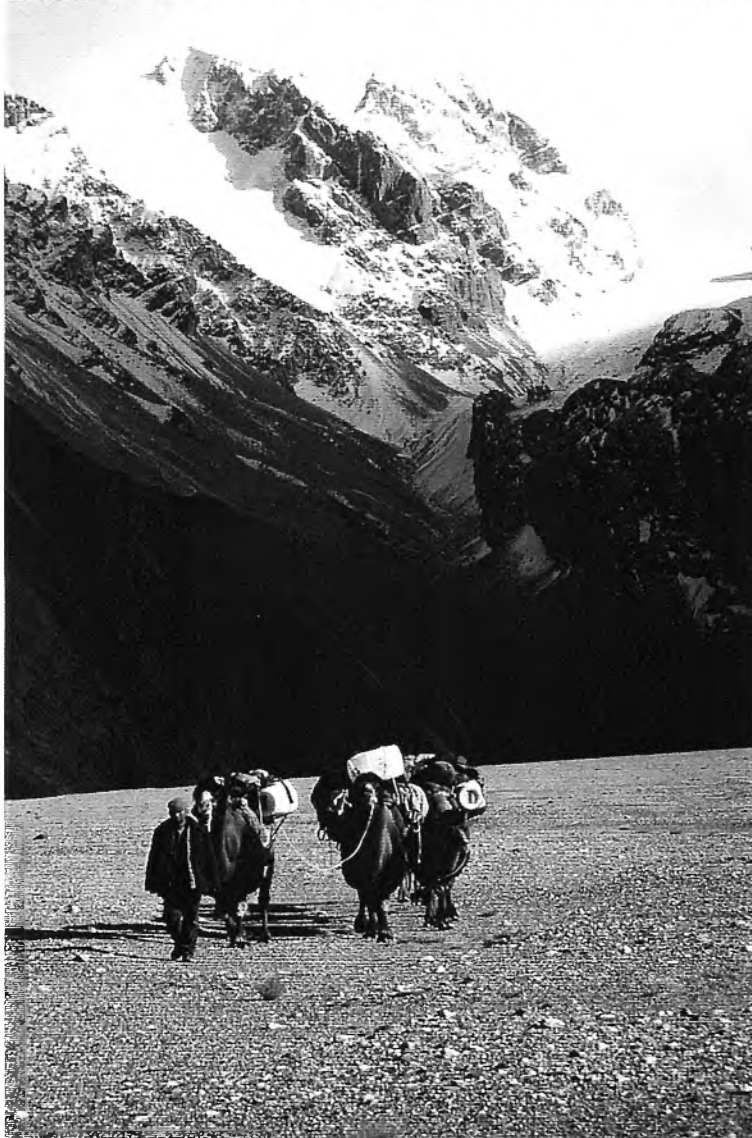


Photo 2: Peak 6,340m on left

2. Introduction

2.1 Purpose

The purpose of the expedition was exploratory mountaineering in the Chinese Karakoram.

The primary objective was to explore the Aghil Mountains, in an area between the Shaksgam and Zug Shaksgam Rivers, and climb one or more unnamed peaks.

The secondary objective was to climb an unnamed peak situated between the South East Skyang and the North Gasherbrum Glaciers.

2.2 Location

The Aghil Mountains are located immediately north of the Karakoram Mountains, between the latitudes of 35° 40' north and 36° 20' north and between the longitudes of 76° 40' and 77°.

The South East Skyang Glacier is located directly south of the Aghil Range. Nearby are the highest mountains of the Karakoram, including the highest, K2.

Their locations are shown in Figure 2.1.

2.3 Character and Access

The Karakoram Mountains within China lie directly to the south of the Taklamakan Desert. They are desert in character and amongst the most precipitous in the world.

Within the mountains, valley floors are generally between 3,500 and 4,500 metres whilst the peaks rise to over 8,000 metres. Peaks of the Aghil Mountains rise to between 6,000 and 7,000 metres.

Access is generally from Kashgar, via either the Karakoram Highway or the Kashgar-Khotan road and the road to Tibet.



Figure 2.1: Map of Aghil Mountains showing expedition routes

3. Personnel

The expedition members comprised seven New Zealander climbers, a Chinese liaison officer and a local cook.

The New Zealand members were:

- John Nankervis, expedition leader
- John Cocks
- David Ellis
- Kristen Foley
- Tom Davies
- Dominic Hammond
- John Wild.

The liaison officer was:

- Jin Ying Jie, China Xinjiang Mountaineering Association

The cook was:

- Gao Zheng.

4. Preparation

4.1 Introduction

This section describes the preparation undertaken prior to the expedition leaving New Zealand.

4.2 Research

4.2.1 Introduction

The objectives of research were to decide on:

- the necessary formalities for climbing in China
- suitable climbing objectives
- the time of year to visit the area
- the provisions to take from New Zealand.

The section summarises the research and outcomes with respect to each of the above objectives and other matters including finance, insurance, air travel, and medical arrangements.

4.2.2 Formalities

In August 1996, fellow New Zealander David Bamford was working in Xinjiang. On behalf of the expedition, he contacted Jin Ying Jie of the China Xinjiang Mountaineering Association, whose headquarters are located in Urumqi, the principal city of the Xinjiang Uigur Autonomous Region, and obtained information about the formalities of mounting an expedition in the Chinese Karakoram.

From that time, the expedition leader, John Nankervis, corresponded with Mr Jin. Mr Jin successfully attended to all formalities.

4.2.3 Climbing Objectives

Discussions were held with a number of mountaineers who had visited the area, including Kurt Diemberger of Austria, Jim Williams of the USA and Colin Monteath of New Zealand. A Select Bibliography (Appendix A) lists books and articles in English about the area and some more general accounts.

Previous accounts of expeditions to the area were read. The Select Bibliography records some of these accounts.

Maps of the area were obtained from references and map sellers. These include:

- Parts of the Great Karakoram and the Aghil Mountains - Shaksgam Expedition 1937 (see “Blank of the Map”)
- Karakoram Sheet 2 - Swiss Foundation for Alpine Research, Zurich
- K2 (Mount Qogori) Mi Desheng, Lanzhou Institute of Glaciology and Geocryology, Chinese Academy of Sciences.

4.2.4 Time of Year

The summer climbing season extends from May until October. During high summer, generally during the months from June until late August, river crossing can be difficult because of high flows.

Expedition members wished to avoid risky river crossings. The New Zealand Alps are subject to heavy rainfall events and all members have had unpleasant experiences of crossing flooded rivers or have had trips aborted because of flooded rivers.

Through a combination of work commitments and planning logistics, the expedition planned to visit the area late in summer when rivers should be falling.

4.2.5 Provisions

Consultation with Mr Jin and discussion with other contacts indicated that most food for an expedition could be bought in Kashgar. However, we chose to bring from New Zealand certain foods to enhance our walk-in rations and to improve our high altitude rations. The foods taken from New Zealand were salami, cheese, chocolate, ground coffee, soups and sauces, dehydrated meat, dehydrated potato, and dehydrated vegetables including tomatoes, capsicums, and onions.

4.2.6 Finance

Following consultation with Mr Jin and the expedition travel agent, the total cost of the expeditions was estimated to cost in the order of NZ\$6,000 to \$7,000 per person.

Expedition financial assistance was sought from the Mount Everest Foundation (MEF) and financial assistance for the three younger members was sought from the New Zealand Alpine Club (NZAC). Both organisations offered assistance, with MEF providing 900 pounds sterling and the NZAC offering NZ\$400 for each of the younger members of the expedition.

The remainder of the expedition finance was raised personally by each of the expedition members.

4.2.7 Insurance

Insurance for most members was provided by The Treks, Expeditions and Safaris Travel Insurance Scheme and issued in the United Kingdom. The policy was obtained through Mike Henry, insurance brokers, in Auckland.

4.2.8 Air travel

Travel arrangements to China were made with Qantas Airlines, which kindly provided a free overweight allowance sufficient to accommodate all travel baggage.

Internal air travel in China was arranged through the China Xinjiang Mountaineering Association.

4.2.9 Medical arrangements

Medical advice was sought from Dr. Richard Price, a New Zealand doctor and mountaineer, who has considerable high altitude climbing and overseas medical experience.

Individual and base camp first aid kits were prepared in New Zealand.

4.3 Administration

Mr Jin provided a form for lodging an application for mountaineering expeditions in Xinjiang and successfully arranged for processing of the application. He also provided information about travel arrangements, costs, and equipment available for purchase or hire.

No difficulties were experienced either in obtaining the necessary expedition approvals or negotiating travel arrangements. Indeed, Mr Jin's organisation skills were exemplary.

With the assistance of Mr Jin our itinerary was finalised and is presented in Table 4.1.

Table 4.1
Planned Travel Itinerary

Date	Activity
August - 29,30,31	Travel from New Zealand to Kashgar by aeroplane: Auckland, Beijing, Urumqi, Kashgar with a night in Urumqi
September - 1,2	Food and equipment purchasing and packing in Kashgar
September - 3,4	Travel by 4WD from Kashgar to the road end at Mazardara
September - 5 to 8	Travel by camel from Mazardara to base camp at Durbin Jangal in the Shaksgam River valley
September - 9 to October 4	Exploratory mountaineering
October 5 to 8	Travel by camel from base camp at Durbin Jangal in the Shaksgam River valley the road end at Mazardara
October 9, 10	Travel by 4WD from Mazardara to Kashgar
October 11	Kashgar
October 12 to 14	Travel from Kashgar to New Zealand by plane

5. Activity

5.1 Introduction

This section describes the activities of the expedition during the time in China.

5.2 Access

In mid August 1997, Tom Davies and Dominic Hammond flew from New Zealand to Pakistan and travelled by road over the Karakoram Highway. They arrived in Kashgar on 29 August 1997.

On 29 August the other members of the expedition flew from New Zealand to Beijing, and to Urumqi where they spent one night. On 31 August they flew to Kashgar and there met Mr Jin, Mr Gao, Tom and Dominic.

The next two days were spent purchasing food, aviation fuel for primuses and other miscellaneous provisions and packing these in containers. A number of blue plastic barrels were brought from New Zealand. Further plastic barrels were hired from the China Xinjiang Mountaineering Association which has an office and store in Kashgar. Barrels were numbered and an inventory of the contents of each was prepared. Climbing hardware, tents and other bulky items were packed in kit bags.

On 3 September the expedition travelled to Yecheng where the night was spent in the Mountaineering Hotel. The next day the expedition left the Kashgar-to-Khotan sealed highway and travelled on the road to Tibet as far as the Yarkand River valley. From this point the road down the Yarkand valley was followed to the road end at Mazardara, where there was an army camp. Our camels and their four drivers were waiting for our arrival.

On 5 September we assisted in loading 14 camels and at midday set forth along the remnants of a road which follows the Yarkand River to the Pakistani border. We followed the road until the Surukwat River, and then travelled up the true left bank of the Surukwat until its confluence with the Zug Shagskam River where we made camp.

On 6 September we travelled up the Surukwat River, making one easy river crossing, and camped after a long day at the top forks close to a small summer settlement of local shepherds.

On 7 September we travelled up to the Aghil Pass reaching the Pass at midday. From here we obtained our first view of the Shaksgam River valley and the higher peaks of the Aghil Mountains. Cloud obscured any view that we may have had of the higher mountains of the Great Karakoram. We made the relatively steep descent to the Shaksgam River valley and made camp just on dusk at the first small "jungal" (patches of scrub) on the valley floor.

After a three hour walk on 8 September we arrived at our Durbin Jangal base camp. This proved to be a delightful oasis of greenery midst starkly dry surrounds. The oasis is kept alive by a number of warm springs which issue from cracks in the mountainside rock a hundred metres or so above the valley floor.

5.3 Aghil Mountain Reconnaissance

On our first afternoon at Durbin Jangal we began our reconnaissance. The immediate task was to identify a route into the Aghil Mountains that would provide access to the specific area in which we planned to climb. Our research indicated that the tributary of the Shaksgam River immediately upstream of Durbin Jangal might provide this access. On the basis of our preliminary observations and advice from Mr Jin about a reconnaissance trip he had undertaken with Jim Williams the previous year, we planned to use the camels in establishing an advanced base camp as far as the camels could take us up that tributary.

Early on 9 September three of the team set off up the tributary to investigate the route, ahead of the camels. Travel up the river bed was easy until the tributary divided into two. Good access up the true right tributary was blocked by a waterfall. John Cocks and Kristen investigated the true left bank of the other tributary, only to determine that this was not a camel route. John Wild investigated the true right bank and returned late in the day. He had travelled as far as the glacier snout. He reported that the terrain was dangerous on account of steep, unstable slopes and recommended that it was not a safe packing route. When the camels arrived at the forks, the drivers inspected the route immediately beyond and advised that camels could go no further.

The news of John Wild and the advice of the camel drivers was disappointing. We had to review our plans immediately. Our decision was to spend a day further investigating access routes into the Aghil Mountains and, if this proved unsuccessful, travel up the Shaksgam and pursue our second objective.

On 10 September the team split up to investigate a number of alternatives. Dave and Kristen travelled down river to explore the first tributary downstream of Durbin Jangal. Nank and John Cocks travelled upstream to explore a tributary immediately south of Peak 6824. Both parties returned to report that severe gorges prevented ready access into this section of the Aghil Mountains. Thus, the next step was clear - to establish an advanced base camp up the Shaksgam so that we could pursue our second objective.

5.4 Climbing in the South East Skyang Glacier Area

On 11 September, with the assistance of camels, the expedition established an advanced base camp near the snout of the South East Skyang glacier. Mr Jin, the camel drivers and the camels returned to base camp the same day. The camel drivers and the camels then returned to Durbin Jangal, whilst Mr Jin and Mr Gao remained at base camp.

Our second objective, Peak 6648 metres, was clearly visible as we approached the advanced base camp. Our mission was to acclimatise whilst exploring the South East Skyang Glacier and to establish a route by which we would attempt to climb.

From 12 to 14 September we packed up the glacier and established Camp 2 at the confluence of the main glacier and a tributary glacier (refer to Figure 5.1). Travel was generally straight forward, initially up the lateral moraine on the true left of the glacier and then up medial moraine.

After a rest day we crossed the glacier and travelled up terraces on the true left bank of the glacier and established a high camp at approximately 5,400 metres on a sheltered gravel terrace. From the terrace, we gained impressive views of K2 and Skyang Kangri.

On the 17 September Peak 5,959 metres on the north side of a pass to the West Skyang glacier was climbed. This was an easy snow climb and it seems likely had been climbed once before, by Kurt Diemberger and Erika Prokosch in 1991. On the next day Peak 6,068 metres on the south side of the pass was climbed, following the snow ridge to the summit from the pass. It is understood that this was a first ascent.

After returning to Camp 2 reconnaissance trips were carried out to establish a route by which Peak 6648 could be attempted. On 20 September John Wild, Dave and Dom travelled up a tributary glacier on the west side of the peak whilst Nank, John Cocks and Kristen travelled back down the South East Skyang glacier and up a tributary on the east side of the peak. The former group established that their route would prove problematic because of steep icefalls and a long, castellated summit ridge. The latter group established a good packing route up the tributary glacier and observed what appeared to be a climbable route from the head of the tributary glacier up the East Face and the Southeast Ridge to the summit.

On 23 September, the team travelled down the South East Skyang Glacier and up the tributary, establishing a camp above the first icefall on a small terrace on the true left bank. Access up the tributary was gained on its eastern side, at first travelling up the ice and then crossing onto the lateral moraine.

On 24 September, the team travelled up the north side of the glacier and then up scree slopes to a high camp, on the outer edge of the upper basin, at approximately 5,580 metres.

On 25 September a predawn start was made to climb the mountain. In the dark travel was across a lightly crevassed basin to the base of a prominent couloir. The couloir, which was moderately steep, was ascended on front points to about two thirds of the way to a col at the base of the Southeast ridge. By this time the weather was beginning to close in, with cloud enveloping the higher peaks.

John Wild and Dave decided it would be risky to proceed in the deteriorating weather and turned back to camp.

Nank and Tom, on the third rope, were being bombarded by tumbling pieces of ice dislodged by picks of those above, so they sought refuge on a ledge beside the couloir. By the time John and Dave reached them, time was getting on and, as a consequence of the delay, Nank and Tom also made a decision to turn back.

By this stage, the first rope of three was out of sight.

At about two thirds of the way up, Dom, Kristen and John Cocks left the couloir and followed a platform beneath a large ice cliff into the upper icefall. Travel then became mixed and slow. In places hard ice demanded precarious manoeuvres. Elsewhere, soft deep powder snow meant wading uphill. Eventually they made the col at 6,000 metres. It was midday.

After 3 hours of relatively straightforward climbing, wending a way up the summit slope to avoid ice cliffs and crevasses, the summit was reached. Cloud obscured most of the surrounding peaks and light snow was falling.

Thinking the weather was going to deteriorate further, a hasty retreat was made back to the col. Fortunately, at that stage the cloud began to dissipate.

Dom, Kristen and John Cocks returned to the high camp at 11 p.m., after a hard but exhilarating day, knowing this was the first ascent of this spectacular mountain.

5.5 Aghil Mountains Climbing

Having achieved our second objective we were keen to explore the southern end of the Aghil Mountains. During our travel up the Shaksgam, we had observed a route which appeared to provide access to a group of mountains south of the great limestone wall. On 27 September, Nank and John Cocks set off up the Shaksgam to investigate the route.

Uninterrupted travel was gained up the true left bank, beneath the towering terminal icecliffs of the snout of the North Gasherbrum glacier to a small valley which lies between this glacier and the Urdok Glacier. On 28 September they climbed a small hill (4,790 metres), from where they gained an unsurpassed view of the Broad Peak and Gasherbrum Groups, including Broad Peak, Gasherbrum I and Gasherbrum II. From this vantage point, a certain route appeared to a group of peaks at the more southerly end of the Aghil Mountains.

On the 30 September, Nank, John Cocks, Dom and Kristen set off to climb Peak ±6,340 metres. The Shaksgam was easily forded and a high camp was established at approximately 5,300 metres up a rock couloir, on a terrace.

On 1 October and with a predawn start, the team set off. Travel was slow, wading though powdery snow, to the base of an ice couloir, and then wading though the snow

up the couloir to the summit snowfield. From the summit snowfield, the summit ridge was gained and followed to the summit. The day was perfectly clear and the views were expansive, especially into the upper Zug Shaksgam visited by Shipton's Shaksgam Expedition in 1937.

During this time, John Wild, Dave and Tom had travelled up the Shaksgam River, climbed the hillock 4,790 metres and fossicked about the snout of the North Gasherbrum Glacier.

5.6 Finale

All members of the expedition returned to advanced base camp on 3 October and, that afternoon as planned, the liaison officer, two camel drivers and six camels arrived. After a busy hour or two of packing up the advanced base camp, the expedition set forth at 6pm on a hasty retreat down valley, travelling in darkness during the last couple of hours. We arrived at the base camp at 10:30pm to a warm welcome and sumptuous meal prepared by the cook, Mr Gao.

There was a day's rest at base camp, enjoying the warm spring waters and exquisite cuisine.

On 5 October, the expedition left for Kashgar, returning by the same route and by the same means as it arrived. A short detour was made on the last day of the trek out, to a village downstream of the confluence of the Yarkand and Surukwat Rivers. There we were enthusiastically welcomed by the village folk who showed us their woollen craft work and their school. At the school Nank and John Wild performed a haka (a ceremonial dance of the Maori) much to the delight of the gathered children.

5.7 Weather and River Conditions

The weather at the beginning of the trip was hot during the day and cool during the night. The wind was predominantly from the south-west, with some cloud on the higher peaks. Towards the end of the expedition the weather became distinctly cold, with ambient temperatures approaching zero centigrade during the day and colder at night. During September, three disturbances, each of about 24 hours, resulted in light snowfall and delays to climbing. At the end of September and early October, the days were perfectly clear with little wind.

During early September, on the walk in, the Shaksgam River had a moderate flow but carefully selected crossing points enabled safe crossings by foot and even safer crossings by camel. On the walk out, the river had fallen dramatically to a low flow.

There were no accidents or serious illness to the expedition members, camel drivers or camels.

6. Conclusions

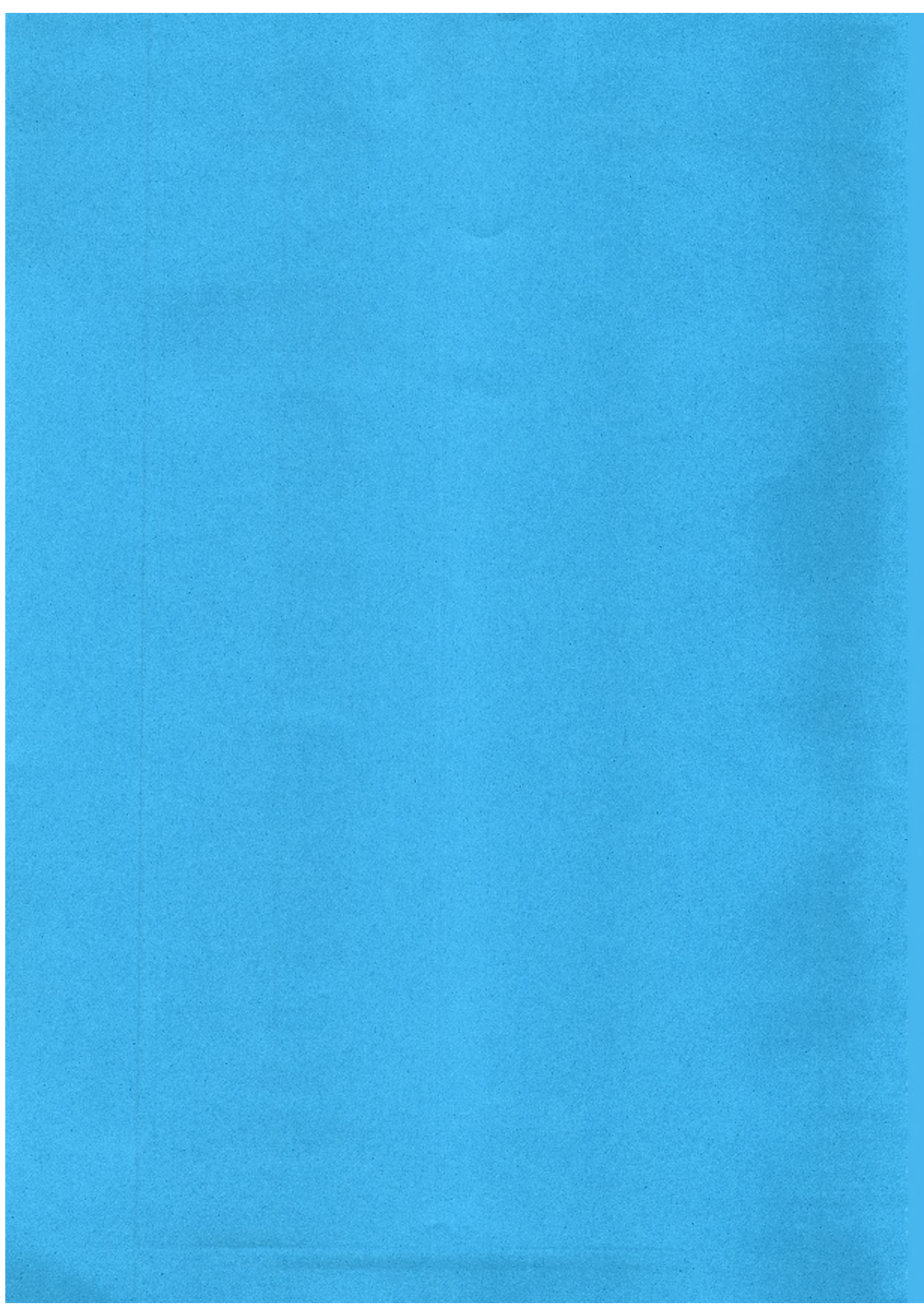
In conclusion:

- the Aghil Mountains provide challenging and rewarding climbing, with very few recorded ascents
- the peaks of lower altitude in the South East Skyang Glacier area provide challenging and rewarding climbing, and there are very few recorded ascents
- there is much exploratory mountaineering and spectacular trekking in the area
- access to and up the Shaksgam River valley is relatively straightforward and readily accomplished in four to five days from the road end at Mazardara.
- most expedition food can be purchased in Kashgar and fresh vegetables and fruit can be purchased at towns en-route to the road end
- the China Xinjiang Mountaineering Association provides an excellent service in obtaining the necessary approvals and making travel arrangements
- more recently published maps, and the map in Shipton's Blank on the Map, provide accurate topographical information, given the limits of the scale and contours
- the difficulty and hazards of access into the Aghil Mountains, or at least its central part in the vicinity of Durbin Jangal, are not to be underestimated
- river crossings of the Shaksgam River have been reported to be treacherous. However, during the September-October period a moderate to low flow river was safely forded, provided crossing locations were carefully selected
- the area is desert with the only greenery being at a few oases, fed by spring waters.

7. Acknowledgements

The expedition gratefully acknowledges assistance from the following people and organisations.

- Mount Everest Foundation for financial assistance
- China Xinjiang Mountaineering Association (CXMA)
- Jin Ying Jie of CXMA for his superb organisation, sharing his considerable knowledge of the people and geography of the area, and his warm companionship
- Gao Zheng, for his cheery character and excellent cooking
- New Zealand Alpine Club for financial assistance
- Dave Bamford, Kurt Diemburger, Jim Williams and Colin Monteath for information provided during the expedition research stage
- Peter Cammell of Cammell the Chemists for preparing the first aid kits
- Dr Richard Price for medical advice
- Qantas Airlines for an additional baggage allowance and safe air travel
- Verkerks of Christchurch for supplying their incomparably good salami to the expedition
- Earth Sea Sky Equipment for providing exquisite clothing to our liaison officer, cook and other expedition members
- Margaret Jefferies for secretarial work
- wives, family and friends for support, and enthusiasm.



Appendix A A Select Bibliography

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Appendix B Inventory of Equipment

New Zealand Aghil Expedition 1997
Mountaineering Equipment

Item	John Nankervis	John Cocks	Tom Davies	Dave Ellis	Kristen Foley	Dom. Hammond	John Wild	Total
Personal								
ice axe	1	1	1	1	1	1	1	7
ice hammer	1	1	1	1	1	1	1	7
crampons	1	1	1	1	1	1	1	7
crampons spares	1	1	1	1	1	1	1	7
helmet	1	1	1	1	1	1	1	7
belay / abseil device	1	1	1	1	1	1	1	7
prussics	4	4	4	4	4	4	4	
harness	1	1	1	1	1	1	1	7
screw krabs.	3	3	3	3	3	3	3	21
Party								
Climbing ropes (9mm x 50m or 8.5mm x 50m)	1		1	1		1	1	5
Static rope 6 to 8mm x 100m	1							1
Pulleys	1	1	1	1	1	1	1	7
Jumars <i>see Note 3</i>	2							2
Snow stakes	2	2	2	2	2	2	2	14
Ice screws								
- screw in	2	2	2	3	3	2	3	17
- drive in	1	1	1			1		4

Item	John Nankervis	John Cocks	Tom Davies	Dave Ellis	Kristen Foley	Dom. Hammond	John Wild	Total
Nuts (wires) <i>see Note 1</i>		1 rack				1 rack		2 racks
Cams. <i>see Note 2</i>			1 x 4		1 x 4			2 x 4 units
Large Hexes	1 x 2				1 x 2			2 x 2 units
Quickdraws		2	2		2	2		8
Runner krabs	4	4	4	4	4	4	4	28
Slings <i>see Note 4</i>								
• 90cm-180cm long	2	2	2	2	2	2	2	14
• 60cm long	2	2	2	2	2	2	2	8
Pitons <i>see Note 5</i>	3			3				

Notes

1. Nuts: 2 lead racks comprising 2 full sets of wires (# 1-9) + **1 krab./ rack**
2. Cams: 2 lead racks comprising 2 x 3 units (say -1# 1, +#1 and #2 sizes) + **3 krabs / rack**
3. Message for Nank - Dave Ellis has two available sets of jumars if yours are not released from Charleston.
4. Sling lengths = half circumference.
5. Pitons to include selection of blades, angles and lost arrows (1 of each / nominated person).

Appendix C Further Information

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