

# **Mount Everest Foundation**

**Expedition report of:** 

New Zealand Expedition to the Kangri Garpo, Tibet, October –November 2001 (Expedition Reference 01/43A)

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## **Mount Everest Foundation**

# New Zealand Expedition to the Kangri Garpo, Tibet, October-November 2001

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### 1. Summary

During October – November 2001 five New Zealand climbers spent 4 weeks mountaineering on and around the Lhagu Glacier in the Kangri Garpo Range in south eastern Tibet. There had been very few foreign visitors to the area and we could find no record of ascents of the peaks surrounding the Lhagu Glacier We were attracted by the potential to explore and climb in a previously little visited area. Late autumn was selected for ease of road access and in anticipation of predominantly fine weather.

The first objective was to explore the Lhagu Glacier, and to climb one or more of the unnamed (on maps), virgin peaks that surround the head of the Glacier. The Lhagu Glacier is approximately 35 km long – one of Tibet's longest.

A secondary objective was to visit the Ata Kang La (pass) area, and possibly attempt a peak near the Pass.

The expedition was planned as a lightweight one to attempt peaks of between 5,600 and 6,500 metres. As nobody had climbed in the area, we had very limited information. Whilst this enhanced the prospect of exploration, it raised the risk of our objectives proving unattainable for a small, lightweight expedition on a tight timetable.

Permission for exploratory mountaineering in this politically sensitive part of Tibet was arranged through the China Tibet Mountaineering Association ("CTMA"). With the exception of some problems on our return road trip from the village of Lhagu to Lhasa, all travel arrangements went to plan. Permit formalities, accommodation, travel to and from the mountains were, overall, organised by the CTMA efficiently and well. However the base camp equipment and staff provided by the CTMA both fell short of our expectations.

The expedition travelled together to Lhasa, where the balance of food and equipment was purchased, along with gasoline for cooking stoves. We then travelled by road over three days from Lhasa to the village of Lhagu. After a further day's travel with a yak train, base camp was established on a moraine terrace on the southern edge of the Lhagu Glacier.

From that base we travelled up the Glacier with the aim of climbing some of the peaks surrounding the head of the Glacier. Apart from the early stages, we were able to use skis for travel. Notwithstanding that, we were defeated in our primary objective by a combination of the distances and logistics involved, and poor weather.

No significant peaks were climbed, but expedition members explored in various directions, including a ski ascent of a 5,700 metre snow dome on the northern side of the névé at the glacier head.

In the face of the bad weather, a decision was made to return to base camp, with the aim of attempting one of the attractive unclimbed peaks behind (to the south of) base camp. That aim had to be abandoned in the face of a period of bad weather.

After returning to Lhagu, the expedition spent several days exploring the Ata Kang La area.

Mixed weather was encountered during the four weeks spent in the area. Particularly in the early stages of the expedition, we encountered lengthy periods of fine clear weather. In the latter stages, we had several periods of bad weather, unfortunately at times we were hoping to climb. Fine weather did, however, return towards the end of the trip. Throughout, the wind blew almost constantly from the south/south-west, making for cold conditions at altitude.

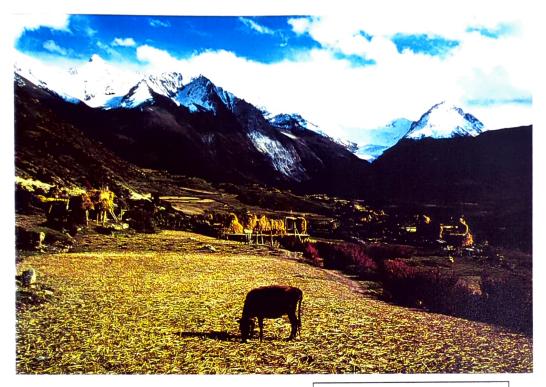


Photo 1: Lhagu and peaks to the south of the village

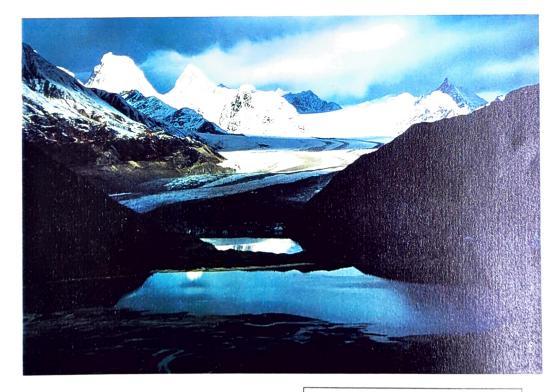


Photo 2: Lhagu Glacier and surrounding peaks from Lhagu

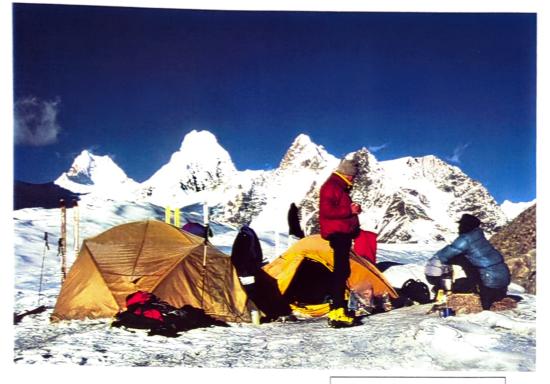


Photo 3: Camp on the Lhagu Glacier



Photo 4: Peaks on the south side of the middle section of the Lhagu Glacier



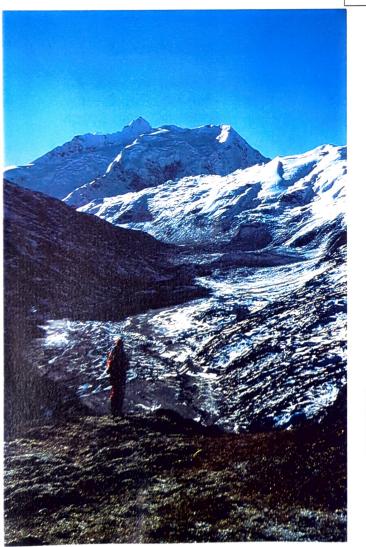
Photo 5: Eastern aspects of the Lhagu Glacier névé



Photo 6: Peaks on western end of the Lhagu Glacier névé



Photo 7: Loaded yaks on the return from Base Camp



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Photo 8: View south towards the Ata Kang La from point 4,535 metres

## 2. Introduction

### 2.1 Purpose

The expedition's aim was exploratory mountaineering in the Kangri Garpo Range in south-eastern Tibet.

The primary objective was to explore the Lhagu Glacier, and to climb one or more of the unnamed (on maps), virgin peaks surrounding the Glacier, particularly those at its head.

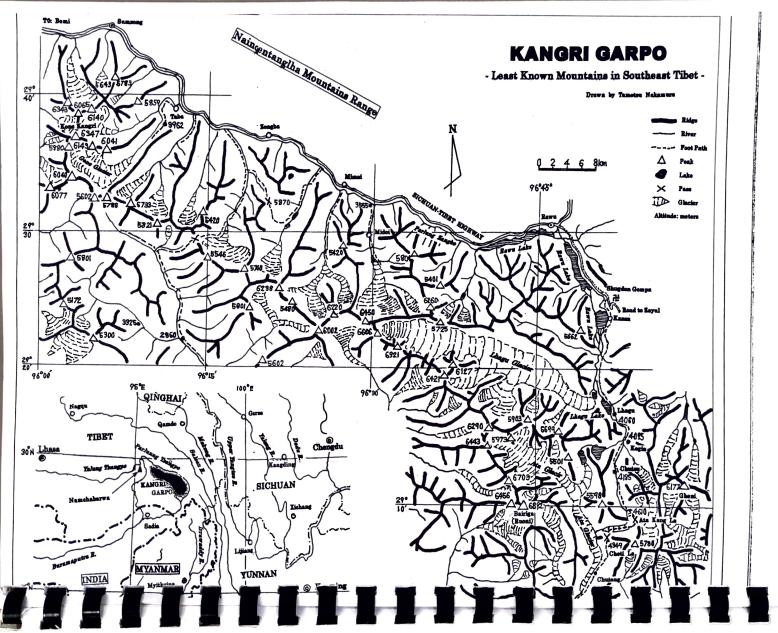
A secondary objective was to explore the area near the Ata Kang La (pass), and perhaps to attempt one of the peaks (also unnamed and unclimbed) in the pass area.

## 2.2 Location

The 250 km long Kangri Garpo range is in south-eastern Tibet, to the north and north-west of Tibet's borders with Assam (India) and Myanmar (Burma) respectively. Most of the range lies east of the great bend of the Tsangpo (Brahmaputra) River and Namcha Barwa, the eastern-most outpost of the Himalaya. The Kangri Garpo lies at latitudes of approximately 29 to 30 degrees north and between longitudes of 95 and 97.30 degrees east. The location is shown on the accompanying map.

### 2.3 Character and Access

Whilst not part of the Tibetan plateau proper, the Kangri Garpo is elevated. The valley floors in the eastern part of the massif we visited are between 3,800 and 4,500 metres, whilst the peaks rise to 6,800 metres.



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## 3. Personnel

The expedition members comprised five New Zealand climbers, a Tibetan liaison officer and a Tibetan cook.

The New Zealand expedition members were:

- John Nankervis (leader)
- Wilf Dickerson
- Colin Monteath
- Nick Shearer
- John Wild

The liaison officer was:

• Jinba

The cook was:

• Tsering Tashi

In addition Betty Monteath (Colin's wife) and Jocelyn Lang (New Zealander resident in Canada) accompanied the expedition to Lhagu. They explored areas around Lhagu and southern tributaries of the Parlung Tsangpo River between Sumzong and Rawu, the moraine terraces on either side of the lower Lhagu Glacier, visited base camp and then joined expedition members in the Ata Kang La area.

## 4. Preparation

### 4.1 Introduction

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

### 4.2 Research

#### 4.2.1 Introduction

The objectives of research were to make decisions on:

- The formalities necessary to climb in Tibet.
- Suitable objectives.
- The optimum time of year to visit the area.
- The provisions to take from New Zealand.

This section summarises the research and outcomes with respect to these objectives and other matters including finance, insurance, air travel and medical arrangements.

#### 4.2.2 Formalities

The Kangri Garpo lies near a border area disputed between China and India. It seems the area was only opened to foreign climbers during the late 1990s.

The formalities of obtaining a permit for exploratory mountaineering in the area were attended to efficiently by Mr Dou Chang Shen of the CTMA in Lhasa.

#### 4.2.3 Climbing objectives

We could find no record of previous climbing in the Lhagu Glacier area of the Kangri Garpo. We obtained helpful information and a sketch map from members of the Silver Turtles of Japan, who visited the lower Lhagu Glacier in October-November 2000.

We also obtained ready and valuable assistance from Tamotsu Nakamura of the Japanese Alpine Club, a seasoned traveller in the mountains of Eastern Tibet.

We obtained the following maps:

- Terrain Map of the Qinghai-Xizang Plateau 1:3,000,000 Institute of Geography, Chinese Academy of Sciences (1900)
- TPC H-10A and H-10B (US) 1:500,000
- JOG Series 1501 (US) Sheets NH 46-8 (Pien-Pa), NH 46-12 (Po-Mi) and NH 47-9 (Jan-Wu) 1:250,000
- Russian 1:100,000 H 47-85, H47-86, H 47-98.

Chinese People's Liberation Army maps which we understand to be of scales 1:50,000 and 1:100,000 were unavailable.

#### 4.2.4 Time of year

All our inquiries indicated that October/November was the optimum time to visit, in terms of ease of road access from Lhasa to Lhagu, and weather in the Kangri Garpo. We knew this would be late autumn/early winter in the mountains, and were thus anticipating cold, clear conditions.

#### 4.2.5 **Provisions and fuel**

We took some food from New Zealand, purchasing the remainder of our provisions in Lhasa. From New Zealand we took most of our high altitude food: dehydrated meat and vegetables, salami, cheese, tinned butter, ground coffee, chocolate and sweets, and soups and sauces. In Lhasa we purchased noodles, pasta, milk powder, biscuits, spreads and other locally available items. The food we purchased in Lhasa was generally satisfactory, if not always appetising, except for the (vacuum packed) bacon, which proved inedible.

While in Lhasa we also purchased gasoline. The first fuel purchased for us by the CTMA would not burn in our stoves. The fuel subsequently purchased for us was usable, but not entirely satisfactory in terms of combustion and cleanliness.

#### 4.2.6 Finance

The total cost of the expedition per member including airfares to and from New Zealand was estimated at NZ\$13,500. Actual costs approximated to the total budget of \$67,500 although within that figure there were unders and overs on individual items.

The Mount Everest Foundation made a generous grant of £940. We also received a Shipton/Tilman grant of US\$5,000. Expedition members financed the remainder of the costs personally.

#### 4.2.7 Insurance

Most members arranged insurance through the New Zealand Alpine Club, which offers a policy arranged by Torribles Insurance Brokers of Bristol, England. Cover per member for the expedition was an affordable NZ320 (£105). The cover extended to medical, travel cancellation, search and rescue, personal liability and accident and personal effects.

#### 4.2.8 Air travel

The expedition flew from Auckland, New Zealand to Hong Kong with Cathay Pacific, and from Hong Kong to Chengdu in China with Hong Kong Dragon Airlines. We had overnight stops in Hong Kong and Chengdu. Cathay Pacific kindly allowed us a free overweight allowance sufficient to accommodate all our baggage. We did not receive the same concession from Dragon.

Internal air travel in China (from Chengdu to Lhasa and return) was arranged by the CTMA, with no significant overweight problems.

#### 4.2.9 Medical arrangements

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

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

#### 4.3 Administration

The CTMA arranged for the lodging and processing of the expedition's application for a permit to visit the area, and also organised air travel inside China and road travel from Lhasa to Lhagu and return.

The CTMA also provided base camp equipment.

The travel arrangements were generally satisfactory, although we experienced a problem on the return journey overland to Lhasa when expedition members became parted from the expedition equipment.

The base camp kit was barely adequate: the gear was minimal and very old. Our liaison officer and cook were also disappointing in some respects; the former in terms of his support, the latter in terms of his cooking skills. The cook was young and lacked significant expedition experience as a sole cook.

With the assistance of Mr Dou of the CTMA, our itinerary was finalised and is presented in Table 1.

## Table 1

## **Planned Travel Itinerary**

Date	Activity					
10 October	Arrive Lhasa airport from Chengdu. Food buying, etc. and stay in Lhasa.					
11 October	Food buying, etc. and stay in Lhasa					
12-14 October	Travel to road end near Lhagu					
15-16 October	Travel to base camp (BC)					
17 October-10 November	At BC or climbing (25 days)					
11-12 November	Return to road end near Lhagu and stay at Lhagu					
13-15 November	Travel from road end to Lhasa, stay in Lhasa					
16-17 November	In Lhasa (allows extra day for return delay)					
18 November	First group departs Lhasa by air for Chengdu					
21 November	Second group departs Lhasa by air for Chengdu					

## 5. Activity

## 5.1 Introduction

This section describes the activities of the expedition during its time in Tibet.

## 5.2 Access

Following our arrival in Lhasa, we spent two days purchasing food and sorting equipment.

Over the three days 12-14 October, we travelled by road from Lhasa to the village of Lhagu. Transport comprised two landcruisers and a truck for the equipment. The first night was spent at Bayi, the second at Bome. The road is the southern Tibet-Sichuan "highway". It is an excellent, sealed road until a little beyond Bayi, and is generally good after that, except for a section around Tangmai which is undergoing major reconstruction. The hundreds of Chinese workers on that section of the road made an impressive sight.

We managed to get our vehicles all the way to Lhagu, although the road was only properly completed by the villagers during the month we were based at Lhagu. We received an enthusiastic welcome at Lhagu, and, throughout our stay there, constant and inquisitive attention.

## 5.3 BC and Lhagu Glacier reconnaissance

Following a recce the previous day, base camp was established on a moraine terrace on the south (true right) side of the Lhagu Glacier on 16 October, at an altitude of 4,200 metres. Approximately 20 yaks and 3 horses and their drivers from Lhagu were used. Subsequently, base camp was re-sited, again using yaks from Lhagu, further up the south side of the Lhagu, also on a moraine terrace. Plenty of dried firewood from dead alpine scrub was available at both camp sites, and there were streams nearby each.

Over the following 5 days the expedition reconnoitred a route out onto and up the Lhagu Glacier. Camp 1 was established out on the Glacier, and then Camp 2 at an altitude of 4,805 metres on a flat snow shelf in the Glacier, immediately below the icefall leading to the upper névé. Bamboo wands were used for route marking and skis and skins utilised beyond Camp 1. In generally fine, clear weather (very hot on the Glacier round the middle of the day) about 7 days food was packed up to Camp 2.

Two Lhagu villagers who had stayed behind in base camp were hired to assist with load carrying up the Glacier to Camp 1. We later found evidence of camp fires further up the Glacier. Subsequent inquiries revealed that the local people travel extensively on the glacier in order to gain access to the surrounding country on journeys to collect valuable herbal remedies.

## 5.4 Climbing at the head of the Glacier

From Camp 1 a side trip was made on skis and access gained to the névé above the icefall at the foot of a southern feeder of the Lhagu Glacier.

Over the following days, expedition members explored the upper névé. Skis were used right from Camp 2, although numerous deviations around crevasses and some steep skinning were necessary before gaining the névé proper. The upper névé is an impressive area. It is only gently contoured, and is approximately 5 km long and up to 3 km wide. A number of peaks, all representing worthy mountaineering challenges, could be climbed from the névé. These vary in height from 6,000-6,500 metres.

An altitude of 5,300 metres was gained on a broad snow shoulder on the southern side of the névé, giving excellent views of the surrounding terrain.

On 28 October a party skinned to the summit of a 5,720 metre snow dome on the northern side of the névé, another excellent vantage point.

On the same day, a party of two traversed the névé on skis to the foot of one of the peaks on the southern side of the névé. Access to this peak off the névé involved a steep climb and schrund crossing to gain a long ridge which appeared to be corniced for most of its length. A decision was made not to attempt this peak that day, because a climb could not have been completed in the daylight remaining, let alone the lengthy trip back to our high camp.

This experience underlined for us the logistical reality: because of the distances involved, in order to have a reasonable prospect of climbing a peak around the head of the glacier, we would need to establish a climbing camp near the base of the peak.

Bad weather then intervened, snow and wind ruling out further activity on the upper névé. On 31 October a decision was made to return to base camp with the aim of climbing one or more of the fine looking peaks behind (to the south) of base camp and/or exploring and climbing in the Ata Kang La area, to the south of Lhagu.

All the expedition members and gear were back at base camp by 2 November. Inclement weather then again disrupted climbing plans, with a pattern of clear cold nights but, by dawn, cloud and steady light snow.

On 5 November, with fresh snow on the mountains and around base camp, the decision was made to abandon further climbing around the Lhagu Glacier. The yaks and their drivers were fetched up from Lhagu and we returned there on 6 November.

## 5.5 Ata Kang La

The following days were spent exploring the Ata Kang La area. The Ata Kang La was the route followed by Kingdon Ward from Assam in 1933 on one of his notable plant and seed collecting expeditions. This route, which involves ascending one

glacier and descending another, appears still to be a regularly used route by the local people between Lhagu and the village of Ata, at the much lower altitude of 2,300 metres in the Ata Chu valley.

Winter was fast approaching and the weather, although mainly good, was now very cold with a steady strong wind from the south/south-west. On the morning of 10 November, from a 4,535 metre vantage point behind a camp, we had superb views of Chombo (Chinese name "Ruoni" or "Bairiga") at dawn. At 6,805 metres this large and complicated mountain is the highest in the Kangri Garpo. It was reconnoitred by Tamotsu Nakamura's party in May 1999. It lies between the main Ata Glacier and a smaller (but still significant) glacier to its west which feeds the Ata Chu above the village of Ata.

#### 5.6 Finale

Back in Lhagu, the late arrival of our transport meant an enforced stay of 3 days. During this time expedition member Nick Shearer, a dentist, operated an open-air dental clinic for the villagers until his dental supplies ran out. Dental care and hygiene were clearly a novelty to these Tibetans.

We left Lhagu on 14 November and arrived back in Lhasa on the evening of 15 November. A few days were spent sightseeing, in particular absorbing the unique and colourful ambience round the Jokhang Temple, before expedition members flew out (on different dates) to Chengdu and thence home to New Zealand.

#### 5.7 Weather conditions

We had put back our departure date from New Zealand by two weeks, because all available information indicated that late October/early November was the optimum time in terms of road access from Lhasa to Lhagu, and weather in the Kangri Garpo.

Although the assumption about roads proved correct, that about the weather in the Kangri Garpo is questionable. Had we gone earlier there would have been more precipitation at the beginning of the trip than we had. However, by November falling temperatures, coupled with the almost constant wind from the south<sup>1</sup>, would make climbing at altitude rather more challenging than earlier in the autumn.

<sup>&</sup>lt;sup>1</sup> Kingdon Ward in "A Plant Hunter in Tibet" (1934) commented on the wind in the Lhagu area: "The south wind blew ... ceaselessly without pity, till it got on my nerves and ruined my temper. I grew to hate and fear it ..."

## 6. Conclusions

To conclude:

- Permission to climb in the Kangri Garpo is currently available. That may alter if border tensions in the area increase.
- Road access from Lhasa to Lhagu village is now a reasonably reliable and straightforward 2-3 day trip. The section around Tangmai which is undergoing major reconstruction may be an exception. The road has now been completed all the way to Lhagu Village.
- Both sides of the lower Lhagu Glacier are used by the local people for grazing, and are well tracked. The moraine terraces provide good camping sites with firewood and water handy. From Lhagu a packing route following up the southern (true right) side provides good access to the Lhagu Glacier.
- Access up the Lhagu Glacier and its tributary glaciers involves typical glacier travel. But the distances involved should not be under-estimated. We recommend any future expedition to engage local people to assist in portering loads up at least the lower section of the glacier, to make the logistics of establishing a climbing camp(s) in the head of the glacier more manageable.
- The many impressive peaks surrounding the Lhagu Glacier, particularly at its head, remain unclimbed. They present a range of climbing challenges: some of the peaks look technically demanding. There is also huge scope for trekking in the valleys and over the passes in the surrounding area.
- Specialised mountaineering food needs to be carried to Tibet, but good supplies of basic foods are available in Lhasa.
- Gasoline for cooking stoves is also available in Lhasa, but should be thoroughly tested before the expedition departs.
- The CTMA provides a knowledgeable and efficient service in obtaining the required permits and making travel arrangements. Future expeditions would be well advised to check the adequacy of the base camp kit and the credentials of the liaison and cooking staff, provided by the CTMA.
- Adequate maps of the area are available.

## 7. Acknowledgments

The Expedition gratefully acknowledges assistance from the following people and organisations:

- The Mount Everest Foundation for financial assistance.
- W L Gore & Associates, for a Shipton/Tilman grant.
- The China Tibet Mountaineering Association, and in particular Mr Dou Chang Shen, for its organisation.
- Our liaison officer, Jinba.
- The New Zealand Alpine Club Inc. for its endorsement and encouragement.
- Tamotsu Nakamura 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.

- Cathay Pacific for a generous baggage allowance.
- Verkerk's of Christchurch for supplying their superbly good salami to the Expedition free of cost.
- Margaret Jefferies for secretarial work.
- Wives, partners, family and friends for their support and enthusiasm.

# 8. Copyright

The compilers of this report and the members of this expedition agree that all or part of it may be copied for the purpose of private research.

# Appendix A A Select Bibliography

## A. BOOKS

- 1. F Kingdon Ward "The Riddle of the Tsangpo Gorges" (1926 and 2001 illustrated reprint)
- 2. F Kingdon Ward "A Plant Hunter in Tibet" 1934
- 3. R Kaulback "Tibetan Trek" 1934
- 4. J Hanbury-Tracy "Black River of Tibet" 1938
- 5. F M Bailey "No Passport to Tibet" 1957
- 6. A Swinson "Beyond the Frontiers The Biography of Colonel F. M.Bailey Explorer & Secret Agent" 1971
- Harold R L Fletcher "A Quest of Flowers The Plant Explorations of Frank Ludlow and George Sherriff" 1975
- 8. I Morshead "The Life and Murder of Henry Morshead" 1982
- 9. "Himalayan Enchantment an Anthology Frank Kingdon Ward" 1990, esp. photos b/w pp78 and 79
- 10. "Tibet Handbook" (Footprint), 2nd Edition 1999, esp. pp227-242 and 405-413

#### B. ARTICLES

- 1. F Kingdon Ward "The Himalaya East of the Tsangpo", The Geographical Journal, Vol LXXIV (November 1934), pp369-95
- 2. F Kingdon Ward various articles in "The Gardeners' Chronicle", Vols XCVI, XCVII and XCVIII
- 3. Michael Ward "Mountains of East and South-East Tibet", Alpine Journal (UK) 1991-2, pp49-62
- 4. Ernst Sondheimer "A Plant Addict in the Eastern Himalaya", Alpine Journal 1998, pp149-156
- 5. Tamotsu Nakamura "Untrodden Mountains in Southeast Tibet", Sangaku Vol 94 (1999), ppA34-A38

- 6. Tamotsu Nakamura "East of the Himalaya", Himalayan Journal 1999, pp30-39
- 7. Tamotsu Nakamura "Trips to Southwest China in 1998/1999", Himalayan Journal 2000, pp219-224
- 8. Michael Ward "The Exploration of the Tsangpo River and its Mountains", Alpine Journal 2000, pp124-129
- 9. Tamotsu Nakamura "Kangri Garpo Range in Southeast Tibet", Japanese Alpine News, Vol 1 October 2001

### Appendix B

#### NEW ZEALAND KANGRI GARPO EXPEDITION 2001 MOUNTAINEERING EQUIPMENT

Item	John Nankervis	Colin Monteath	Nick Shearer	John Wild	Wilf Dickerson	Total	Comment
Personal							
Ice axe	2	1	1	1	1	6	Nank takes one spare (70cm) axe
Ice hammer	1	1	1	1	1	5	
Crampons	2	1	1	1	1	6	Nank takes one spare pair lightweight adjustable crampons
Crampons spares	1	1	1	1	1	5	
Helmet	1	1	1	1	1	5	
Belay/abseil device	1	1	1	1	1	5	
Prussics	4	4	4	4	4	20	Or any greater number that suits you
Harness	1	1	1	1	1	5	
Screw krabs.	2	2	2	2	2	10	Take more screws/fewer runner krabs, if preferred
Runner krabs	6	6	6	6	6	30	
Avalanche transceivers	1	1	1	1	1	5	457Khz or dual frequency
Skis, skins, poles (preferably with avo probe capability)	1	1	1	1	1	5 pairs	Also arrange for skin glue and wax and repair items
Bivvy bags	1	1	1	1	1	5	



ltem	John Nankervis	Colin Monteath	Nick Shearer	John Wild	Wilf Dickerson	Total	Comment
Party							
Climbing ropes – 9mm (minimum 8.8mm) x 50m	1	2		1		4	Allows for 2 spares
Static rope (±6mm x 100m)	1					1	Take to BC, at least. Also for river crossings.
Pulleys	2	1	1	1	1	6	Take extra if you prefer
Ascendeurs	1 pair					1 pair	For emergency
Snow stakes	2	2	2	2	2	10	
Ice screws	4	4	4	4	4	20	If snargs or other drive-ins are included, suggest limit to 1 each
Rock racks (Note 1)	1	1				2	See accompanying note
Quickdraws	2	2	2	2	2	10	Nank has spares
Slings (Note 2)							
90cm-180cm long	2	2	2	2	2	10	
60cm long	2	2	2	2	2	10	
Pitons (Note 3)	±3	±3				6	

#### Notes:

1. Rack = selection of wires, and hexes and/or Friends.

2. Sling lengths = half circumference.

3. Piton selection, say, a blade, an angle and a lost arrow.

## Appendix C

# **Further Information**

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