

**Scottish East Greenland Expedition 1999**

Exp Pg 99/16

# CONTENTS

<b>SUMMARY.....</b>	<b>ERROR! BOOKMARK NOT DEFINED.</b>
<b>TEAM MEMBERS.....</b>	<b>4</b>
<b>EXPEDITION BACKGROUND.....</b>	<b>ERROR! BOOKMARK NOT DEFINED.</b>
<b>EXPEDITION OBJECTIVES.....</b>	<b>5</b>
<b>EXPEDITION AREA .....</b>	<b>6</b>
<b>*MAP .....</b>	<b>6</b>
<b>TRAVEL .....</b>	<b>7</b>
AIRCRAFT.....	7
HELICOPTER.....	7
<b>ICE-CAP TRAVEL .....</b>	<b>8</b>
DRY GLACIER.....	8
WET GLACIER .....	8
<b>MOUNTAINEERING .....</b>	<b>9</b>
<b>WEATHER.....</b>	<b>9</b>
SNOW CONDITIONS.....	9
CLOUD COVER.....	9
PRECIPITATION.....	10
WIND .....	10
TEMPERATURE.....	10
<b>RATIONS.....</b>	<b>11</b>
1997.....	11
1999.....	11
SUGGESTIONS.....	11

<b>EQUIPMENT.....</b>	<b>12</b>
CAMP.....	12
<i>Tent Stability.....</i>	<i>12</i>
<i>Sleeping.....</i>	<i>13</i>
<i>Cooking.....</i>	<i>13</i>
SKI.....	13
<i>Bindings.....</i>	<i>13</i>
<i>Spares.....</i>	<i>14</i>
MOUNTAINEERING.....	14
<i>Ropes.....</i>	<i>14</i>
<i>Crampons.....</i>	<i>14</i>
<i>Axes.....</i>	<i>14</i>
<i>Hardware.....</i>	<i>14</i>
<i>Glacier Travel.....</i>	<i>15</i>
<b>ACCIDENTS &amp; ILLNESSES.....</b>	<b>15</b>
<b>PERMITS.....</b>	<b>15</b>
<b>EXPEDITION ACCOUNTS.....</b>	<b>16</b>

## **Acknowledgments**

The expedition would not have been possible without the financial assistance of:

Low Alpine (Adventure Award)

Gino Watkins Memorial Fund

Mount Everest Foundation

British Mountaineering Council

Mountaineering Council of Scotland

*"The compilers of this report and the members of the expedition agree that any or all of this report may be copied for the purposes of private research"*

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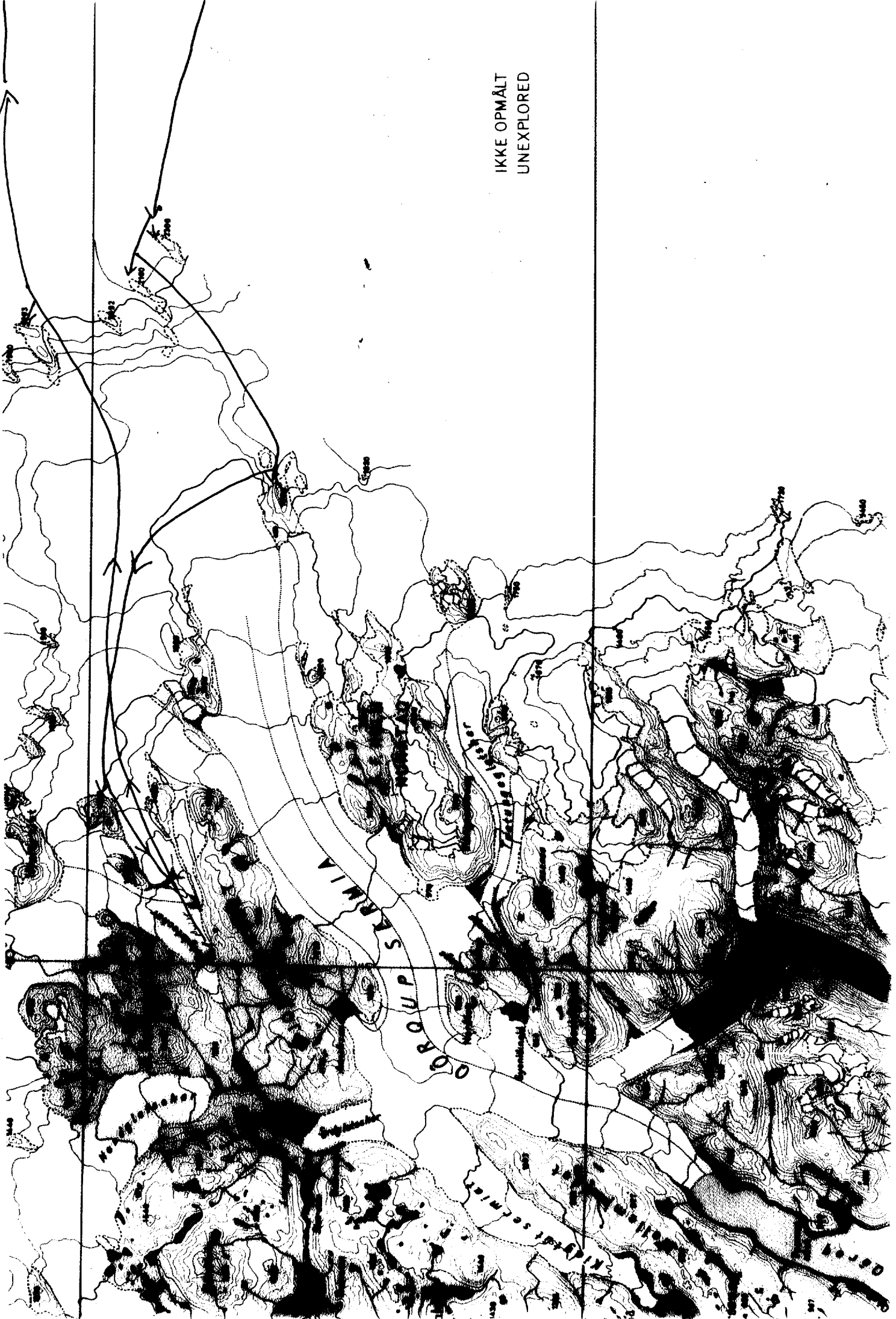
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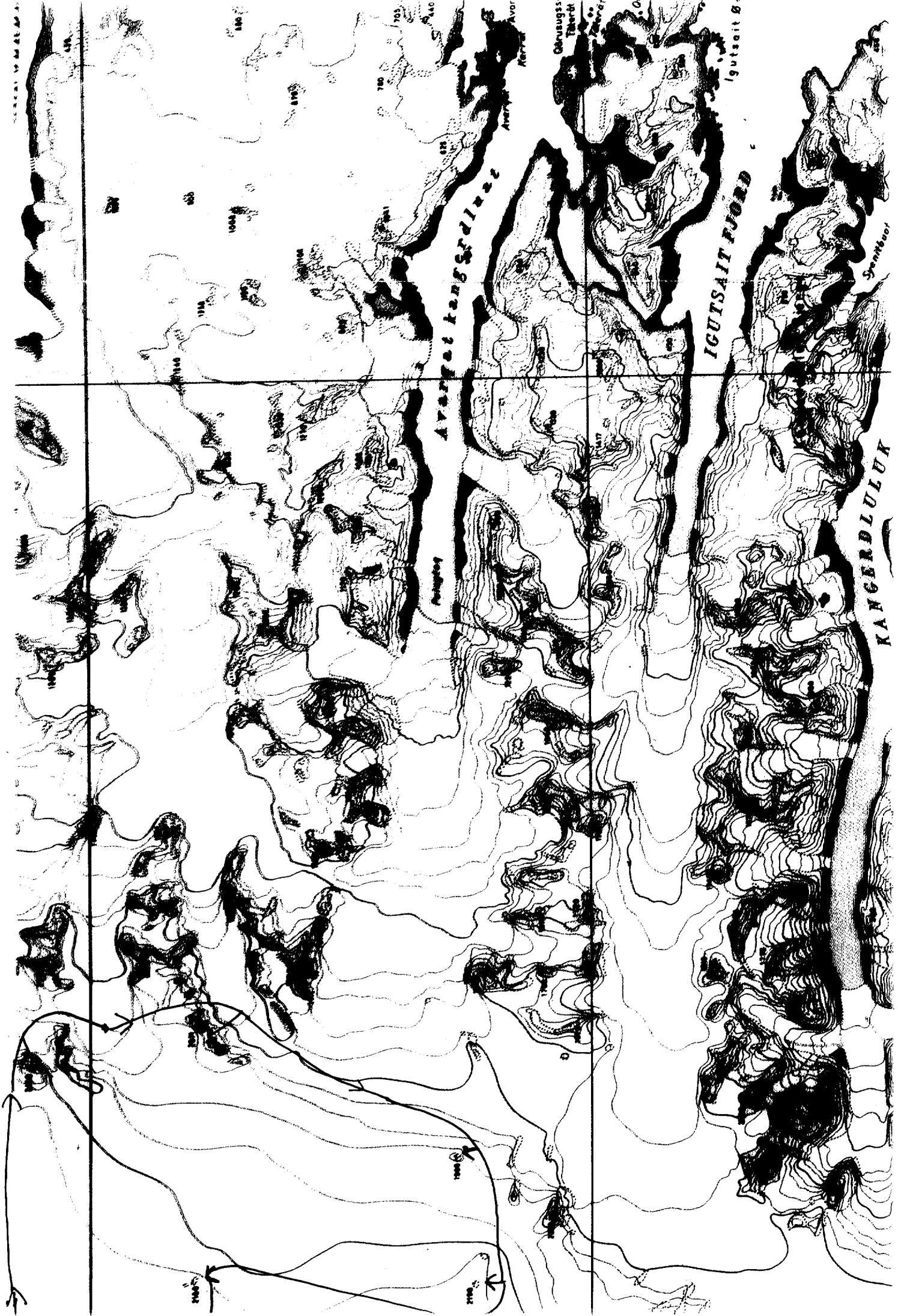
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## **Expedition Objectives**

- To charter a helicopter from Narsarsuaq to our 1997 equipment dump on the margins of the western ice-cap (See 1997 Report from MEF)
- To relocate the 1997 cache of pulks and other ice-cap equipment at the head of Ostgletscher
- To ski to the east coast of Greenland from the dump site, ascending unclimbed peaks en route
- To ascend unclimbed peaks on the south-east coast of Greenland
- To return by ski to the west coast, ascending peaks en route
- To return to Narsarsuaq by helicopter

IKKE OPMÅLT  
UNEXPLORED





## **Travel**

### ***Aircraft***

Significant problems were experienced with baggage allowances on the Greenland flights. Future expeditioners should be ready to pay a significant amount of money for excess baggage if the large amount of equipment required for this style of trip is not shipped out beforehand. The charge in 1999 is approximately £13.00 per kilogram over the 20 kg limit.

Also, the expedition experienced major baggage handling problems on the outward and homeward journeys. This had an impact on the total available time in Greenland.

### ***Helicopter***

Helicopter travel was heavily affected by the prevailing weather. The expedition experienced far stronger average winds than in 1997 and this had a major impact on 'ice-cap' time. One day was lost at either side of the trip due to delayed helicopter flights. Also, helicopter flights were extremely expensive. Overall, we chartered 1.5 hours at £1000.00 per hour.

The helicopters available at Narsarsuaq are too small to take more than two people with all the ice-cap equipment. This has obvious implications for larger teams. Most importantly, no economy of scale would result from larger trips chartering larger aircraft.



## **Ice-Cap Travel**

### ***Dry Glacier***

The expedition spent little time on dry glaciers. Also, they were relatively uncrevassed compared to the coastal glaciers nearer to Narsarsuaq traversed in 1997.

However, crampons are still essential for dry glacier travel in this area. Crampon breakage could prove very serious due to the steep nature of terrain coupled to the difficulty of pulling 200 pound pulks on bare ice without them.

### ***Wet Glacier***

Lower level wet glaciers leading to the crest of the ice were heavily crevassed. However, the expedition benefited significantly from the extensive winter snow cover still present. Most crevasses were still bridged throughout July at higher levels. The extent of metamorphosis in the snowpack was at an intermediate stage, resulting in bridges being weak during the day but well frozen at night. Almost all travel was therefore undertaken at night.

On the very crest of the ice-cap running north-south, travel was remarkably trouble-free. There were no significant areas of crevassing and most surfaces comprised wind-scoured ice and hard windslab.

## **Mountaineering**

Four unclimbed peaks, up to 2300 metres in height, were ascended. Routes up the peaks were no more than PD in standard. Lengths of routes varied from 200 – 600 metres with smaller routes generally being on high-level nunataks on the ice-cap itself. Also, two further ascents of a peak first climbed in 1997 were made at the end of the trip bringing the total number of ascents to six. Scope for mountaineering is good in this area.

## **Weather**

### ***Snow Conditions***

Snow conditions were generally excellent throughout the trip due to the extensive night-time travel undertaken. Snow conditions deteriorated rapidly by mid-morning on most days. The effort of skiing and pulling sledges generally became unmanageable by midday.

### ***Cloud Cover***

High pressure was present for most of the expedition on the high ice-cap with associated stable and clear conditions. However, coastal areas often experienced large accumulations of cloud over the same period. Cloud occasionally moved inland when pressure was slacker. Early in July, the team experienced two misty days at lower levels with an associated slowing of the rate of progress east.

## ***Precipitation***

The team was tent-bound for 2 days on the high icecap due to snowfall.

Accumulations were significant, mainly due to a combination of high winds and vast open areas of ice-cap to the east of our position at the time.

## ***Wind***

High winds were experienced at regular intervals throughout the expedition period.

The wind delayed the outward and homeward helicopter journeys by one day. On several occasions, wind-speeds severely hampered our ability to erect the tent without firstly building shelter walls. On our final ice-cap day, we could not erect the tent due to wind-speeds upwards of 80 mph.

## ***Temperature***

Ambient temperatures were generally high during the day with an average of 15oC and maximum of 20oC. Ambient night-time temperatures averaged -5oC and reached -15oC on several occasions.

## **Rations**

### **1997**

5,500 calories per day were consumed in 1997. This was fully justified by the extremely arduous nature of travel. Each team member lost 8 – 10 pounds even with this level of calorific intake.

### **1999**

5,000 calories per man per day were consumed on this trip. This was ample given the less strenuous nature of travel on the icecap. The rations could be split to provide double the number of day's food should it have been required.

### ***Suggestions***

It would be unwise to carry any less than 5,000 calories per man per day on the basis of our experiences. Large weather-related delays could add significantly to the length of a trip in this area with consequent increases in basic food requirements. Also, a very large proportion of the diet should be fat to minimise the weight carried.

## **Equipment**

### ***Camp***

#### **Tent**

##### ***Alterations to Standard Tent***

A heavily re-inforced North Face VE-25 was used. Double poles were carried, 10 extra guying points were fitted and a full snow/rock valance sewn on.

##### ***Guying Out on Snow***

Guying-out on the ice-cap was achieved through use of skis, ski poles, dead-man and buried axes.

##### ***Stability in Wind***

In strong wind conditions, snow walls were built on susceptible aspects. Often on the high ice-cap, it was possible to build large walls out of the hard-slab found on all windward slopes.

##### ***Spare Shelter***

A 4-person Livi Bivi was carried for emergency shelter on the icecap. This size of shelter is sufficient for two people to sleep for the night. It is also remarkably useful for night time flask stops.

## **Sleeping**

1100 g goose down sleeping bags were carried along with Gore-Tex bivouac bags. Each member carried a Thermarest and Karimat. Equipment was kept dry in rubberised waterproof stuff-sacks.

## **Cooking**

Two MSR X-GK stoves were taken along with a spare pump, two spares kits and 5 fuel bottles. Two plastic jerry cans were used to carry fuel in the pulks.

Thermos flasks are of significant use to save fuel (cook and re-hydrate) and 'black bag' water melters reduce consumption further if lain in the sun during the day.

## ***Ski***

### **Boots**

One team member carried leather telemark boots with Gore-tex socks. The other member used Scarpa Terminator boots. Both were found to be satisfactory.

However, the Terminators would be more reliable in continuous bad weather due to their ability to keep feet drier than in leather boots.

### **Bindings**

Standard Rottefeler 3-pin bindings were used for all ski travel. Cables were carried for downhill sections.

## Spares

Spare ski tips, skins, adhesives, pole baskets and pole tips were carried.

## ***Mountaineering***

### Ropes

One 50 metre 9mm rope was used for glacial travel and all mountaineering.

### Crampons

Two sets of individual crampons (Grivel F2 and Charlet Moser S12) were supplemented with one set of Salewa Everest (adjustable) crampons as spares.

### Axes

Three curved pick mountaineering axes were carried.

### Hardware

A selection of eight ice-screws and a dead-man were supplemented by a small selection of rock gear. Ice gear is also used during the day to guy out the tent.

### **Glacier Travel**

A large selection of prussiks and pulleys were carried and are an absolute necessity for two-man rope teams.

### **Accidents & Illnesses**

There were no accidents or illnesses experienced on the expedition.

### **Polar Bears**

There is a risk of encounter with bears as one nears the east coasts in particular. Due to weight restrictions, however, the team did not carry a rifle.

### **Permits**

No permits are required for this area of Greenland.



## Expedition Accounts

### *Income*

MEF	800.00
Lowe Alpine	1000.00
Gino Watkins	1000.00
BMC	500.00
McofS	250.00
<i>Personal</i>	<i>2249.00</i>

<b>TOTAL</b>	<b>5799</b>
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### *Expenditure*

Airfares	1900.00
Helicopter	1350.00
Insurance	180.00
Food	280.00
Food Postage	159.00
Aerial Photos	100.00
Cash	150.00
New Equipment:	
Tent Poles	150.00
Altimeter	100.00
Waterproof Stuff bags	160.00
Livi-Bivi	65.00
Satellite Beacon	1100.00
Telephone	55.00
Travel	50.00

<b>TOTAL</b>	<b>5799</b>
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