

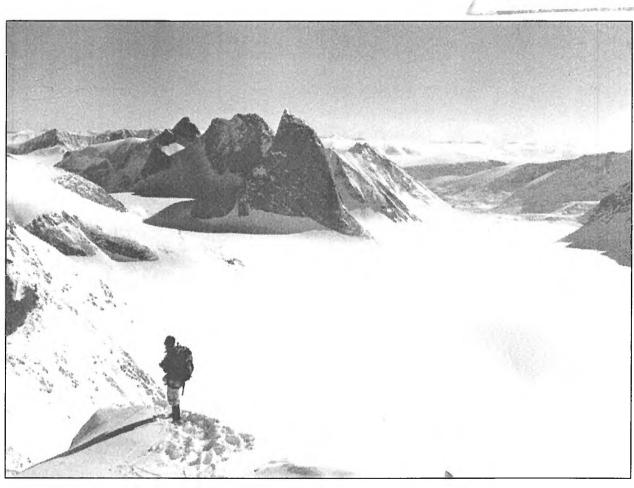


Baffin Island

Ski-Mountaineering Expedition 1998

13th April - 7th May

EVEREST FOUNDATION



An exploratory journey on ski through the mountains of the Cumberland Peninsular

Contents

Summary		1
Expedition Members		
Acknowledgements		3
Baffin Island - a brief descritpion		4
Maps		5
The Expedition		7
Logistics		7
Route		8
Climbs		8
Conditions		9
Accidents		10
Expedition Diary		11
Equipment & Food		18
Finances		21
Contacts		22

Cover Photo - View SE down the Ayunnamat Glacier from Valhalla Mountain

Summary

Between the 16th April and 6th May, the seven member expedition successfully completed an exploratory journey on alpine ski through the mountains of the Cumberland Peninsular, to the east of the Weasel Valley and to the north of Kingnait Fjord.

The Expedition from the point of drop off by skidoo was entirely self-sufficient with the supplies and equipment being pulled and carried with a combination of rucksack and specially adapted children's sledge.

After a few days around Mt Asgard the team moved South-east out of the Auyuittuq National Park Reserve into a very dramatic area of large glaciers and steep rock walls. A fairly circuitous travel of some 150km was made back to a pick-up at the head of Pangnirtung fjord and fourteen peaks were climbed en route. Of the peaks climbed three had names on the map and a further four appeared to have had previous ascents. Most summits involved a combination of ski and foot, generally by the easier looking ridges and never exceeded more than alpine PD+ in technical difficulty. Various peaks were ascended and descended entirely by ski with one noteable extreme descent.

The weather was generally high pressure with clear skies and little wind with daytime temperatures of -10°c to -15°c and nightime lows of -30°c. During 20 days, travel was restricted on 3 days.

Snow cover was good but of dubious quality with approximately 30cm of windpack layers overlaying 1m of depth hoar. It was apparently a high snowfall year for the area.

One team member (John Kentish) broke a back molar tooth in half on day four and decided to retreat alone down the Weasel valley, in some pain, to get treatment.

Expedition Team Members

Experienced alpine climber including ascents of Walker Spur. David Williams (UK)

Ski-mountaineering since 1980 in Alps, Pyrenees, Scandinavia, Corsica, Greece. Expedition to Hayes Range and Mt Fairweather (Alaska), Mt Waddington (Canada), Rolwaling (Nepal) and

Taurus & Kackar Dag traverses (Turkey).

Danny Baillie (NZ) (resident UK)

3 seasons ski-mountaineering in Alps, alpine skier, climber and outdoor enthusiast.

Rodney Franklin (UK) Extensive ski-mountianeering in Alps, Scandinavia, Morocco,

Corsica and Greece. Expeditions to Kashmir & Kulu (India), Rolwaling, Mt Waddington. Ascents of Island Peak (Nepal), West

buttress Mt Mckinley, Mt Kenya.

John Kentish (UK) Experienced alpine climber and ski-mountaineer including

> Christmas ascent of Mt Blanc. Expeditions to Karakorum, Kamchatka, Morocco. Ascents of Aconcagua, Mt Elbrus, Mt Kenya & Kilimanjaro. First traverse of Caucasus mountains 1996.

Member of Svalbard Polar Dawn Expedition 1997.

Ian McKirdy (CAN) 4 Alpine climbing seasons (Rockies & NZ Alps). Rock and Ice

climber. Ski-mountaineering expeditions to Ladakh, Kashmir and

Mt Waddington.

Graham Rowe (UK) 6 seasons ski-mountaineering in Alps. Extensive alpine climbing.

Rock and Ice climber.

Charles Turner (UK) Wide experience of ski-mountaineering & climbing in Strathcona (resident Canada)

Park and Coastal Range of British Columbia. Expeditions to Mt

Waddington, Mt Logan & Rolwaling.



The final team: David Williams, Rodney Franklin, Danny Baillie. Jan McKirdy, Charles Turner, Graham Rowe

Acknowledgements

 Γ inancial support was received from the following for which all the expedition members are very grateful:

Eagle Ski Club (Expedition Grant & Georgina Travers award)
Mount Everest Foundation
British Mountaineering Council
Scott Polar Research Institute (Gino Watkins Memorial Fund)
Alpine Ski Club (Kenneth Smith Scholarship)

In addition

W. Jordan (Cereals) Ltd kindly supplied us with a large quantity of Frusli bars Harvest Foodworks Ltd supplied us with reduced cost dried food and Terra Nova Equipment Ltd supplied us with reduced cost clothing and tent items

Many people also gave advice and support to the expedition

Thankyou to Rob Collister
John Harding
Derek Fordham
Rob Wood
Adrian Kenny

Baffin Island a brief description

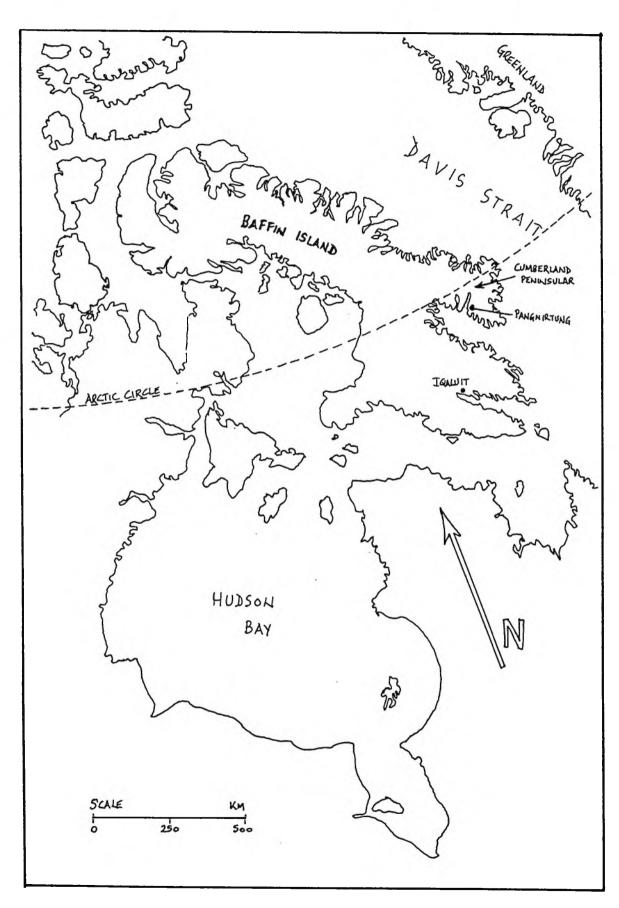
Baffin Island, of the Northwest Territories in North Eastern Canada, at approximately 1500km long is the fifth largest Island in the world. It was named after the British explorer William Baffin who visited the area in 1616 in search of the elusive Northwest Passage.

The north east coast of the island is of spectacular fjords and cliffs. The interior is mainly of treeless artic tundra and includes two impotant ice caps, the Barnes and the Penny, the latter of which is contained within the boundaries of the Auyuittuq National Park Reserve on the Cumberland Peninsular. This area is very alpine in nature with thousands of spectatular mountains rising up to 2157m carved out by a complex glacial system (and has been dubbed the 'Switzerland of the Eastern Arctic'). The rock is mainly granite, gneiss and schist.

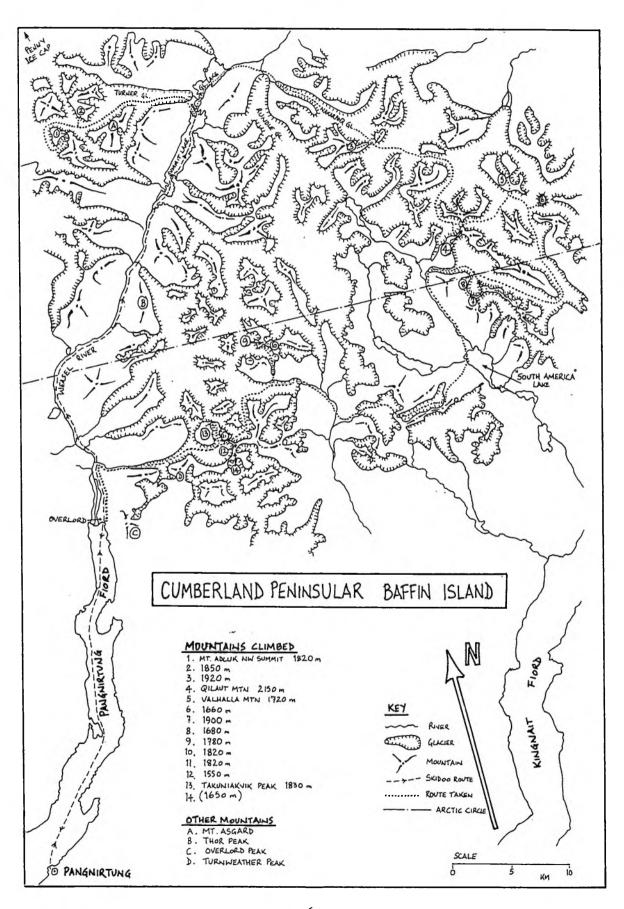
The island is primarily home to millions of sea birds and a large array of sea and marine mammals. Polar bear are widespread, particularly along the NE Coast.

Around 10,000 people, mainly Inuit, inhabit the Island. Until recently the Inuit have lived according to tradition, sustaining a culture and way of life that has changed little over thousands of years; living in small camps along the coast, hunting the sea mammals from ice or kayak and pursuing Caribou inland. Today though, most Inuit are now wage-employed within their more modern settlements but their art, of mainly carvings, prints and weaving, remains as strong as ever.

Southern settlers, mainly in search of whale and precious metals have come and gone over the centuries and today there are a small number of mines producing lead, zinc and silver. After the devastating whale slaughter of the 19th century catches are now only allowed by residents and are strictly limited.



Maps



LOGISTICS

The objective of the expedition was to make a self-sufficient journey of 20 days in the Cumberland peninsular mountains climbing suitable peaks en route, using standard alpine ski-mountaineering equipment. The terrain was a mixture between alpine and arctic and our choice of using rucksacks together with small sledges for our supplies reflected this.

We based our sledge design on that used by John Kentish on a previous expedition - a small plastic child's sledge with lashed stuff sack, towed from the rucksack waistbelt by shackcorded 4mm line held within a semi-rigid framework of 19mm plumbers overflow pipe. Our original intention had been to burn this all plastic assembly once the point had been reached when everything could be carried in one load on our backs but we quickly appreciated the comfort of never carrying more than 20kgs and got used to the more troublesome aspects of steeper downhill skiing with a following sledge and so kept them to the very end. Breakages did occur to the pipe framework but were always easily repairable. At the outset with 20kgs on our backs we pulled about 30kgs in the sledges. (We could have fairly easily added another two weeks supplies to this for future trips).

Maps were obtained from the Canada Map office in Ottawa (or via Stanfords in London) and came bit by bit. Initially the only available sheet was 1:250,000 (sheet 26-I) but subsequent enquiries and finally a visit once in Ottawa provided a complete set of 1:50,000 (sheets 26-I / 6, 7, 10 & 11). On the ground the latter gave little additional information over the small scale map and at times their contour information (particulary on steeper ground) proved a bit arbitrary.

Although Polar Bears are essentially marine mammals they are known to make long journeys inland (albeit rarely) and so each tent group carried a can of Capsicum spray deterrent. At the last minute we chose to borrow a 2-22 rifle from our Outfitter. It is illegal to carry a firearm within the national park but as 90% of our journey lay outside the boundary and that the majority of the team had young families waiting at home we would 'bend' the rules. On a similar vein, with family pressure, a small emergency beacon was also carried.

We were meticulous about not leaving any waste and during the trip had the rubbish burned. This only works efficiently if done on a bare rock with a little fuel to help. Most waste is plastic and it does require one person to constantly 'work' at the fire with a bamboo or similar to separate out aluminium packet liners and to remove the inevitable unburned residue at the end. A 'clean' burn takes at least a couple of hours - it is not sufficient to put a match to the pile just as one is leaving. Toilet paper was also burnt but this is a difficult task to perfect!

ROUTE

We took scheduled flights with Air Canada and First Air from London to Pangnirtung (Baffin) via Ottawa and Iqaluit with a one day stopover in Ottawa to sort out final food provisions and equipment. The internal flights have a 2 x 20kg baggage allowance but by careful packing and dressing for the flight we avoided any excess fee.

Once in Pangnirtung we were met by our Inuit Outfitter and having registered our route with the Park Authorities and purchased fuel, left immediately by skidoo up the frozen fjord. Our original plan had been to begin our journey at the head of the fjord (Overlord) but the outfitters, who wanted to drop some of their own supplies off at summit lake, offered to take us there too (at \$120 each). This seems an accepted practice in winter and it saved us a minimum of four days of hauling our supplies up the well travelled Weasel valley. The skidoos took 8 hours to Summit Lake (with an overnight stop) and it was a cold ride.

From Summit Lake we made a 3 day trip (without sldges) W up the Turner glacier to camp below Mt Asgard, from where we made asscents of two ski peaks. Back with our sledges we headed SE out of the park via the Nakarpoq glacier, travelling through the large glaciated area around Valhalla and Ayunnamat mountains, climbing 6 peaks en route with one day confined to an igloo by high winds, before descending via the head of the Masa glacier to 'South America' lake (so called because of it's shape). From here during 4 days of poor weather and snow conditions we made slow progress westwards before crossing a large valley (running into Kingnait fjord) and traversing the final glacier system via The Guardians and Turnweather peak down to Overlord for a skidoo pickup. We climbed a further 5 peaks in this last area and stopped just short of the summit on a sixth.

Of the 20 field days, we had 15 days travelling (including ascents of 9 peaks), 4 full days climbing and 2 and 2 half days lying up in bad weather. We covered approximately 150km including our initial trip by Mt Asgard (but not including side excursions to peaks).

CLIMBS

Where possible we attempted peaks suitable for ski ascent and descent. Climbs had to be relatively quickly accomplished in order to let the journey proceed. Of those climbed four had names and a further four appeared to have had previous ascents (i.e cairned and/or recorded ascent). No mention has been found of the remaining six but even so we would hesitate to claim any first ascents. It is highly likely though that many of the ascents were 'firsts' in the ski-mountaineering sense. The SW face of Valhalla mountain was skied by two members from just below summit rocks to the glacier base, a vertical descent of some 500m with an average angle of 40° (max 45°).

The full list of ascents is as below (together with an approx alpine grade):

	Date	Peak	Grid Ref.	Height (approx)	Party	Grade
1	18 April	West Summit of Adluk Peak	LU941971	1820m	DW, CT, IM, RF, DB	F
2	18 April	Unnamed Peak	LU962988	1850m	GR, JK	F
3	21 April	Unnamed Peak	MU178895	1920m	DW, CT, GR, IM, RF, DB	F
4	22 April	Qilaut Mountain	MU243802	2150m	DW, CT, RF, DB	PD+
5	25 April	Valhalle Mountain	MU290832	1720m	DW, CT, GR, IM, RF, DB	PD+
6	26 April	Unnamed Peak	MU315812	1660m	DW, CT, GR, IM, RF, DB	F
7	27 April	Unnamed Peak	MU243745	1900m	DW, CT, GR, IM, RF, DB	F
8	27 April	Unnamed Peak (Cairned)	MU232756	1680m	DW, DB	PD
9	2 May	Unnamed Peak	MU056758	1780m	DW, CT, GR, RF, DB	PD
10	2 May	Unnamed Subsidary Peak	MU068750	1820m	DW, CT, GR, IM, RF, DB	F
11	3 May	Unnamed Peak (Cairned)	LU008694	1820m	DW, RF, DB	PD
12	3 May	Unnamed Peak	MU014682	1550m	DW, DB	F
13	4 May	Takuniakvik Peak	LU994705	1830m	DW, GR, RF, DB	PD+
14	4 May	Summit Ridge of Unnamed Peak	MU010674	1650m	DW, DB	F

CONDITIONS

For weather Baffin Island lies within the area of the Polar high and is generally an area of low precipitation, low winter temperatures but with occasional high winds (particulary in the Pangnirtung area - with very strong katabatic winds descending from the Penny Ice Cap and/or frontal winds funnelling through the main Weasel/Owl valley).

Previous expedition accounts however suggested a fairly frequent occurrence of bad weather and blizzards and in our initial planning we had allowed for many more lie-ups. We were lucky though with generally high pressure conditions persisting with clear skies and little wind, coupled with a winter that had had an unusually high snowfall. We experienced one day of high winds and several days of continual light snowfall with whiteout conditions. During these days the temperature rose to freezing (at the 500m level) but generally the daytime still air temperature was between -10°c and -15°c. Nightime temperature often fell below -25°c (occasionally -30°c).

Snow cover was good with a fairly consistent depth of four feet on the flatter glaciers, but this snowpack was made up of approximately three foot of unconsolidated depth hoar covered by a number of layers of strong windpack. These upper layers appeared strong enough to keep most slopes stable but once broken it was very disconcerting. This large

amount of depth hoar is undoubtedly a feature of the arctic where a strong temperature gradient (from very low air temperature) through a shallow snowpack is sufficient to build up a great depth of these fragile hollow cup crystals. The main difficulties they presented to us was when skiing off the glaciers where the effect was even more pronounced and the surface would unpredictably collaspe into great holes of 'sugar'. The lack of any temperature consolidation also gave some problems with climbing, with rocks being covered by a large depth of loose snow. By the end of the trip though with daylight nearing 24 hours there was a marked improvement, with the freeze-thaw effect becoming apparent.

With an area of low precipitation it is easy to become blase about avalanche risk but the snow tends to fall with wind, creating laden lee slopes. We took care to avoid such slopes but were nearly caught unaware high on one peak when we triggered a small slab that proceeded to take with it half the slope up which we had just skinned.

ACCIDENTS

John Kentish broke a back Molar tooth in half on day four and decided to retreat alone down the Weasel valley, in some pain, using a system of emergency shelters each night, to Pangnirtung fjord from where he radioed for a skidoo pick up. Had we carried a dental filling kit this disappointment might well have been repairable.

13-14 April

The five UK members fly from London to Ottawa to be met by Ian and Charles. The next day is spent sorting food and gear; packing and repacking until we feel sure we can slip through the next check-in without paying for excess baggage.

15 April

We arrive mid afternoon in Pangnirtung after some four hours flying time with a change of planes in Iqaluit. Roposie, our Inuit outfitter meets us at the airfield and within minutes whisks us away by skidoo to the National Park Centre to register for entering the Auyuittuq National Park Reserve and each pay the \$100 fee. Fuel, our last vital ingredient, is purchased before, in a convoy of four skidoos and sledges, we set out into the gloom of an overcast evening up the frozen fjord towards the mountains. Three hours later, chilled to the bone and in darkness we stop for the night by 'Windy Lake' shelter. The abruptness of the transition from warm spring conditions at home to arctic winter shocks us all.

16 April

A further five hours of skidoo ride, including one section of carrying, puts us at the northen end of Summit Lake. We have only seen the bottom hundred meters of the Weasel valley with low cloud shrouding the dramatic views above. A keen breeze and a temperature of -15°c concentrates our minds to the coming weeks as we hastily erect our tents having bade our outfitters farewell. The sledges and traces are assembled in readiness for our journey, which allows just enough time for some of the group to skin up onto the Turner Glacier for some excercise. We are rewarded by a magical spectacle of swirling mists and sun parhelia playing on the dramatic NW face of Mt Asgard and the spire of Mt Loki. It is late by the time we ski back to camp and it is not until 11p.m. before the long cooking session is over. Outside the temperature drops to -20°c as the sky clears.

17 April

Leaving sledges and the bulk of our food buried under rocks and snow as protection against raven and wolf we again head up the Turner Glacier in a cold and gloomy morning for a few days 'acclimatisation' in this famous area. It is a fine afternoon as we pitch camp beneath the twin towers of Mt Asgard. What a place!

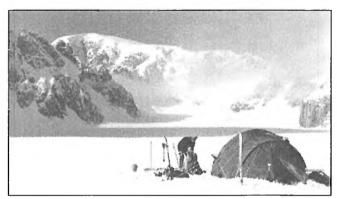
18 April

The cold night together with our breath produces large hoar crystals all over the inner tent. The morning ritual begins with an attempt to remove as much of this as possible before the heat from the stove melts it and dampens our sleeping bags. Leaving



Mount Asgard

tents standing we ski WSW to below the NE face of Mt Adluk which we hope to climb. Dangerous lee slopes though, thwart any attempt from this side so whilst John and Graham opt for a ski peak [ca. 1850m] close to Mt Loki, the rest of us gamble on a possible ascent of Mt Adluk from the west. A long exposed corniced section of ridge puts us off the main



summit but we are able to skin to the top of the NW summit [ca. 1820m]. A superb gulley descent opening into a wide fan in good powder takes us in one amazing swoop down to the glacier from where we begin the 10km plod back to camp.

Adluk Peak from the Turner Glacier

19 April

Our journey beckons and happy to have camped in the shadow of Asgard we return to our food stash. The motion of the laden sledge across 5km of Glacier Lake is new to most of us and is a touch annoying but we slowly warm to them. It is good to able to avoid double carries and yet still carry no more than a 20kg rucksack. We stop for a cold night amongst the morraine rubble at the snout of the Rundle Glacier.

20 April

Awake to a stunning morning but also to the news that John has broken a large chunk off a back molar tooth and having only either araldite or a pair of molegrips to treat it with decides to descend alone down the Weasel valley to a dentist chair in Pangnirtung. Luckily the 4 man tent has two stoves to make this possible and a number of emergency cabins in the Weasel valley provide shelter. He kindly lends his extra lightweight sleeping bag to Rodney whose own bag has lost a considerable amount of insulation due to dampness being trapped in it by an iced-up bivvi bag.

Now down to six we begin the long steep pull onto the Nakarpoq Glacier. It is hot going even though the air temperature stays around -10° c to -15° c. We try to pitch camp to maximise our evening sun - the moment it goes we instantly looses a further 10° c.

21 April

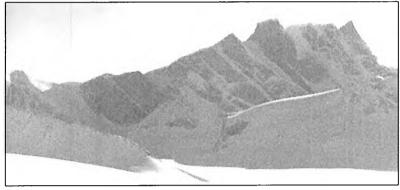
One hour of gentle rising brings us to the head of the Nakarpoq glacier, SW of Midgard Mountain (climbed by the Cambridge Arctic Canada Expedition in 1961). To our SW a superb slope rises steeply to a rounded summit [ca. 1920m] some 600m higher. The feeling of being entirely alone in this wilderness is exciting (apart from several parties skiing from Broughton Island to Pangnirtung via the Owl and Weasel valley) - the ski descent an added

bonus. Back with sledges we ski and skin in various steps down to the Qila basin, passing easily through once major icefall.

22 April

The fine weather holds as we continue SW up the Qila Glacier to a camp on the SW side of

Ayunnamat Mountain. To our SW a col gives way to the fine W ridge of Qilaut Mountain some 800m above camp. Graham stays with the tents while the rest of us fix two ropes up to the col and climb the easy but exposed snow and ice ridge to the first summit, and then across a vast icy plateau to the main summit [ca. 2150m]. The cold



Oilaut Mountain - NE face

with the wind is intense but the views in the evening light spectatular. We linger as long as we dare before descending back to camp and our coldest night so far (below -30° c).

23 April



Pressure is dropping with high cloud streaming in from the SE. We move camp approx 7km to below the SW face of Valhalla mountain and spend the remainder of the day building a large igloo to shelter from the coming storm.

Tugnga Mountain from Qila Glacier

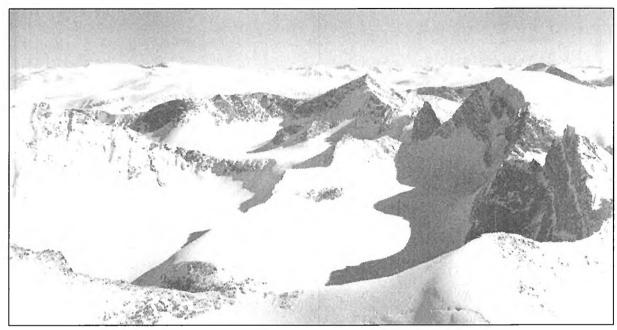
24 April

High winds and swirling cloud. We lie up in the igloo until mid-afternoon when David and Danny venture out into the wind but clearing skies to inspect the condition of the bottom section of a couloir descent possible from just below Valhalla's summit. The snow is a mixture of windpack, suncrust and depth hoar and yet still 'feels' safe.

25 April

The morning dawns clear and still which surprises us all. We all skin up to a col SE of Valhalla and then crampon up the easy ridge, roping up for the three awkward pitches to

reach the cairned summit (first climbed 1973), and a superb vantage point [ca. 1720m]. At the bottom of the third abseil David and Danny don skis for the couloir descent. Awkward snow up to 45° leads all too quickly to the flat glacier and igloo.



View east from Valhalla Mountain

26 April

After our third night in the Igloo we leave in good weather SE towards Tugnga Mountain, skinning up and skiing an easy peak [ca. 1660m] en route, and then down to near the snout of Ayunnamat Glacier. Avoiding a large icefall by keeping to a steep moraine trench we climb up onto the Masa Glacier and follow it's entire length NW to below the southern slopes of Qilaut Mountain. We have passed through some amazing mountains on this day the possibilities in this area for climbing and mountaineering look endless.

27 April

Leaving tents we crampon up an easy ridge bounding the E side of a small cirque from the head of the Masa glacier to a domed summit [ca. 1900m] (climbed by the Clifton College Expedition 1974) overlooking 'South America' Lake. David and Danny continue on ski and crampon around the cirque rim with the mixed climbing made more awkward by skis on sacks before skiing a wide powder gully back to camp.

From here we drop nearly 1000m into a large flat valley running NNW from 'South America' Lake. The 7km slog along this gets progressively more tiring as the snowpack deteriorates with the leader ploughing a knee deep trench through breaking crust and depth hoar. Clouds are again racing in from the south and pressure is falling.

28 April

In poor light and increasing snowfall we work our way up some very awkward side moraine W of the lake stopping early beneath 800m vertical cliffs raked continually by spindrift avalanche.

29 April

Lie up all day with some 8" of snow falling. The wind has eased and the temperature hovers around freezing making everything very damp. The day is lightened when Danny produces a spare kilo of chocolate.

30 April

In marginal weather we proceed to a very large col from where we 'feel' our way downwards into the next major valley. For the first time we strap sledges and all onto our rucksacks for the descent which whilst giving us a freer ski proves a mistake lower down when the collapsing snow becomes almost unskiable let alone with 35kg on one's back. Exhausted by this we camp early.

1 May

After a fine start the weather slowly deteriorates as we move N then W up the glacier leading to Tête des Cirques and after only 6km stop in low cloud opposite a small valley that promises to give access to some remote peaks. Light snow fall continues all afternoon and evening.

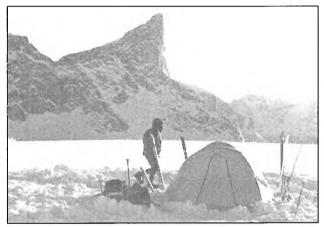
2 May

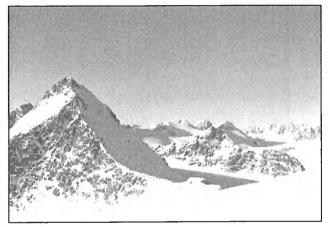
In light fresh snow and pale sunshine we leave tents to skin up into our hidden valley and onto an obvious col at it's N end. From here we make a cramponed ascent of a small summit [ca. 1780m] to the W, ploughing through deep snow either side of a corniced ridge and then skinning E from the same col to a fine summit [ca. 1820m] with a short awkward section of mixed climbing to finish. The descent of the peak in deep powder on a constant 35° slope gives the best skiing of the trip, and remains interesting all the way down to the tents. With the weather improving quickly we move camp 5km W and then S up a side glacier in the direction of The Guardians. The mountains in this area are all very steep and appear to offer less scope for ski-mountaineering.

3 May

A sharp wind brings an urgency in packing up camp to get moving for warmth. We aim for the lowest part in the ridge ahead of us hoping that it will give access to the final descent

under Turnweather peak into the Weasel valley. Luckily some easy scrambling leads to reasonable ski descent and while Ian, Charles and Graham follow this to make an early camp, the rest skin up towards a fine summit NW of the col. The snow pack is a little disconcerting but seems well anchored by a large number of rocks strewn across it. Leaving skis high on the SE ridge we finish with some moderate mixed climbing to a cairned and cloudy summit [ca. 1820m]. It is somehow disappointing to find signs of a previous ascent. On our descent a small windslab avalanche is triggered that quickly carries half the slope away with it. Lucky to have been above the break line the exposed surface gives an excellent ski descent. Aware that our days out are soon coming to an end, David and Danny skin up and ski down in perfect powder, an additional insignificant peak [ca. 1550m] to the S of the col.





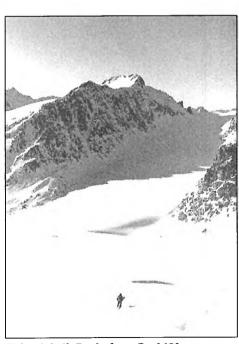
Turnweather Peak Pt. 1820m (No. 11)

4 May

With one day still to spare we skin up to a col due N of The Guardians and climb interesting mixed ground via the E face and S ridge to the cairned summit of Takuniakvik peak [ca. 1830m]. Back at the tents David and Danny decide on one last peak, following a steep exposed crest on ski due E from the summit of The Guardians to be stopped by a section of double corniced ridge some 20m below the summit [ca. 1650m]. The exhilarating ski descent gives ample reward.

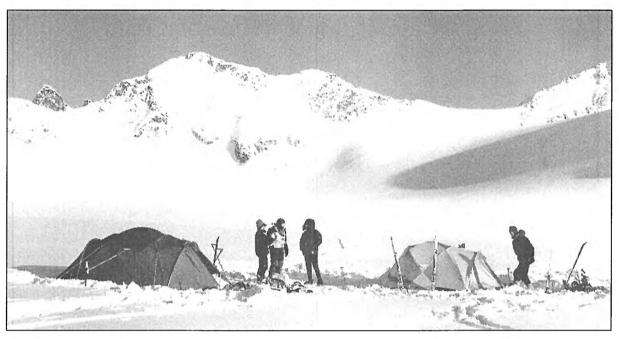
5 May

The weather closes in and we make our exit from the mountains with a long push down the glacier beneath Turnweather peak. As the glacier gives way to the jumble



Takuniakvik Peak, from Pt. 1650m

of terminal moraine the skiing steepens and becomes interesting. With little regard for our now light sledges some of us enjoy a fast and reckless descent to the floor of the Weasel valley. 5km of flat leads us quickly to Overlord in readiness for our pre-arranged morning pick-up.



Pt. 1650m (No. 14)

6-7-8 May

Exploring Pangnirtung, Iqaluit and their Inuit artwork before beginning the long flight home.

Equipment

CAMPING

Tents (Wild Country 'Hyperspace' and Terra Nova 'Terra Firma')

3 MSR stoves, billies and heat exchangers 1

Fuel bottles²

Mug, Spoon

Thermarest/Karrimat

Sleeping bag (1000 - 1100gm down) ³

Goretex bivvi bag

Vapour barrier liner 4

Down booties

Bamboo stakes 5

Snow shovel Snow saw

CLIMBING

2 x 50m 9mm ropes

Harness, slings, prussik loops, pulley

Ice axe

Crampons

Ice screws

SKIING

Skis (various makes Alpine ski)

Bindings (Silvretta, Fritschi, TourLite Tech, Rainey Superloop (telemark))

Boots (Dynafit Tourlite, Nordica TR9, Scarpa Denali, Scarpa T3)

Poles

Rucksack (80 litres)

Gaiters 6

Skins 7

SAFETY

Plastic Sledge and Stuff Sack

Plumbers overflow pipe

Shockcord

SLEDGE

4mm towing lines

2 Karabiners

2 cans Capsicum spray

Rifle

Distress beacon

Avalanche probes

Avalanche transceivers

PERSONAL

Jacket and Overtrousers 8

Thermal underwear

Fleece Salopettes

Shirt

Fleece top

Socks (1 change)

Vapour barier socks

Windbloc fleece gloves 9

Thick fleece mitts with windproof shell

Hat, Balaclava, Scarf

Down duvet

REPAIR KIT

Molegrips

Screwdriver

Screws

Glues

Duct tape

Cord

Wire

Tent pole splints

Spare sledge components

MSR spares

Thermarest repair kit

- 18 -

Equipment

Headtorch ¹⁰
Waterbottle + insulation, peebottle
Dark glasses, Snow goggles
Sun cream, Lip salve
Camera, Book
Altimeter, Compass

Maps

MEDICAL

Syringes, needles, suturing materials, dressing, bandages, compeed blister patches, skystreme inflatable splint

DRUGS:

ANALGESIC/ANTI-INFLATIONARY

Omnopon (+ Naloxone)
Buprenorphine (Temgesic)

DF118, Ibruprofen

Diclofenac retard, Movilat Cream

INFECTIONS

Ciprofloxacin

Co-amoxiclav (augmentin)

Cicatrin powder

EYES

Cyclopentolate Amethocaine Chloramphenicol

GASTRO INTESTINAL

Loperamide Dorbanex Buccastem

MISCELLANEOUS

Piriton

Adrenaline

Atripin

Ketamine (Gen. anaesthetic)

Dexamethasone

Zopiclone (sleeping tablet)

Glyceryl Trinitrate 2% oint (vasal dilater)

NOTES

- 1. Heat exchangers give a definate fuel saving and become worth their weight on any extended trip
- 2. We allowed ^{1/4} litre/person/day and ended up with several litres extra. A safe margin. Coleman fuel (Naptha) is easily obtained in Pangnirtung. Apart from a standard aluminium fuel bottle for each stove, all the fuel was carried in 2 litre plastic 'coca cola' bottles. This gives a big weight saving over conventional fuel bottles with the advantages of being burnable en route. They seem indestructable even at low

Equipment

temperatures and are not affected (in the short term) by the fuel.

- 3. Two members took down bags with a breathable, water resistant outer in preference to a Goretex bivvi bag. The latter tends to ice up inside and then prevent moisture escaping. One bag became so wet after only 3 nights due to this that the down lost most of it's loft and insulation. A serious problem.
- 4. One member used a vapour barrier liner in his sleeping bag which worked well
- 5. Lengths of bamboo make ideal lightweight tent pegs and were also useful as splints for broken sledge poles.
- 6. Three members used a 'Yeti' type gaiter (awkward fit on ski boots) and four used a full insulated overgaiter. Both work well as a snow guard but frozen toes tended to be associated with waiting around in the mornings rather than the amount of insulation.
- 7. Three members used new Montana Nylon skins and all had problems with the glue losing all it's stick at low temperatures. One pair of skins had to be attached each time with duct tape.
- 8. Lightweight Goretex (or similar) Shell is adequate for winter arctic travelling where a high degree of windproofing is the most important consideration.
- 9. These finger gloves disintegrated after about 10 days. A second pair would have been useful.
- 10. The transition to 24 hours daylight occurs very rapidly at the time we were there and headtorches were used only occaisionally during the first week. One micro torch between two would have been adequate.

FOOD

We purchased all of our food in Britain and Ottawa. There are several Supermarkets in Pangnirtung but prices are high and specialist foods not available.

We planned our diet to give approximately 3300kCal/man/day (at a weight of approx 800gm/man/day).

The food was resonable but possibly a little too much. However with supplies being easily pulled in the sledges weight did not seem to be so critical as when carried entirely on one's back.

Our daily rations were:

Breakfast : Porridge or Granola, Dried milk, sugar, hot drink (chocolate)

Day food : Frusli bars, Chocolate, Gorp

Evening meal: Instant soup, Harvest dried food (various menus), Biscuits, Cheese,

Butter, Hot Drink

Finances

Expenditure (£	E)	
	Air fares	6,500
	Skidoo hire	400
	Food/fuel	535
	Park registration	320
	Equipment	550
	Insurance	630
	Miscellaneous	240
	Admin	120
		£9,295
Income, Grant	rs (f)	
medile, Giant	Eagle Ski Club	2,000
	Mount Everest Foundation	800
	British Mountaineering Council	400
	Gino Watkins Memorial Fund	750
	Kenneth Smith Scholarship	225
	Georgina Travers Award	150
	Personal Contributions (£710 each)	4,970
		£9,295

Contacts

GRANTS

Eagle Ski Club, c/o Nigel Estlick. Tel.: 01980 623 087

Mount Everest Foundation, c/o W. H. Ruthven, Gowrie, Cardwell Close, Warton, Preston.
PR4 1SH

Scott Polar Research Institute, Lensfield Road, Cambridge. CB2 1ER Tel.: 01223 336 540

Alpine Ski Club, c/o Derek Fordham. Tel.: 0181 692 7651

BAFFIN ISLAND

Parks Service Officer, Auyuittuq National Park Reserve, Pangnirtung, NT, Canada. XOA ORO

Tel.: (867) 473 8828 Fax: (867) 473 8812

Roposie Alivaktuk (Outfitter) P.O. Box 257, Pangnirtung, NT, Canada. XOA ORO Tel.: (867) 473 8352

Mitchell Taylor,
Polar Bear Biologist,
Fisheries & Wildlife (Nunavut),
Box 1870, Iqalvit,
NT, Canada.
XOA OHO

Northern Stores Supermarket, Pangnirtung, NT, Canada. XOA ORO Tel.: (867) 473 8935

SUPPLIES

Canada Map Office, 130 Bentley Avenue, Ottawa, Ontario, Canada. K1A OE9

Tel.: (613) 952 7000 Fax: (613) 957 8861

for Sledges Mailbox International Ltd,

Bayley St, Stalybridge, Cheshire. SK15 1QQ Tel.: 0161 330 5577

for internal flight

First Air (Canada) Tel.: (514) 633 6811 Fax: (514) 633 6813

for dried foods

Harvest Foodworks Ltd, Canada.

Tel.: (613) 275 2218 Fax: (613) 275 4747