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NORTHERN GROUP
GREENLAND EXPEDITION
1987

THE THIRD ASCENT OF
GUNNBJORNSFJELD

SCOTT POLAR RESEARCH INSTITUTE

NORTHERN GROUP GREENLAND EXPEDITION 1987.

Patrons

Col. Andrew Croft, D.S.O., O.B.E.

Alfred Stephenson, O.B.E.

Members.

Stan Woolley. Leader.

Robin Illingworth.

Rob Ferguson.

Steve McCabe.

NORTHERN GROUP GREENLAND EXPEDITION 1987.

The Third Ascent of Gunnbjornsfjeld 3700m.

The expedition was originally conceived as the Greenland Two Summits Expedition 1987, a Northern Group Expedition. The intent of the expedition was to climb Gunnbjornsfjeld, Greenland's highest mountain, and Mt.Forel, often described as Greenland's second highest mountain, in a single summer. The plan depended upon the expedition being flown in for an ice cap landing, north of Kangerdlugssuaq, at a height of some 2500m., using a ski equipped Twin Otter for this purpose. At first the plans proceeded well but later the ski landing had to be ruled out and reluctantly the expedition had to accept a landing at sea level. This change prevented the attempt on Mt.Forel, because of the time, food and fuel it would take the expedition to climb up to 2500m. from sea level. The expedition now decided to set its sights firmly on Gunnbjornsfjeld, in the Watkins Mountains, and then, if time and conditions allowed, to give thought to summits in Knud Rasmussen's Land, to the north of the Watkins Mountains.

The expedition flew from Glasgow to Keflavik on 18th. July and to Isafjordur in NW Iceland on 19th. July. The expedition was then held up for two and a half days by bad weather which stopped flying. Flugfelag Nordurlands of Akureyri did its very best, even to the extent of attempting the flight from Akureyri to Isafjordur and having to turn back, because high winds would not allow a landing at Isafjordur. Not until the morning of 22nd. July could the expedition be flown to Mikis Fjord, East Greenland, as the first flight of the season into the relatively new airstrip there. Sigurdur Adalsteinsson himself was at the controls and the members of the expedition were impressed at the way he put the Twin Otter down on such a short strip. The airstrip is located on a gravel outwash plain in Sodalen, some two miles from the tongue of the Sodalen glacier, from which it is separated by moraines and a large lake. At the time of writing the strip has not been discovered by the climbing fraternity and has been used, apart from ourselves, only by geologists working on the Skaergaard intrusion and other Tertiary intrusions in this part of East Greenland.

On arrival at Sodalen little time was wasted and, after pitching camp, the members of the expedition did two carries to the glacier tongue. On the first we had to work out a route, which route, disregarding the scenery, was tedious, often involving heavy moraine. On the second carry the sledges were successfully taken up to the glacier. We had two, short, Nansen, manhaul sledges, supplied by Skemaster of Gt.Yarmouth, and we had brought two pack frames with us, expressly for the purpose of backpacking the sledges to the glacier.

On 23rd. July we did three more carries up to the glacier, leaving just the tents and personal gear for the following day.

On 24th. July the expedition was complete on the glacier, where it was joined for a light lunch by a party of geologists who had flown into Sodalen shortly after ourselves. After lunch we set off, doubling up four to a sledge, intent on relaying our two sledge loads up the glacier. We now met a problem. The writer had last been on this glacier in 1972, when there was an obvious dip in the lower glacier tongue, amounting to a minor valley across it.

With the recession of the intervening years, the dip was now revealed as an actual split, with the tongue bisected down to the glacier's bed. The only route for the sledges was to climb off the glacier to our right and to then proceed along a snow terrace, between two, prominent, lateral moraines. By the time we had climbed steeply off the glacier, we were due to stop for the day and, somewhat chastened, we made our camp only a little distance from the point where we had commenced sledging.

Our route for the next day looked promising but first we had to cope with a wind scoop, into which our snow terrace ran. The bottom of the scoop was so wet that we had to backpack everything around it, on the moraine, but after that we were able to pull the sledges, one at a time, four men to a sledge, a mile and a half higher between the lateral moraines. All four of us enjoyed skiing back down for the second sledge.

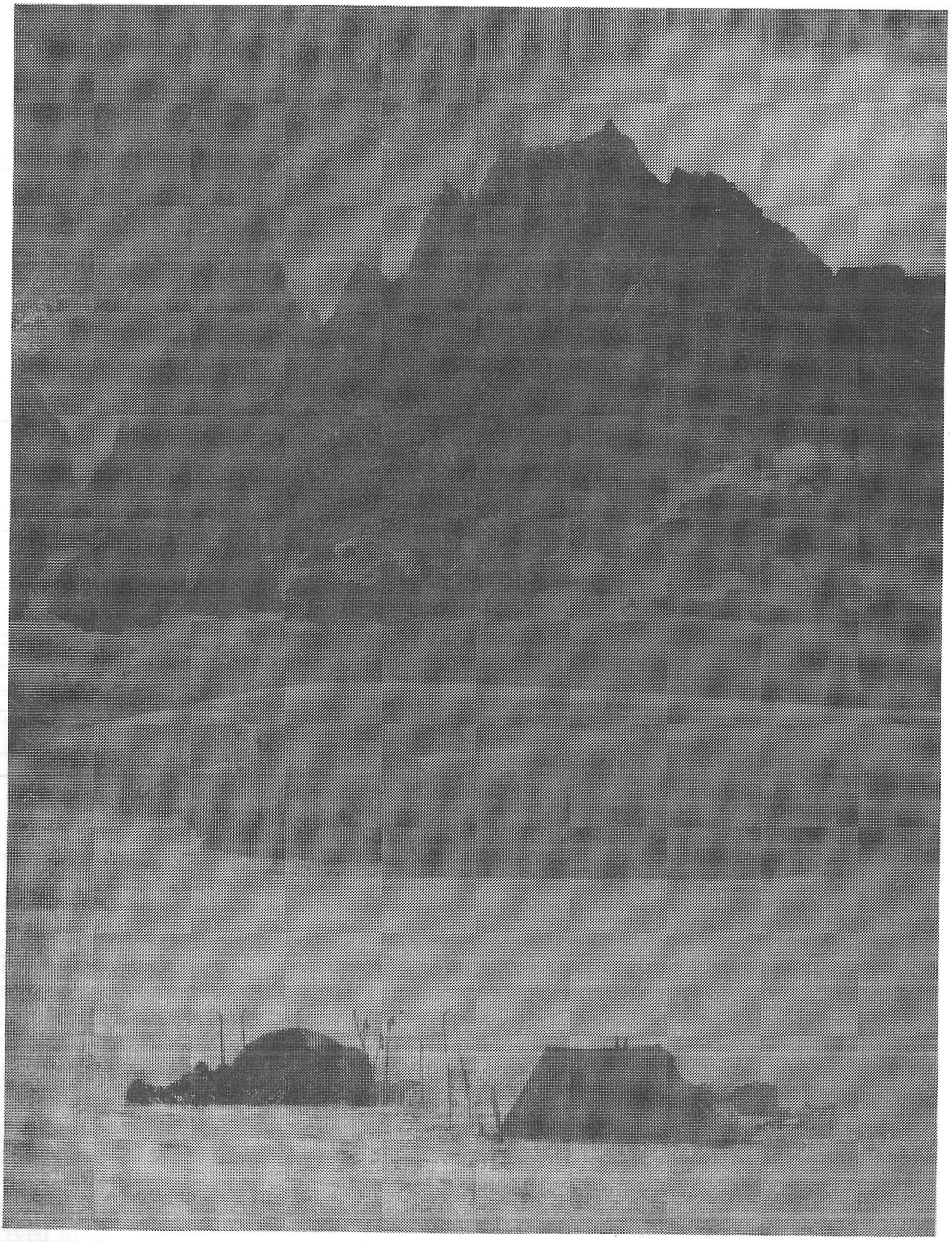
We were now settling into a routine of getting up at 11pm.and, after a leisurely breakfast, moving off at 1am., to get the best of the colder, harder surfaces. With such surfaces the sledges could be pulled independently, each with two men, and on 26th. July we made heartening progress, up toward the head of the Sodalen glacier, camping a half mile or so short of it as a new problem presented itself.

The map shows the glacier merging into an extensive snowfield. In fact, due to recession, the glacier now has a headwall and after camping we skied up to investigate it. It proved to be quite low and could be surmounted by a snow ramp from our side and a short scramble down rock the other side. Nodules of iron pyrite in the rock proved an interesting attraction.

The morning of 27th. July started with us getting over the headwall referred to above. This was somewhat time consuming but provided amusement, as we were able to just throw much of our gear, from the top of the headwall, down on to the snow on the far side.

At this stage we had hoped for some easier sledging but quickly began to realize that the broad ridge of country, between the East Frederiksborg Glacier and the Sorgenfri Glacier, along which we had to travel, presented quite a few complications for a sledging party and we had to allocate scarce time to reconnaissance. We were now coming on to the route used by Courtauld, Wager, Longland and co. in 1935, they having ascended to this point from Jacobsen's Fjord. The accounts of this part of their journey, as provided by Courtauld in the Geographical Journal, and by Longland in the Alpine Journal, show that they also found it difficult.

Our experience was that no sooner did we solve one problem than another appeared and after a good start on 28th. July we ended seemingly boxed in, with no obvious route ahead. Various prospects were investigated on ski and Ferguson and Illingworth eventually found a route - difficult but just possible for the sledges. Coping with the difficulties of this route took up the first part of the next day. We began by doubling up, four to a sledge, on a steep slope which we could only just cope with. The way then led past some impressive seracs, overhanging the East Frederiksborg Glacier, and finally we had to lower the sledges down



Camp on the Sodalen Glacier, 26th July 1987.

the snow headwall of a corrie - once again throwing much of our gear down to hasten the process.

Referring to the same area, before their Camp 3, Courtauld describes a steep drop of 1000 feet, when they had to lower the sledges with a rope belayed to several ice axes. Longland, describing the same difficulty, talks of a drop of 200 feet. Our own experience, seemingly at the same place, was of an overall height loss getting on for 1000 feet, the steepest section of which was in accord with Longland's description.

Having tackled successfully the various features referred to above, we made better time to the glacier underlying Pyramiden and flowing down to join the Sorgenfri Glacier. Crossing this, toward the ridge leading from Pyramiden to Black Cap Pass, Illingworth broke through one, frozen pool in a rather spectacular fashion but we had no difficulty in reaching a dry land camp site, on the moraines below the ridge and some four miles or so below Black Cap Pass.

Black Cap Pass takes its name from Black Cap Peak, itself named by the 1935 party. The mountain marks the north side of the pass and is a distinctive peak. The lower and larger part of the mountain is composed of light coloured gneiss, while the summit or cap is of dark basalt. Between the two is an intervening snow band. The mountain is easily picked out from a considerable distance. The actual pass at some 1400m.is straightforward and gives a direct route from the Frederiksborg Glacier to the Sorgenfri Glacier. After the 1935 ascent of Gunnbjornsfjeld, Wager and others wintered at Skaergaard and the pass was used as a depot site. In 1972 the writer, while a member of another expedition, found the remains of Wager's depot at Black Cap Pass and was able to use his paraffin and biscuit - all still in good condition.

We reached Black Cap Pass at lunch time, 6am.on 29th. July and after a break, including some collecting of Cretaceous fossils, which are abundant on the lower part of the ridge, and after leaving a depot of food and fuel for our return, we pressed on down toward the Sorgenfri Glacier, camping somewhat short of it. A recce on ski showed extensive melt at the corner we had to round to get on to the Sorgenfri but the following morning, after a hard frost, we were able to get through this area and to cross four melt streams, with less difficulty than we had anticipated. The corner itself was marked by a large melt lake extending out from the land.

We now came to the ice fall on the Sorgenfri which delayed the 1935 party. They had to camp when only half way up it and we found ourselves in a somewhat similar position, with a camp two thirds of the way up the ice fall and one sledge load still some way below us - a position we had to rest content with, as the snow bridges around us had grown increasingly soft as the day advanced. To some extent we had to blame ourselves as, deceived by an apparent snow ramp, we had tried to ascend the ice fall close to the land, on the Black Cap Pass side, and had found ourselves in increasing difficulty. I distinguished myself on this day by losing a ski pole irretrievably down a crevasse. Happily we had reinforced our sledges with spare bamboos, of appropriate length, to cater for such a contingency.

The morning of 1st. August saw us working out the rest of the route to the top of the ice fall and bringing up the remaining gear from below. Once we had the ice fall behind us the surface improved splendidly and we began to make good progress, up to and abreast of the peak called Narren. It was at the top of the ice fall in 1935 that the supporting party turned back and Courtauld reported the same notable improvement in surface conditions, above the ice fall, that we ourselves found.

At this stage in the journey it became clear that we were running a little short of time, for we were due back at Sodalen on 19th. August. Our intention had been to press straight on through the Linbergh Mountains, following an attractive route running parallel to but higher than the Christian 1V Glacier. This route would have eventually brought us out at the north west head of the Christan 1V Glacier, where we intended to swing east, to cross the Christian 1V Glacier and to go on the north side of the Watkins Mountains to approach Gunnbjornsfjeld. This route to Gunnbjornsfjeld was a longer one than crossing the Christian 1V Glacier directly from our present position - more or less as Courtauld, Wager, Longland and co.had done in 1935. Moreover we were worried about the extensive melt on the upper Christian 1V Glacier and the extent to which it might add time to the route described above through the Lindbergh Mountains. An obvious feature of aerial photographs of the Christian 1V Glacier is that the melt lakes and melt streams are more in evidence on the upper glacier than they are on the middle glacier. The reason for this is not clear but probably a lot of the water on the upper glacier escapes sub glacially.

Anyway with all these thoughts in mind we decided to turn east and to cross the Christian 1V Glacier now rather than later. Our present position was south of Icefall Glacier Pass but north of Windy Gap Pass. The aerial photographs showed an unnamed pass, to the Christian 1V Glacier, between these two, the first of which had been used by the 1935 party on their outward trip and the second of which had been used by them on their return journey. The unnamed pass was higher than the other two and did not look easy but it was abreast of our present position and beckoned enticingly. We resolved to try it the next day.

On 2nd. August we had an excellent surface and, although we had a lot of climbing to do, four hours of steady pulling saw us at the top of the pass. The view that opened up to us was a welcome one. First the glacier falling away below us, to the Christian 1V Glacier, looked reasonable, even though there were areas of major crevassing. Second the Christian 1V Glacier appeared to be still snow covered, so offering a useful sledging surface. This was how the first ascent party of 1935 had found the glacier in early mid August. A year later in 1936 H.G.Wager returned to the area and, in the last week of July, found that the Sorgenfri and Christian 1V Glaciers were notably more crevassed and drier than in 1935. As a result his sledging programme had to be curtailed. Awareness of such seasonal variations had been one reason why we had chosen the higher route through the Lindbergh Mountains, now abandoned, and so it was a relief to see that our decision to cross the Christian 1V Glacier, lower than originally intended, was not going to tell against us.

Thus encouraged we pressed on downhill, toward the Christian 1V Glacier, stopping occasionally for a recce on skis to determine our best way through the crevasses and eventually making camp about half way down to the Christian 1V Glacier. A final examination on ski of the route ahead showed that we had further crevasse problems to solve on the morrow, before we could finally get down to the Christian 1V Glacier.

Descending the unnamed pass between the Sorgenfri Glacier and the Christian IV Glacier, 3rd August 1987.

We began 3rd. August handling the sledges very carefully through an icefall and under an area of somewhat disconcerting seracs. Once through this area we lost height rapidly to eventually emerge on the Christian 1V Glacier some 650m.below the summit of our pass. We made good progress on the Christian 1V Glacier, opening up Ice Fall Glacier and Coal Corner on our left, as we took a long diagonal line across the glacier, heading for the north end of Korridoren and for Gino's Glacier. We camped about one third of the way across the Christian 1V Glacier.

On 4th. August we continued with our long diagonal crossing of the Christian 1V Glacier. The going was initially quite good but toward the end of the day our progress slowed down considerably because of the need for us to pick our way between crevasses. We camped about two miles short of the north end of Korridoren. During this day we were notably impressed by the eastward facing buttresses of Jaetteborg and Snebordet, the two main peaks of the Lindbergh Mountains.

We had a tedious time on 5th. August, coping with further crevasses and melt streams, but nevertheless reached a camp site close in under Gino's Glacier. Ivory gulls were in evidence at the camp site - a feature also reported by Courtauld - and appeared to be breeding in the area, on the high buttresses between Gino's Glacier and Korridoren. Gino's Glacier itself terminated abruptly and access on to it appeared to be easiest from the extreme left as we faced the glacier. The route on looked steep and we wondered what changes had taken place since 1935 and just where the 1971 party, that made the second ascent of Gunnbjornsfjeld, had started its climb. The 1971 party had initially tried to get around to the north side of the Watkins Mountains, from an approach via the Rosenborg Glacier, but was stopped by the steep and very active ice fall at the head of that glacier. The party then changed its plan, moved westward and travelled through Korridoren, the trough between Skaermen and the Watkins Mountains. We were now camped in line with the northern exit from Korridoren and thought that the route of the 1971 party through Korridoren must have been an interesting one. It certainly demonstrated an impressive flexibility when the original intention was thwarted.

After camping on 5th. August we decided that on the morrow we would leave one of our two sledges at the campsite and that we would travel as lightly as possible, four to one sledge, around to the north side of the Watkins Mountains. It is interesting to note that the 1935 plan, as initially formulated by Wager, did envisage an approach to the mountain from the north and this from a start point on the coast at Wiedemann's Fjord.

The next day began with a very steep climb, as we cut inside a nunatak to turn the flank of the Watkins Mountains. The slope was so steep that the four of us, pulling a very light sledge, could only just manage it but once the ascent was over we had greatly improved surfaces, as we opened the entrances to a number of corries. We were then faced with a steep descent, before we could turn east along the northern side of the range. We camped after some twelve miles, feeling quite pleased with the day's progress.

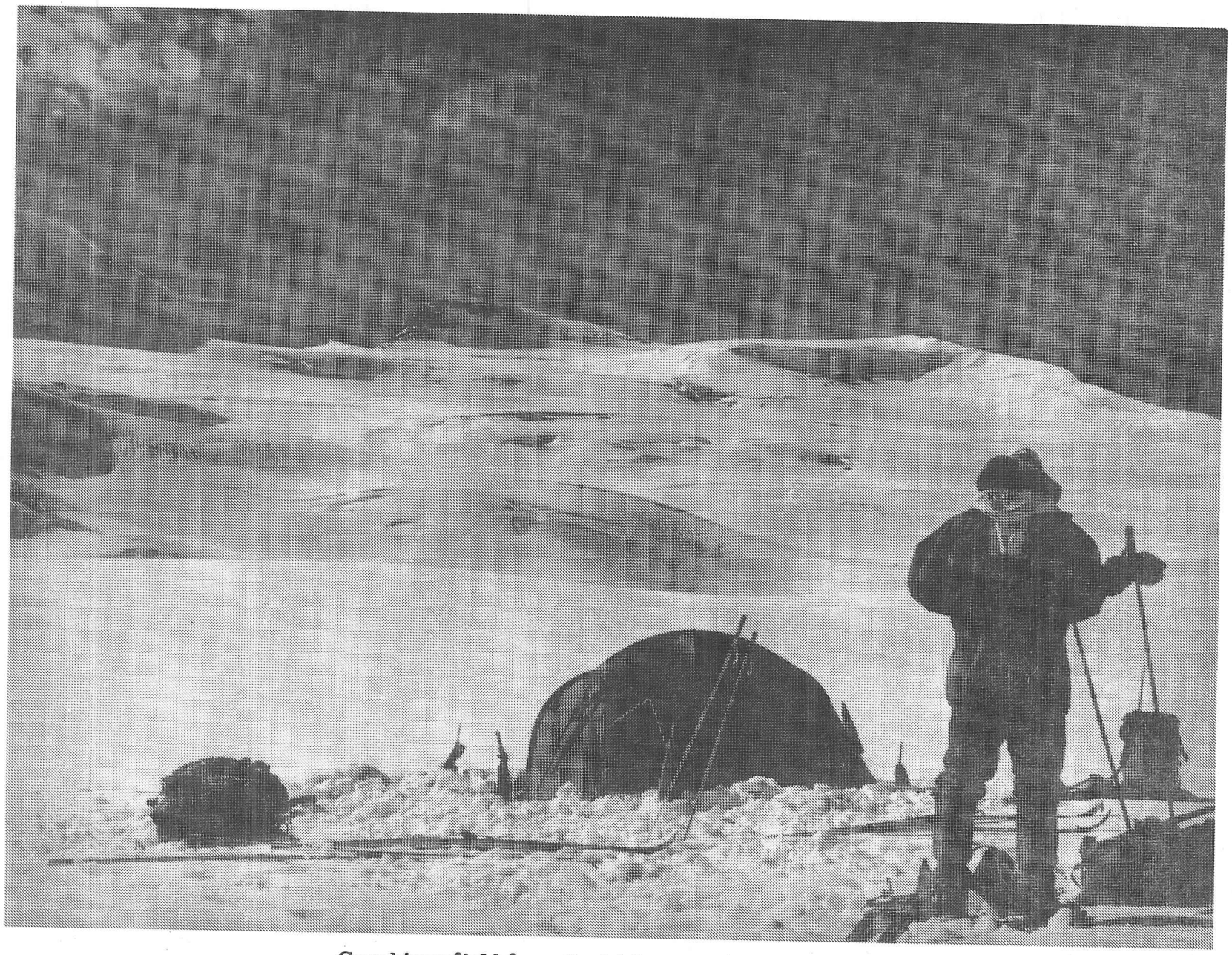
Our plan for the next day, 7th. August, was to leave our second sledge at this campsite and then to backpack a light camp to a high point on the mountain, where we could spend two and possibly even three nights if need be, to hopefully ensure a successful ascent of Gunnbjornsfjeld and ideally of another high summit as well.

The north side of the range features three, descending glaciers and we would have liked to have got as far around as the second of the three - using it as our approach to Gunnbjornsfjeld. This glacier would also have given us good access to other significant, unclimbed peaks in the range. The time factor however indicated that we had best content ourselves with the first glacier that we came to, on our right hand, and the morning of 7th. August saw us backpacking up this glacier on skis. As we gained height we found that the snow conditions improved for skiing, becoming better than at any earlier stage on the journey. We placed our camp at a height some half way between our morning start point and the summit of Gunnbjornsfjeld and, after a short break for lunch, decided to have a go for the summit. Our thinking was to a large extent determined by the weather. We had had good weather throughout the journey so far, with generally clear, blue skies. At some time the weather would surely break and we anxious not to be denied the summit because of a failure to take advantage of good weather. Setting off on skis we made about 350m.of height but found the going heavy and the snow getting much softer. We were also feeling very tired and after some discussion decided to postpone the attempt until the next day. We therefore depoted our ropes, axes and crampons and skied back to our tent, contemplating with interest the prospect of four of us crowded into one tent, the other tent having been left with the second sledge so as to reduce our loads for backpacking up the mountain.

We were away from the tent by 2am.on 8th. August. On skis we gained height rapidly and soon picked up our depoted gear of yesterday. Continuing upward we had some steep traversing to do and occasional crevasse belts to negotiate but there were no real difficulties until we reached the foot of the final, summit pyramid, where we joined the route taken by the 1971 party. Here we discarded our skis, put on crampons and roped up in pairs. The ridge began fairly steeply but then rose at an easy gradient to the start of a more challenging pitch of some 45m.directly under the summit. This offered some difficulty as the exposure was considerable and there was a 12m.section of ice that required determined front pointing. Ferguson gave us a valuable lead here and fairly shortly the whole party was on the summit. The view was dramatic and particularly of the other two, high peaks of the Watkins Mountains, called aptly in the 1971 report "dome" and "cone" . Given the time factor these were outside our range but we noted that both were sufficiently detached from Gunnbjornsfjeld to be seen as quite separate mountains and we found ourselves in agreement with the words of the 1971 report, "it would seem likely that these are the second and third highest peaks in Greenland."

No sooner had we taken the customary photographs than a strong, cold wind got up and we had to give thought to the descent. Given the ice pitch below the summit we decided to sacrifice a deadman and after belaying Ferguson down we then followed, while he gave us a top rope from the deadman, using our two ropes joined. Once back with our skis we descended some little way and then found ourselves out of the wind.

Our ascent of the final, summit pyramid was by the NW ridge, the same as used by the 1971 party. In the Alpine Journal Longland describes the 1935 party as using the SE ridge, although the 1971 report identifies the 1935 SE ridge more correctly as the South ridge. As already stated both the 1935 and 1971 ascents were made via Gino's Glacier.



Gunnbjornsfjeld from the high camp, 8th August 1987.

The summit of Gunnbjornsfjeld behind us, we now decided to look at a subsidiary summit - the first on our right as we descended the glacier back towards our high camp. Initially we were quite optimistic about this but on attempting the South ridge we found it to be badly corniced, with a fracture line that would have forced us out on the face. This made for a longer and more difficult climb, particularly as we had now only one deadman left. With some reluctance we abandoned the climb and continued down to our campsite.

On 9th. August we gave ourselves a deserved lie in until 4am. but were away by 6am. and, losing height rapidly, returned to our depoted sledge in good time. As we descended it was a matter of some regret to see the peaks of Knud Rasmussen's Land so near, knowing that we had no time left for them. While skiing down we crossed a set of fresh, fox tracks and for a while entertained the fear that the creature had found and enjoyed our depoted food but all was as we had left it.

On 10th. August we returned to our first, depoted sledge under Gino's Glacier, again making good time but camping early at the depot, to sort out and to discard some non essential gear, before commencing our recrossing of the Christian 1V Glacier.

We decided not to cross the Christian 1V Glacier on the same long diagonal as before but instead to travel down the glacier close in under Skaermen, until we were more or less opposite Dumpen and to then cross by a shorter, direct route. This we had decided for two reasons. Firstly because the glacier's condition had clearly worsened, with more crevassing apparent, and we therefore hoped for easier going down the side of the glacier, and secondly because keeping in close to the land would make for more interesting sledging, as the various buttresses, corries and small, tributary glaciers were successively passed.

We began 11th. August badly, as we unwisely took a line from in front of Gino's Glacier to the north end of Skaermen, found ourselves on steep, crevassed ground and had to backtrack and find an easier way down on to the main glacier. This done though we were able to get close in to Skaermen and made good progress. The most notable obstacle of the day was a melt stream, draining off the glacier and into a lake against the land. This stream we had to cross by a narrow, ice bridge, below which the torrent plunged some 30m.or so, over the near vertical side of the glacier and into the melt lake below. We camped a mile or so short of our turning point for the crossing of the Christian 1V Glacier.

On 12th. August we began by continuing down under Skaermen until the gradient of the glacier suddenly steepened, with a good deal of crevassing. Here we turned sharp right and after some zigzagging through a belt of crevasses made good time across the glacier, camping some two miles short of Dumpen, the 1935 depot under Windy Gap Pass. We had already decided to return to the Sorgenfri via Windy Gap, both for variety and because this was the lowest pass. The route also meant that we could avoid the big ice fall on the Sorgenfri and gave us the additional bonus of being able to examine the 1935 depot site.

We reached Dumpen early next morning and found the depot to contain the remains of two, sledge boxes, some ten tins of pemmican and three 2lb. tins of butter. The tins were a little rusty but we imagined the contents to be edible. The prize find was a sealed tin with the

contents not marked. When we broke the seal we found the tin to contain some eighty bars of Bemax chocolate, in perfect condition some fifty years on. It needs hardly mentioning that this find was greatly enjoyed.

We then gave some thought as to our immediate route. There are in fact two passes above Dumpen, lying close together. The 1 : 250, 000 map labels the more southerly of the two as Vejrgabet, and the map accompanying Courtauld's article in the Geographical Journal also appears to show that the more southerly pass was the one used. We ourselves were attracted by the northern pass, which is the one nearest Dumpen and which, although it looked a little steeper to begin with, also looked somewhat lower overall.

The ascent was very hard work and we had to use a pulley system to get the sledges up. A lot of effort and several hours saw us less than half way up and having to camp, as the day had gone by and the snow was now soft.

After camping Ferguson and myself went ahead on ski for a recce, going up to top of the pass and some way down the far side. We found that not only did the descent on the far side look difficult for the sledges but that the snow cover came to an abrupt end once down the far side of the pass. In fact the whole of the Sorgenfri, below the ice fall, was now dirty, bare and broken ice. Our conclusion was that we could get the sledges to the top of the pass, down the far side and perhaps even across the Sorgenfri, but that it would all take a very long time and that we would go a lot faster backpacking.

Once back at camp there was a general discussion of the implications of what we had seen. We knew that if we backpacked out quite a lot of gear, apart from the sledges, would have to be abandoned. This however had always been a likely possibility, at some stage in the journey, as a penalty of trying to sledge low down in the late summer, and all four of us appreciated the wisdom of backpacking from this point onward.

Sadly we were too far above Dumpen to depot our abandoned equipment there and so we left the two sledges, and a variety of other gear, all neatly lashed up and close to half way up north Windy Gap Pass, on the Christian 1V Glacier side of the pass and in sight of Dumpen.

August 14th. saw us backpacking on skis to the top of the pass and then adding our skis to our loads, as we roped up to tackle the crevassed descent on the far side. Once down we made good progress and finally camped by the moraine on the eastern edge of the Sorgenfri.

The next day, starting in the half light of dawn, we made rapid progress across the Sorgenfri, with McCabe out in front setting a fast pace. Coming off the Sorgenfri, at the foot of the rise to Black Cap Pass, we had to cross a number of melt streams, necessitating vigorous jumping with heavy packs, but we were finally halted by a very wide, fast flowing, melt river that we had no hope of crossing and that had built up since our outward journey. It flowed out of the big melt lake at the junction of the Sorgenfri and the rock wall leading up to Black Cap Peak and our only course was to follow the lake to its junction

with the rock and then to continue around the lake on the rock. Fortunately the rock was not too steep and we were able to do this. Illingworth then set off, with great determination, for Black Cap Pass and, trailing wearily in his wake, we eventually reached our depot on the pass to conclude a useful day's march. After camping, and before turning in, more fossils were collected and a cairn was erected at the depot site.

The 16th. August saw us taking a direct line from Black Cap Pass to the head of the East Frederiksborg Glacier, our intent being to return to Sodalen by that glacier and so to enjoy a route different to our outward path. The day went well and after negotiating the crevassed head slopes of the East Frederiksborg Glacier and keeping well to the left true bank of the glacier, so as to stay on the east side of any developing melt streams, we continued to a camp site about half way down the glacier.

Our route the next day lay down the glacier for a further five miles or so and then we had a taxing climb up the valley side, so as to emerge in the country above the two, small lakes that lie to the west of the Sodalen glacier. Carrying heavy packs the ascent was very demanding, rising steeply for some 500m., with a surface sometimes irritatingly soft and at other times of that variety that made one think that crampons might have been a good idea. The exit at the top also posed modest difficulties, giving us the choice of a cornice or of taking to the rock. By the time we had got ourselves on top we only too pleased to camp and to call it a day.

On 18th. August we descended a small glacier we had emerged on after yesterday's ascent and then continued around to a col overlooking the Sodalen glacier. The glacier was quickly crossed, enabling us to recover a few items of gear that we had left at our first campsite on the glacier on the outward trip, and we then made our way back over the moraines to the Sodalen airstrip, completing a round trip of 190 miles.

At the airstrip fortune smiled on us, for the camp of the Canadian prospecting company, Platinova, was well established and we were given a warm welcome. This extended to our enjoying the hospitality of the camp's mess tent for the remainder of our stay in Sodalen and our grateful thanks go to Platinova, to the camp management and to the exceptional man who was the camp cook.

After some little delay we flew back to Iceland on 21st. August, in a Greenlandair Twin Otter, landing in Reykjavik after an uneventful flight.

WSLW.

November 1987.

APPENDIX 1.

The Height of Gunnbjornsfjeld.

Although the mountain is the highest in the Arctic there is still doubt about its actual altitude.

The current, Danish map, in the 1:250,000 series, shows a height of 3700m. The map is based on Ejnar Mikkelsen's coastal survey of 1932 and the aerial survey of Knud Rasmussen's Seventh Thule Expedition 1933 - the map being produced with little ground control. At the end of Courtauld's article in the Geographical Journal is a short account, by Michael Spender, of how the Danish map was made.

The British Trans Greenland Expedition 1934 published its computations for establishing the height of the mountain and gave a mean height of 13,100 feet. A.S.T.Godfrey writes that the then recently published Danish height for the mountain of 12,200 feet "would appear to be considerably too low, for the true height of the peak can hardly be less than 12,700."

The 1935 expedition (first ascent), from aneroid and hypsometer readings, established a height given by Longland, in the Alpine Journal, as 12,250 feet. An appendix to Courtauld's article, in the Geographical Journal, gives fuller details of the calculations, and provides a figure of 12,200 feet, going on to say "this agrees closely with the figure taken from the Danish map of 3700m. (12,140 feet.)"

The 1971 expedition (second ascent) attempted to clarify the height of Gunnbjornsfjeld but the details of its triangulation survey work have not, to the best of my knowledge, been published.

The Operational Navigation Chart, ONC C-13,1:1,000,000. published by the Defense Mapping Agency, Aerospace Center, St. Louis Air Force Station, Missouri, and revised July 1975, gives a height of 13,120 feet.

APPENDIX 11.

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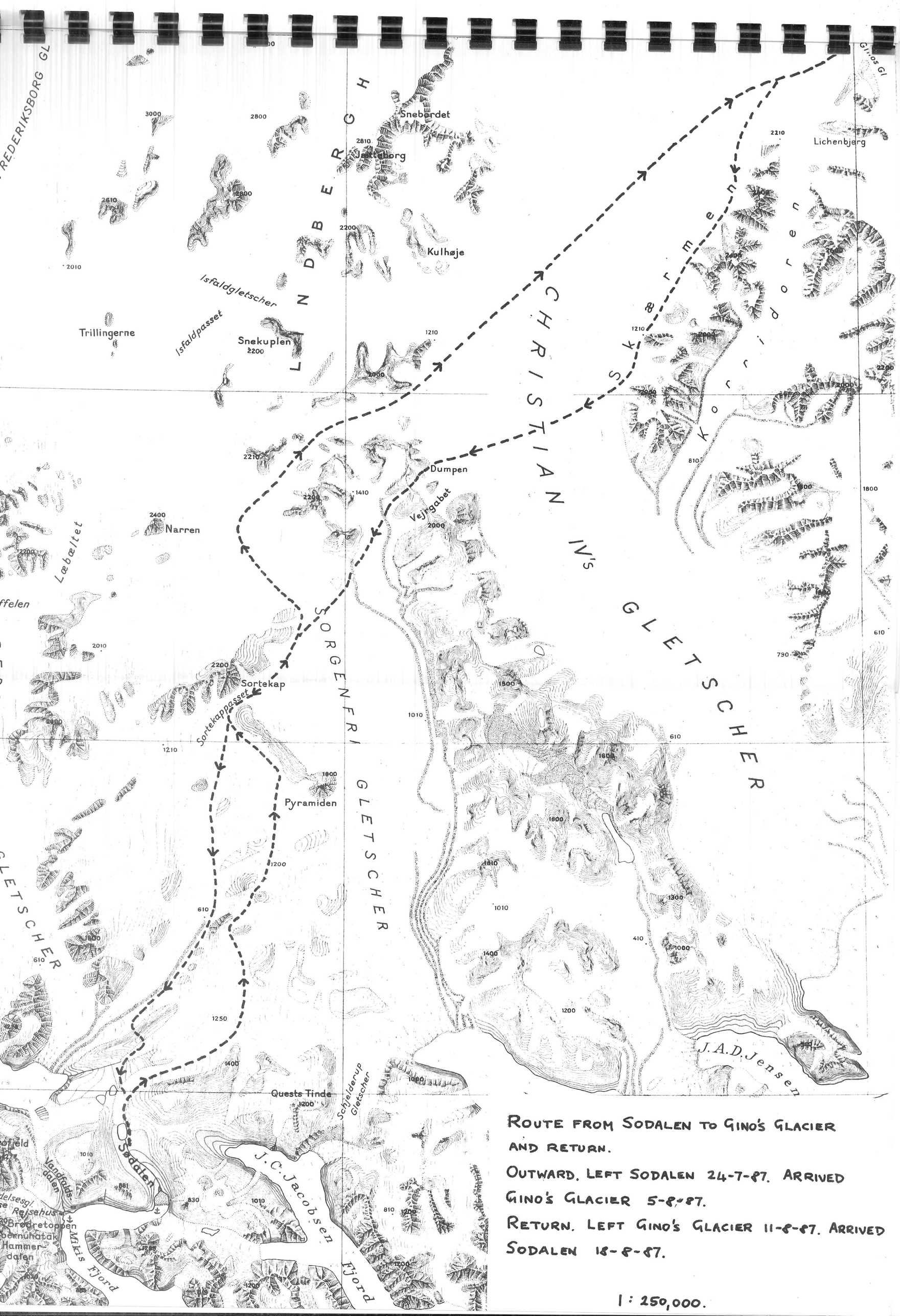
Platinova.
Fischer of Austria.
Salomon Ski Equipment Ltd.
North Cape.
Mileta Sports.
Graseby Communications Ltd.
Icelandair.
Highland Guides, Aviemore.
R.H.M. Ingredient Supplies Ltd.
Danish Bacon Co.Plc.

Dr.Iain Campbell.
Roger Daynes.
Derek Fordham.
Dr.David Matthews.
Jim Lowther.
Sigurdur Adalsteinsson.
Prof.John Gittins.
RSM Eddie Brannan.
Tom and Sally Spurway.
Susan Bryan.
Ian Wilkinson.
Peter Doran.
Trevor Cawthorne.
Michael Manisty.



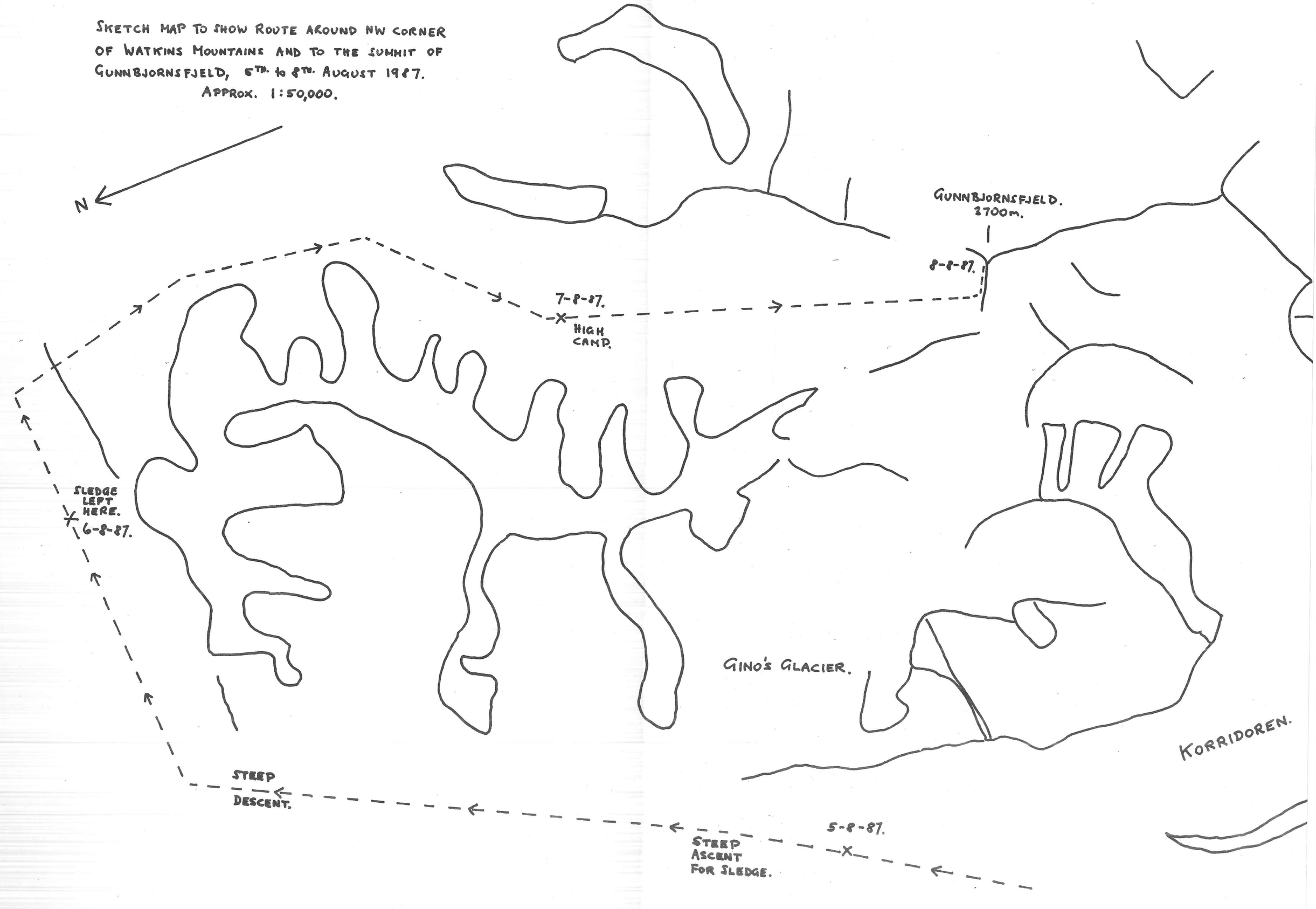
ROUTE FROM SODALEN TO GINO'S GLACIER AND RETURN.

OUTWARD. LEFT SODALEN 24-7-87. ARRIVED GINO'S GLACIER 5-8-87.

RETURN. LEFT GINO'S GLACIER 11-8-87. ARRIVED SODALEN 18-8-87.

1 : 250,000.

SKETCH MAP TO SHOW ROUTE AROUND NW CORNER OF WATKINS MOUNTAINS AND TO THE SUMMIT OF GUNNBJORNSFJELD, 5TH. to 8TH. AUGUST 1987.
APPROX. 1:50,000.



Northern Group Greenland Expedition 1987.

Receipts.

Mt. Everest Foundation.	900.
Gino Watkins Fund.	500.
British Mountaineering Council	600.
Members' subscriptions.	4,000.
	£6,000.

Expenditure.

Air travel.	4,300.
Equipment.	730.
Food.	240.
Insurance.	290.
Freight.	320.
Medical.	40.
Misc.	80.
	£6,000.

WSLW.

Gino Watkins Memorial Fund.

With very many thanks for the financial support given to the expedition.

Stan Worthington.