

Mount Vancouver Expedition 2003

Supported by the Mount Everest Foundation and UK Sports Council / British Mountaineering Council

MEF Reference: 03/39

Final Report



On the E Ridge of Mt Foresta's North Peak.

The author 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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Summary

We flew by ski plane from Haines with Paul Swanstrom, landing at 4040ft (2030m) on the Hubbard Glacier. Conditions were unusual for early May, with crevasse lines extending into the flat glacier and a melt-freeze crust on the surface.

We elected to tackle Mt Foresta first, aiming for the unclimbed North Peak which is marked as the highest at 11,960ft (3645m). This summit is quite separate from the previously climbed South Peak. We climbed the East Ridge, which we joined at 6400ft (1951m) via an avalanche-prone NE-facing cwm. On the ridge itself we found insecure climbing over detached cornices and blocky granite crenellations. GPS and altimeter readings on the summit suggested that the map height may be a typographical error for 10,960ft (3341m).

We descended the cwm and returned to base camp in an oncoming storm which lasted 5 days. After this we attempted to penetrate the icefall leading to the E Rib of Mt Vancouver, but found it essentially impassable.

- Area visited:** Hubbard Glacier, St Elias Mountains, SE Alaska / Yukon border
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- Objectives:** E Rib of Mt Vancouver (new route); North Peak of Mt Foresta (first ascent).

Area introduction

The St Elias Range is straddles the border between South East Alaska and the Yukon. Many of its major peaks form turning points on this border. The peaks and glaciers of the range are on a huge scale. The range includes Canada's highest peak, Mount Logan, which in terms of its bulk above the surrounding glacier is described as the largest mountain in the world.

Being close to the Pacific Ocean the range receives considerable snowfall. This is a boon for devotees of big white mountains, and ensures that much of the loose rock is covered, but also produces the unsettled weather and challenging snow conditions for which the range is also known. These problems, combined with the scale and the complex broken glaciers guarding many potential routes, constitute the main reasons why the range has never become a popular climbing destination (with the exception of the King Trench route on Mt Logan).

The area and its climbing history are well covered in the major North American climbing journals.

Access and logistics

Since the untimely demise of glacier pilot Kurt Gloyer operating from Yakutat, access to this part of the range has become more difficult and more expensive. The best-known options are Paul Claus operating from Chitina and Andy Williams operating from Klauane Lake. We flew with Paul Swannstrom, who operates under the name Mountain Flying Service from Haines, with a ski-equipped Cessna 185. We were able to fly in and out on the days we requested, without waiting for weather, and found Paul a conscientious and reassuringly careful pilot. Paul also flies from Yakutat, and this would be a cheaper option for larger parties.

Given that all currently available air taxi services are based at more distant airports, the VHF marine radios often used by previous parties in the range are no longer tenable for communication. It seems most parties now use satellite phones. We used a Globalstar phone, which was lighter and cheaper than the Iridium alternative. It worked well, although there were periods of time when reception was not available. We rented it from Day Wireless Systems in Seattle. Apart from the obvious benefits, use of the phone saves expensive wasted air taxi flights. A regrettable side-effect is that it reduces the sense of absolute commitment that was previously inherent in climbing in this area.

The nearest major airport to Haines is Juneau. From here Haines can be reached in 4 hours by ferry or 45 minutes by light plane. On the outward journey, for reasons of time and convenience we took the plane, flying with Wings of Alaska. This saved a day, because it meant we could fly in to the glacier that afternoon. The extra day proved crucial on our Mt Foresta climb. The price of the flight (with an inevitable excess baggage charge) was also offset by savings in accommodation and taxi fares.

The ferry, which we took on the return journey, was highly worthwhile as a 'cruise'. It was also very economical and, being part of the 'Alaska Marine Highway', could even be taken from or to Bellingham, WA over several days.

We bought our food in New Zealand and Seattle, and Coleman Fuel in Haines. For the outward journey we took great care to air the MSR bottles, and encountered no problems with carrying them in our luggage. On the return from Juneau to Seattle we had not been able to be so thorough, and one fuel bottle went missing after check-in. No acknowledgement of this confiscation was given other than a Department of Transportation notice stating that the bag had been officially searched.

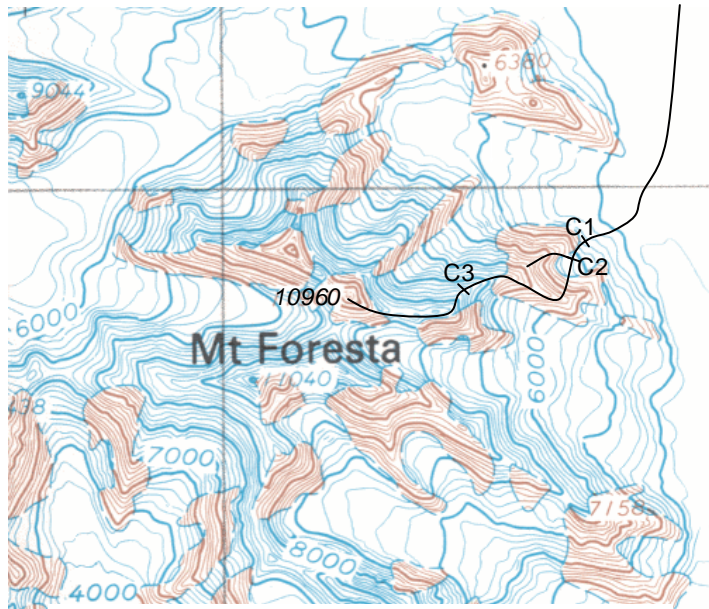
Dates

2 May 2003	Fly Christchurch – Los Angeles – Seattle. Supermarket shopping in Redmond.
3 May	Fly Seattle – Juneau – Haines and by ski plane to Hubbard Glacier.
5 – 10 May	Ascent of Mt Foresta North Peak (see below).
11 – 15 May	Confined to base camp in storm.
16 – 17 May	Attempt on Mt Vancouver E Rib (see below).
18 May	Return to Haines (ski plane flight ordered by Globalstar phone).
19 – 20 May	Ferry to Haines; fly to Seattle.
21 – 30 May	Rock climbing at Leavenworth, Exit 38 and Index, and hiking at Bandara, Washington State.
31 May – 2 Jun	Return to Christchurch.

Mount Foresta

This mountain lies between Mt Vancouver and Mt Seattle, wholly in Alaska. Viewed from the Hubbard Glacier it is a highly attractive massif with multiple pointed summits. The summits lie along two main ridges running roughly east-west. Of these the North Peak is marked as the higher, at 11960ft (3645m), on the 1:250000 map. The only previous ascent of any point on the massif was of the South Peak (11040ft, 3365m), climbed via its West Ridge by Fred Beckey's party in 1979. They selected this summit after their helicopter reconnaissance showed it as the highest point, contrary to the map heights. They climbed in unsettled weather and found the route crevassed, but otherwise straightforward.

No further ascents of the mountain have been reported, but Kurt Gloyer mentioned in 1999 that there had been at least one unsuccessful attempt to repeat the Beckey Route during the 1990s.



Heights in feet. Scale approx 1cm:1.25km

We approached the mountain on 5 May in cloudy conditions, camping close to a serac fall at the base of the NE branch of the E Ridge. Next morning we made excellent progress around the seracs and continued to 6857ft (2090m) on the ridge. Here we could see sustained difficulties ahead and decided to retreat.

During our descent we looked across the avalanche-prone cwm and spotted a line up a shallow snow rib to a point on the E branch of the E Ridge. We tackled the rib early on 7 May, finding the wind-deposited snow less stable than we would have wished. We climbed around the cornice to join the East Ridge at 6400ft (1951m). Above, large detached cornices over a sharp granite ridge made for insecure climbing. The route

felt progressively more committing as we overcame the numerous hidden obstacles including steep rock steps and poorly bridged gaps in the cornice.

After six hours on the ridge the going finally eased, and we made good progress on hard névé to a camp at 8620ft (2635m). Similar conditions above led us surprisingly quickly to the summit on 8 May. More usual conditions (experienced on nearby peaks) involve protracted wading up unconsolidated snow. On the summit, GPS and altimeter readings gave a height of 10960ft (3341m), exactly 1000ft below the map height.



Mount Foresta North Peak (map height 11960ft/3645m) from the Hubbard Glacier

Visually, the South Peak was a little higher, consistent with the 80ft difference between its map height and our measured height.

The following day in warmer conditions our descent of the corniced ridge was even more unnerving, with an unrelenting choice between hanging cornice and crenellated granite crest. In the soft conditions we were reluctant to descend into the cwm, so we camped near the top of the snow rib. Overnight the weather deteriorated, bringing light snow and wind. Seizing the opportunity, we left as soon as visibility allowed. The snow in the cwm felt wet and poorly bonded. We descended without incident, but had to rely entirely on GPS waypoints to navigate our way back to base camp in what were rapidly becoming full storm conditions. A metre of snow fell on the glacier during the next 48 hours.

The following are the GPS waypoints recorded during the climb. The instrument was set to the WGS84 map datum. All readings are based on full 3-D co-ordinates.

	Date recorded	Local time	UTM 07V		N (60 deg)	W (139 deg)
BC	4-May	11:17	593547	6682643	16.18	18.537
W1	5-May	12:04	593428	6677332	13.321	18.813
W2	5-May	12:40	593190	6676888	13.086	19.083
W3	5-May	12:53	593096	6676512	12.885	19.195
Skis stash	5-May	13:08	593006	6676349	12.798	19.297
W4	5-May	13:35	592600	6676169	12.707	19.742
Camp 1	5-May	15:32	592386	6676080	12.662	19.975
Camp 2	6-May	09:29	592081	6675748	12.487	20.315
Rib top	7-May	06:34	591860	6675069	12.124	20.572
Camp 3	8-May	17:48	590306	6675152	12.19	22.251
Summit	8-May	08:29	588430	6675076	12.174	24.283
Camp 4	9-May	13:08	591746	6675092	12.139	20.695

Mount Vancouver

Mount Vancouver is one of the major peaks of the range, forming a huge mass between the Hubbard and Seward Glaciers. Despite its bulk the mountain looks attractive from many angles. This and the large number of ridges have led to a considerable number of routes.

The mountain has 2 main summits on a ridge running N-S. Their highest summit is misidentified on most maps. The N summit is highest at 4812m (15787ft) and takes the name Mount Vancouver. The S summit was originally thought the highest so was used to form the Alaska/Yukon boundary, hence its name Good Neighbour Peak (4785m, 15700ft). Heights are different on every map and in every reference.

Known recent attempts on the mountain are listed below. A full list of prior ascents was given in Expedition Report 99/38, Hubbard Glacier Expedition 1999.

1997	NE Ridge	Attempt	Joe Shutts, Andy Woods, Telluride CO. Day 1 gained 3000ft, day 2 same again but turned round due to weather.
1999	E Rib	Attempt	Paul Knott and Ade Miller retreated at top of icefall.
2001	Route unknown	Attempt	Attempt reported by Kluane Park in AAJ. No details.

We left on 16 May with 9 days' supplies and camped a few hundred metres beyond the base camp site from the 1999 expedition (MEF 99/38) attempting the same route via the East Rib. Conditions had changed radically since the earlier trip, such that we found ourselves navigating around large crevasses in the area the ski plane had landed four years earlier. The icefall above was also dramatically transformed. The overall angle seemed greater, as if the main glacier level had dropped, and on the left side a huge disintegrating ice face had appeared. Only a narrow line of smooth snow remained as a possible route.

The next morning, within 30 minutes we found ourselves entering a labyrinth that would clearly take many hours to navigate. It seemed certain we would eventually find an impasse, and in the meantime be at considerable risk of crevasse fall. Later reflection showed that it was another 2km to the end of the difficulties experienced in 1999, and that the most broken area had not even been visible to us.



Icefall as at 17 May 2003



Icefall as at 31 May 1999



Icefall as at 30 May 1996

The three pictures show the same area of icefall leading to the cwm S of the NE Ridge of Mt Vancouver. The icefall must be passed to reach the E Rib at the back of the cwm. The 1999 expedition (MEF 99/38) found easy slopes in the 'trench' between the two joining glaciers (a small area hidden from view was passed by climbing between blocks over snow-choked crevasses). In 2003 the trench is shown to be less distinct and the easy slopes have largely gone. There were major hidden crevasses even in the smoother-looking foreground.

The same area taken from across the Hubbard Glacier in 1996 also shows no smooth trench (the original plan in 1999 was to take the N side of the cwm as used by the 1975 team on the NE Ridge, but this looked impassable in 1999 as well as in 2003). The only possible line through this part of the

icefall would be further left. It was this left-hand line that we attempted in 2003. It might be concluded that the conditions found in 1999 were unusually favourable.

After our attempt to reach the E Rib we picked up the skis and sleds to make the trip round to the N side of the mountain. This side has been climbed once by one route, the North Ridge climbed by a Japanese team in 1975. It is unclear whether this team climbed the lower part of the ridge from the NW or NE. We could see problem seracs on the NE variant and a crevassed area leading up to the NW variant. The crevasses were probably passable, but we were also concerned about the fresh snow deposited on this side of the mountain from the storm and overall were not sufficiently inspired to squeeze in an ascent of this route.

The following are the GPS waypoints recorded during the climb. The instrument was set to the WGS84 map datum. All readings are based on full 3-D co-ordinates.

	Date recorded	Local time	UTM 07V		N (60 deg)	W (139 deg)
V1	16-May	09:43	584442	6690712	20.645	28.205
V2	16-May	11:10	582140	6690867	20.757	30.703
V3	16-May	11:22	581937	6690940	20.799	30.923
V Camp 1	16-May	12:42	581716	6690977	20.821	31.161
V5	17-May	04:38	581423	6691009	20.842	31.479

Weather and geographical notes

The weather during our trip could be described as normal or good for this range, with prolonged settled spells and one 5-day storm. In other respects conditions were atypical, as might be expected after an El Niño winter (which in Alaska means warmer than average) and a low-snowfall year in 2002. Haines had recorded half its average winter precipitation. Low snowfall seemed to have similarly affected the mountains. Two weeks of warm settled weather in late April had exacerbated the effect, resulting in the melt crust and crevasse lines on the Hubbard Glacier and the firm névé on Mt Foresta.

The change in the icefall by Mt Vancouver seemed dramatic even after taking into account the low snowfall. This may be associated with the Hubbard Glacier's surge in 2002, which blocked the Russell Fjord for the first time since 1986.

The findings regarding the height of Mt Foresta were forwarded to the US Geological Survey. Their reply is copied below:

"Your message was forwarded to the USGS Earth Science Information Center in Anchorage, Alaska.

It appears that you are correct in your assumption that the elevation given for Mt. Foresta on the 1:250,000-scale Mt. St. Elias topographic quadrangle is a typo. Looking at the contour lines, it jumps 1,000 feet nearly instantly from the 10,000 foot to the 11,000 foot contour then adds more 200 foot intervals above that. This problem does not exist on the more-detailed Mt. St. Elias A-4 quadrangle, where the highest contour line is right at 11,000 feet -- much closer to what you measured.

I'll pass this information along to our mapping center. Thanks for bringing it to our attention."

Greg Durocher
gfdurocher@usgs.gov

Equipment and technique notes

The most important learning point during the trip concerned looking after the tent flysheets in heavy snow conditions. At one point the tents were almost buried by snow. This was hard to avoid and did not present any apparent problem given that we were using strong geodesic tents (Wild Country/Terra Nova Quasars). We cleared the snow using a polycarbonate snow shovel, and afterwards found small nicks and tears in both flysheets. This was almost certainly due to the high flysheet tension and the

presence of sharp burrs on the shovel blade (these shovels are susceptible to such burrs being created in use). The problem could be avoided by avoiding excessive flysheet tension where possible, and only using mittens and/or a 'snow claw' to clear snow from the tent (the 'snow claw' is a handle-less shovel made in soft, flexible plastic that does not seem to gain sharp edges in use).

Paul used skis on the glacier, and Erik snowshoes. This apparently incompatible combination usually worked well, but this was probably due to outstanding athletic performance on Erik's part. The biggest differences in effort between the two arose on slightly downhill terrain where skins were not being used, and in late afternoon when the snow was soft. Skins had to be used on the skis when pulling a sled.

As on previous trips, separate rescue ropes were always carried for crevasse rescue when on the glacier. This allows travel at up to 50m apart (in case the crevasses are large) whilst retaining the ability to perform the all-important dropped-loop rescue.

No attempt was made on this trip to adopt the fashionable 'continuous push' climbing style. On exploratory climbs in this range, uncertainties about the route and weather mitigate against it, as do the heat and snow conditions for a long period in afternoon/evening. Conversely, traditional 'alpine style' worked well for us because no extra clothes and little technical gear needed be carried, and the comparatively low altitude meant the sacs did not hold us back to a great extent.

Environmental notes

All non-human waste from the trip was returned to Haines and disposed of via the Hotel Halsingland. Human waste was buried as far as conditions allowed. Surplus food and fuel was donated to the climbing school in Haines, so that it would be put to good use.

The only items we left on the mountain were two abseil slings we used for the descent. At base camp some of our glacier wands were probably buried in the storm, having already fallen over during our time on Mt Foresta. They did not emerge during our stay, and probably never will.

Other climbing teams

We met no climbing teams at all during the trip, and also saw no light aircraft movements. The absence of aircraft movements in the area is undoubtedly a reflection of the lack of a glacier pilot operating from Yakutat.

We heard of a team from Anchorage who flew in with Paul Claus and climbed the S Spur (presumably the 1993 Pilling/Diedrich Route) on Mt Vancouver. The same team continued to attempt King Peak. Conditions here were apparently unfavourable, with avalanche danger on the SW Face.

On Mt Logan, weather conditions after mid-May seemed to become unsettled, with storms 19-20 May then 22-29 May. Several parties attempting the E Ridge turned back low down. A number of parties for this route and the King Trench flew in by large helicopter, as Andy Williams' plane was out of action for a week due to a minor accident (a ski broke through the crust, resulting in a dented wing tip). The cost of the helicopter flight was relatively reasonable at C\$700 per person rather than the usual C\$425 for the ski plane.

Finances

Expenditure

		NZ\$	US\$	GB£	Totals (GB£)
Travel	CHC airport shuttles	75.00			
	Air NZ CHC-LAX	2,003.00			
	Qantas CHC-LAX	1,718.00			
	Alaska Air LAX-JNU	1,771.80			
	Wings of Alaska		262.80		
	Alaska Air excess baggage		100.00		
	Paul Swanstrom		1300.00		
	Alaska Marine Highway		54.00		
	Taxi fares (Juneau)		48.00		
	Alaska Air change fees		100.00		
	Juneau Hostel		20.00		
	Halsingland Hotel		228.27		
					3,216.57
Permits	Kluane Park	126.90			44.42
Food and stores	Glacier wands	4.99			
	GPS batteries	20.00			
	Countdown food	229.14			
	Fresh Choice food	39.02			
	Bivouac food	152.00			
	South City food	8.40			
	Fred Meyer food		286.58		
	Safeway food		28.00		
	Mountain Madness food		12.00		
	Coleman fuel		43.85		
					381.00
Insurance	NZAC (Terribles policy)	590.00			206.50
Other	Postage	10.00			
	Faxes	7.80			
	Phone calls	7.84			
	Calling card phone calls			2.96	
	Globalstar phone & calls	543.64			
	Report costs	43.09			
					217.29
Total					£4065.78

Equipment costs and expenses associated with climbing in Washington are excluded from the above.
Exchange rates used: 1NZ\$=0.35GB£; 1US\$=0.6GB£

Income

		GB£
	Mount Everest Foundation	550.00
	British Mountaineering Council	1300.00
	Individual Contributions	2215.78
Total		£4065.78