

## Sea Ice Notes Cape Hallett, 2003/2004 Season

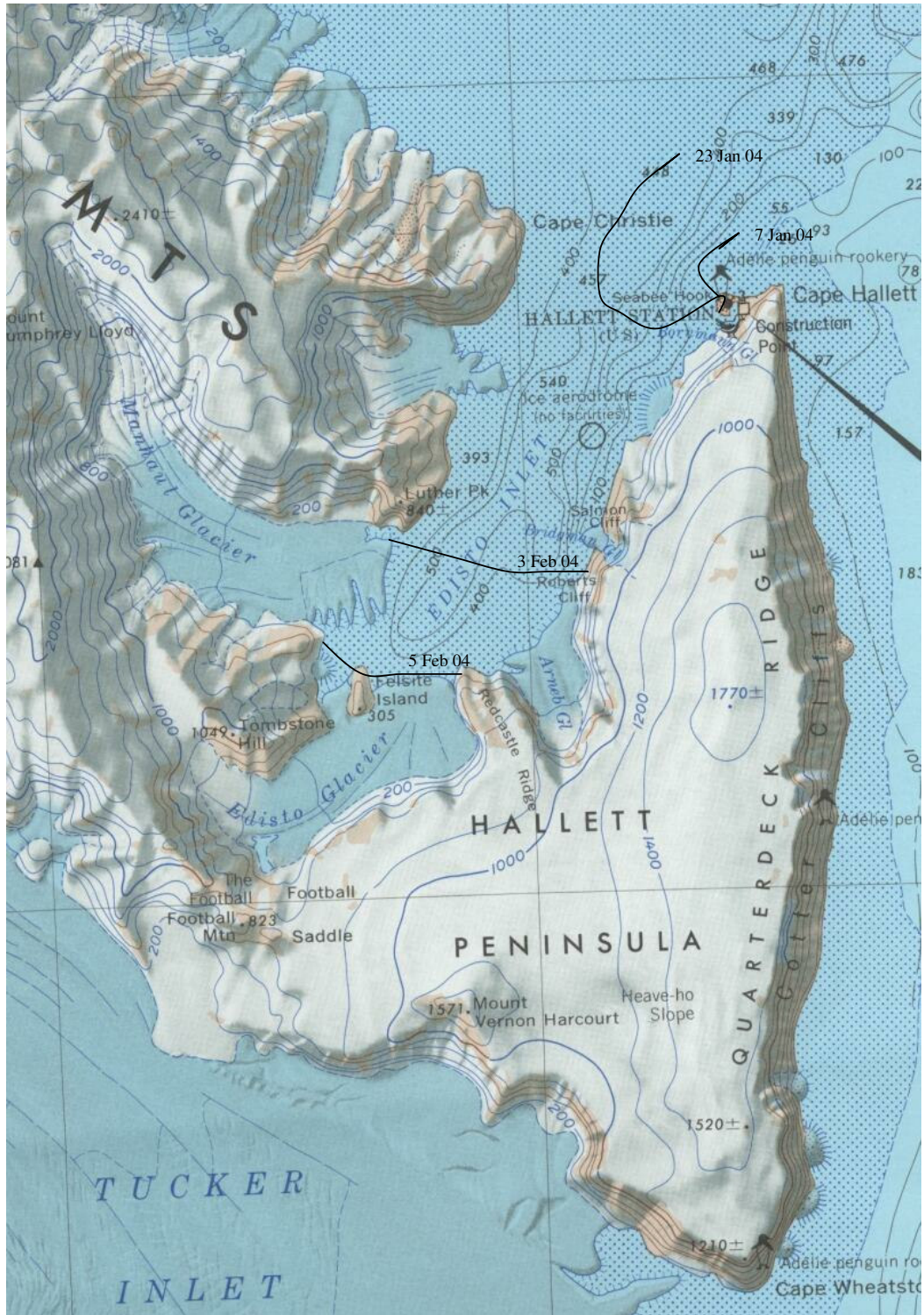
### Rachel Brown/ Gus McAllister

Compiled by Peter Cleary.

Information from conversation 13 Feb 04 & from LGP Manager reports of Dec15, Jan 11, Jan 20, Feb 3

Date	Comments
3 Nov 03	Fast ice thickness 1.6m to 3m, little snow cover, hard blue ice, some of it multi year internal temperature $-6^{\circ}\text{C}$ . Willett Cove is 2m, frozen to bottom, probably very old ice. After 13 days of snow and blowing snow, ice in NE reaches of Edisto Inlet became saturated to 600mm of surface with a dull grey colour. The thinnest ice being 1.3m in sea ice closest to Seabee Hook, This could be related to the strong current. Internal sea ice temperature rose to $-3^{\circ}\text{C}$ . The ice to the west and south still 3m thick
28 Nov 03	Open crack noted
5 Dec 03	Approx, sea ice edge beyond horizon from ridge behind camp
12 Dec 03	Kapitan Khlebnikov reports sea ice is fast at 7 nautical miles east of C Hallett running on a line NNW-SSE
13 Dec 03	Open water moats around icebergs within 100m of Seabee Hook
17-22 Dec 03	Major land melt with surface flooding in Willett Cove
24 Dec 03	Sea ice cracks on north side of Seabee Hook and out at C Hallett open and active
30 Dec 03	C Hallett crack now wide open and joining first open crack 400m out, surrounding ice is 600mm and saturated. Ice at 'Crack One' is 1.2m and saturated, several sites on walking route is 800mm and saturated so route closed
1 Jan 04	Holey Berg [landmark berg noted named for the large hole in it] collapsed
6 Jan 04	Open water from beach. Polynia, approx 400m x 400m, north off Seabee Hook and east to C Hallett
11 Jan 04	Sea ice $>-2.8^{\circ}\text{C}$ and saturated, i.e. period 4
15 Jan 04	Swell noticeable
18 Jan 04	Cracks WNW from Seabee Hook
19 Jan 04	Very high tide had water reach guy ropes of tents
22 Jan 04	Open water at Seabee Hook, opening of Willett Cove
3 Feb 04	Ice edge from Manhaul Glacier to Roberts Cliffs
5 Feb 04	Ice edge to Edisto Glacier, blown out during 3 day storm

# Approximate sea ice edges at Cape Hallett, 03/04 Season





**Figure 1 Seabee Hook before sea ice breakout**



**Figure 3 Sea ice extent on January 7th 2004**



**Figure 2 Sea ice extent on January 23rd 2004**



**Figure 4 Pack ice around Cape Hallett on January 23rd 2004**



**Figure 5 Edisto Inlet completely ice-free February 6th 2004**