

Explanation of files in Appendix H

H-1 Ice thickness map - March.jpg

Map of locations of holes drilled to measure ice thickness in March

H-2 Ice thickness (from hole surveys).pdf

Ice thickness for each numbered hole in **Ice thickness map - March.jpg**

H-3 Average ice thickness.pdf

Average ice thickness for time periods identified in Appendix A. Explanations of sources. Not prime source of ice thickness for global pressures.




H-4 Sites #1 & #2 March 13-14, 1986.pdf

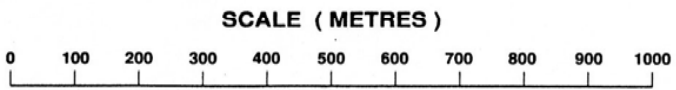
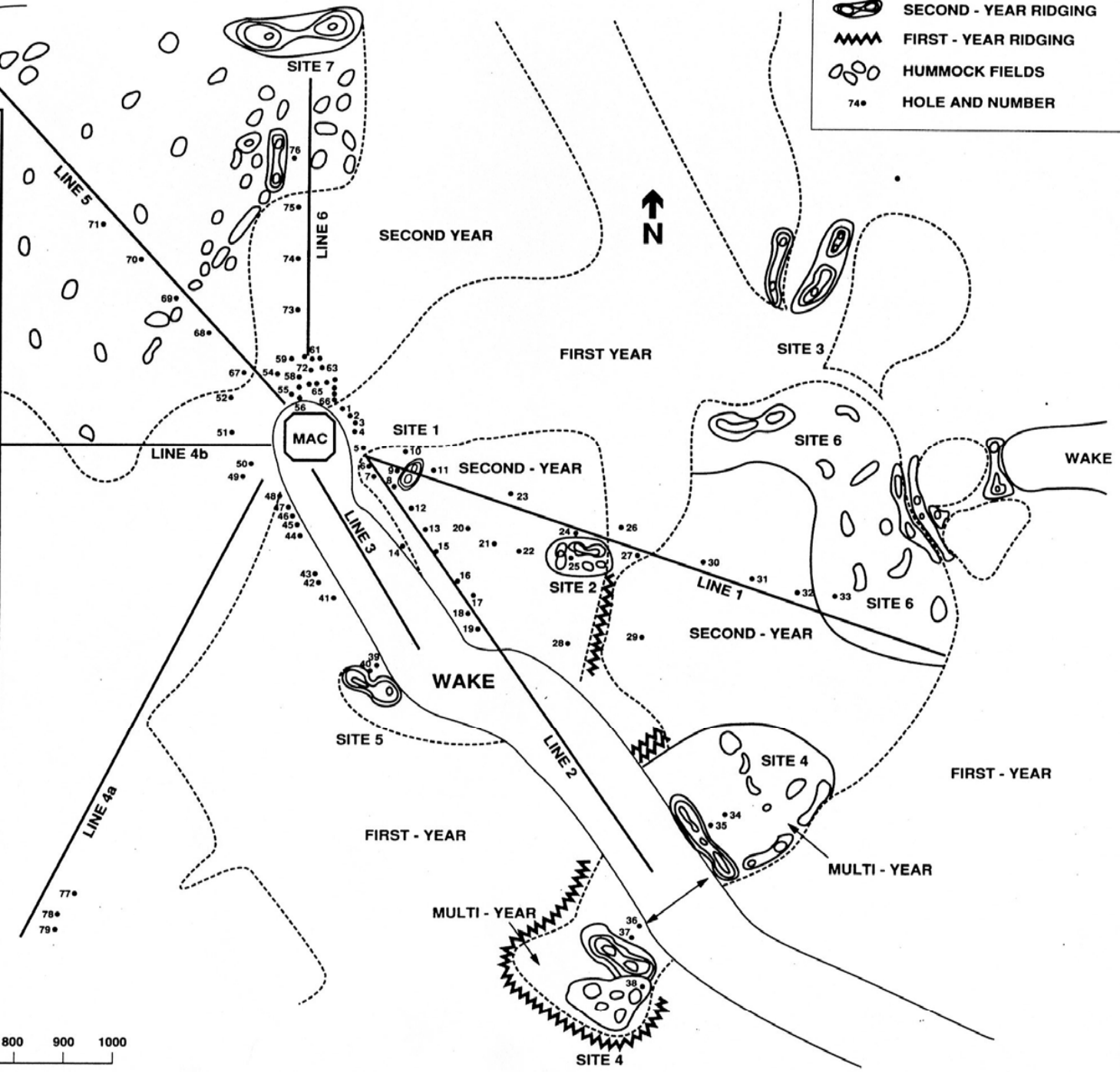
Field notes of measurements at Sites #1 and #2, see **Ice thickness map - March.jpg** for locations.

HOLE SUMMARY
Depth m (Freeboard cm)

- 2.7	30 - 3.0 (75)	59 - 3.2
- 1.6	31 - 3.85 (65)	60 - 3.0
- 1.22 (0)	32 - 3.05 (65)	61 - 3.2
- 1.27 (8)	33 - 7.0 (105)	62 - 1.5
- 1.28 (15)	34 - 4.75 (55)	63 - 3.2
- 3.52 (60)	35 - 7.0 (70)	64 - 2.8
- 5.1 (140)	36 - 4.55 (60)	65 - 2.3
- 2.3 (15)	37 - 4.6 (70)	66 - 2.9
- 3.85 (40)	38 - 10.5 (140)	67 - 4.55 (65)
- 3.0 (35)	39 - 3.0 slush	68 - 4.4 (30)
- 2.45 (30)	40 - 1.4 blocks	69 - >6
- 3.0 (15)	41 - 6 (150)	70 - 4.6 (35)
- 3.7 (40)	42 - 2.35 (35)	71 - >6
- 1.4 blocks	43 - 3.5 (60)	72 - 2.65 (55)
- 2.4 (30)	44 - 4.0	73 - 3.6 (25)
- 2.0 (30)	45 - 1.7	74 - 4.2 (120)
- 2.85 (30)	46 - 2.5	75 - 3.1 (30)
- 4.0	47 - 1.3	76 - 6.0
- 2.5	48 - 2.8	77 - 3.45
- >6	49 - 4.65	78 - 5.2
- 2.35 (30)	50 - 2.8	79 - 4.8
- 4.6	51 - 2.9	
- 3.3 (40)	52 - 3.0	
- 2.0 (25)	53 - 3.3	
- 6/8 (150)	54 - 3.3	
- 1.4 (10)	55 - 2.9	
- 1.5	56 - 3.25	
- 2.5	57 - 2.1	
- 2.8	58 - 3.2	

KEY

- ICE TYPE BOUNDARIES
-  SECOND - YEAR RIDGING
-  FIRST - YEAR RIDGING
-  HUMMOCK FIELDS
- 74• HOLE AND NUMBER



H-2 Ice thickness from drill hole survey

Number on plot	Ice thickness (m)	Freeboard (cm)	Designation in surveys*	Notes from report CHC 14-63
1	2.7			FY area in plot
2	1.6			FY area in plot
3	1.22	0	W1	level FY ice, 12 cm snow; 35 m from NE corner of E caisson
4	1.27	8	W2	level FY ice, 20 cm snow; 20 m south of W1
5	1.28	15	W3	level FY ice, 8 cm snow; 20 m south of W2
6	3.52	60	W4	HARD and Consolidated, SY ice; 35 m from SE corner E caisson
7	5.1	140	W5	HARD and consolidated, SY hummock; 66 m along line 2
8	2.3	15	W6	SY with FY blocks, not Hard, blocks underneath, 10 cm new snow, 100 m line 2
9	3.85	40	hole #1 site #1	consolidated to 3.5 m
				Site #1, see description* (MY hummock 100 m east of E caisson); April 12, 08:30
10	3.0	35	V2	in SY area
11	2.45	30		in SY area
12	3.0	15	W7	semi-hard, small SY hummock, 150 m line 2; April 12, 09:00
13	3.7	40	W8	SY ice, HARD, 20 cm snow, 200 m line 2
14	1.4?		W12	9 m+, 1.6 m fb, void at 1.4 m, level FY rubble, near W8 at edge of wake
15	2.4	30	W9	SY ice, no snow, 250 m line 2
16	2.0	30	W10	SY ice, 300 m line 3
17	2.85	30	W11	SY ice, no snow, small hummock, 350 m line 2, same to 480 m on line 2
18	4.0			in SY area
19	2.5			in SY area
20	>6		M2	large hummock (1/2 m), HARD, in small are of SY hummocks
21	2.35	30	M1	small smooth SY hummock
22	4.6		V3	in SY area
23	3.3	40		in SY area
24	2.0	25	2b	Site #2, level SY ice
25	6.8	150	2c	Site #2, small SY hummock, > 4.5 m; not sure where 6.8 m comes from?
26	1.4	10	2a	level FY ice
27	1.5		V5	FY ice
28	2.5		V4	in SY area
29	2.8		V6	in SY area
30	3.0	75		in SY area
31	3.85	65		in SY area
32	3.05	65		in SY area
33	7.0	105		Site # 6 SY
34	4.75	55		Site #4; multi-year floe, Mar. 7 17:30 and Apr. 12 13:00 contacted leading edge of floe
35	7.0	70		Site #4

Number on plot	Ice thickness (m)	Freeboard (cm)	Designation in surveys*	Notes from report CHC 14-63
36	4.44	60		Site #4
37	4.6	70		Site #4
38	10.5	140		Site #4
39	3.0			slush
40	1.4			Blocks, FY?
41	6	150		in FY area but thickness too great
42	2.35	35		in FY area but thickness too great
43	3.5	60		in FY area but thickness too great
44	4			in FY area but thickness too great
45	1.7			FY
46	2.5			FY?
47	1.3			FY
48	2.8			SY ice
49	4.65			SY ice
50	2.8			SY ice
51	2.9			SY ice
52	3.0			SY ice
53	3.3			SY ice
54	3.3			SY ice
55	2.9			SY ice, close to N face
56	3.25			SY ice, closest to N face, for March 25 event
57	2.1			SY ice, close to N face
58	3.2			SY ice, close to N face
59	3.2			SY ice, close to N face
60	3.0			SY ice, close to N face
61	3.2			SY ice, close to N face
62	1.5			SY ice, close to N face
63	3.2			SY ice, close to N face
64	2.8			SY ice, close to N face
65	2.3			SY ice, close to N face
66	2.9			SY ice, closest to N face, for March 25 event
67	4.55			SY ice
68	4.4			SY ice
69	>6			SY ice
70	4.6			SY ice
71	>6			SY ice
72	2.65			SY ice
73	3.6			SY ice
74	4.2			SY ice
75	3.1			SY ice
76	6.0			SY ice
77	3.45			SY ice
78	5.2			SY ice
79	4.8			SY ice

* refer to Sites #1 and #2 in file: H-4 **Sites #1 & #2 - March 13-14, 1986.pdf**

H-3 Average Ice Thickness

Time period # (See Appendix A)	Period of interest (approx. times)		Average thickness (m)	Notes
	Start	End		
1	10-Nov-85 02:00	10-Nov-85 16:00		
2	19-Nov-85 03:00	19-Nov-85 11:00		
3	27-Nov-85 12:00	27-Nov-85 14:00		
4	16-Dec-85 08:00	16-Dec-85 10:00		
5	07-Mar-86 12:00	07-Mar-86 18:00		
	15:45	16:45	5.2	site #4; holes 34, 35, 36, 37
6	08-Mar-86 15:00	08-Mar-86 23:00		
	15:00	17:30	3.5*	holes 28, 12, 13, 14, 15, 16, 17, 18, 19, 39, 40, 41, 42, 43
	17:30	18:36	4.3	holes 44, 45, 46, 47, 48, 49, 50, 6, 7
	21:10	22:20	2.6*	stdev 0.6 m; 26 measurements on March 9
	22:26	23:00	2.6*	stdev 0.6 m; 26 measurements on March 9
7	22-Mar-86 23:00	23-Mar-86 16:00		
8	25-Mar-86 08:00	25-Mar-86 11:00	3.5*	1.3 std dev, n=19, from March 9 measurements
9	25-Mar-86 14:00	25-Mar-86 17:00	3.5*	1.3 std dev, n=19, from March 9 measurements
10**	27-Mar-86 17:35	?	3.5*	1.3 std dev, n=19, from March 9 measurements
11**	06-Apr-86 22:30	07-Apr-86 05:00	3.5*	1.3 std dev, n=19, from March 9 measurements
12	11-Apr-86 21:30	12-Apr-86 07:00	1.6	holes 1, 2, 3, 4, 5
13	12-Apr-86 07:00	12-Apr-86 10:14	3.3	holes 6, 7, 8, 9, 10, 11, 12; hummock ~10 m
14	12-Apr-86 10:14	12-Apr-86 12:57	3.5	same as March 8 15:00 to 17:30
15	12-Apr-86 12:57	12-Apr-86 14:35	5.9	Site #4, holes 34, 35
16	12-May-86 02:45	12-May-86 04:30	2.5 est	see report
17	22-May-86 08:00	22-May-86 09:45	2.5 est	see report
18	22-May-86 14:30	22-May-86 16:00	3.5 est	see report
19	02-Jun-86 13:00	02-Jun-86 14:20	2.3 est	see report
20	02-Jun-86 20:00	02-Jun-86 21:30	2.3 est	see report
21	25-Jun-86 05:30	25-Jun-86 06:45	2 est	see report

* no load on lower panel

** ignored; no, or very low load

SITE #1

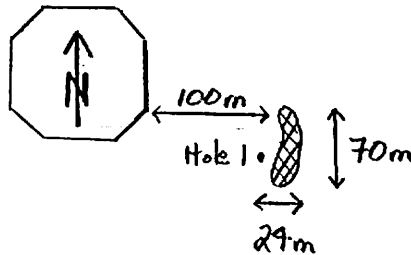
March 13, 1986

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Ridge # 1 (Solitary feature)

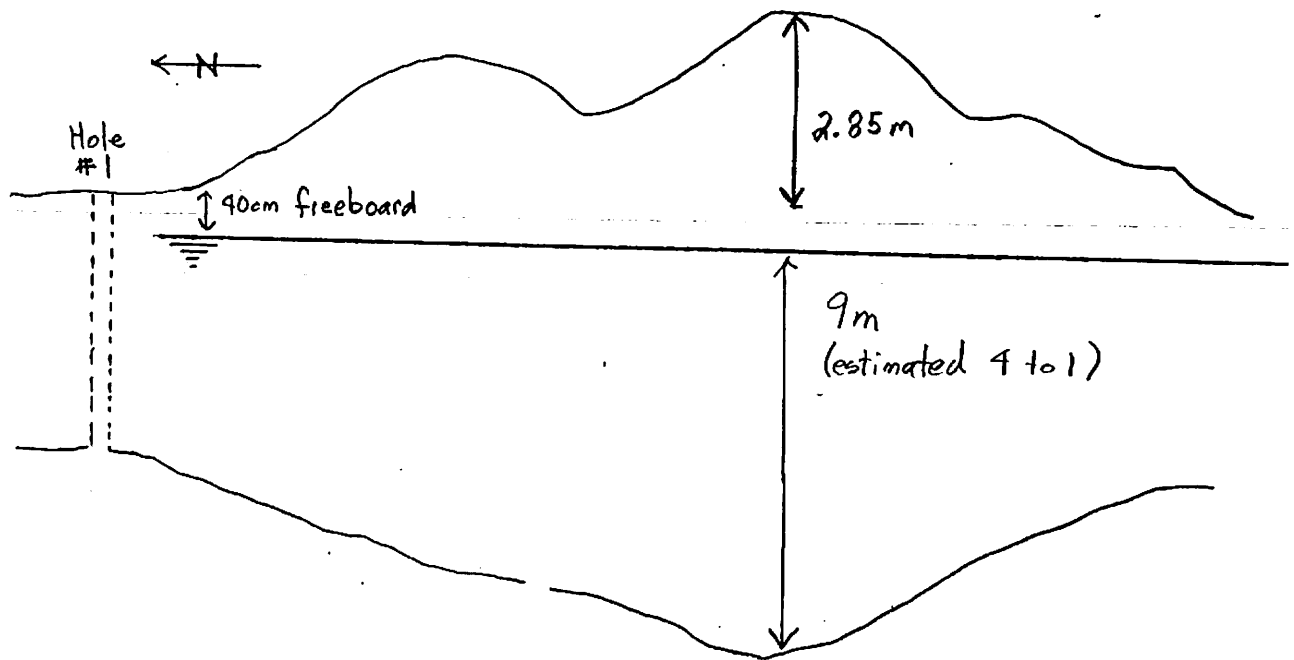
- consolidated multi-year ridge, 3m sail height
- 70m x 29m
- smooth rounded ridge, no blocks evident
- orientation: $010^\circ T$
- located 100m east of cession.
- this is considered a marginal hazard



Hole #1: -3.85m.

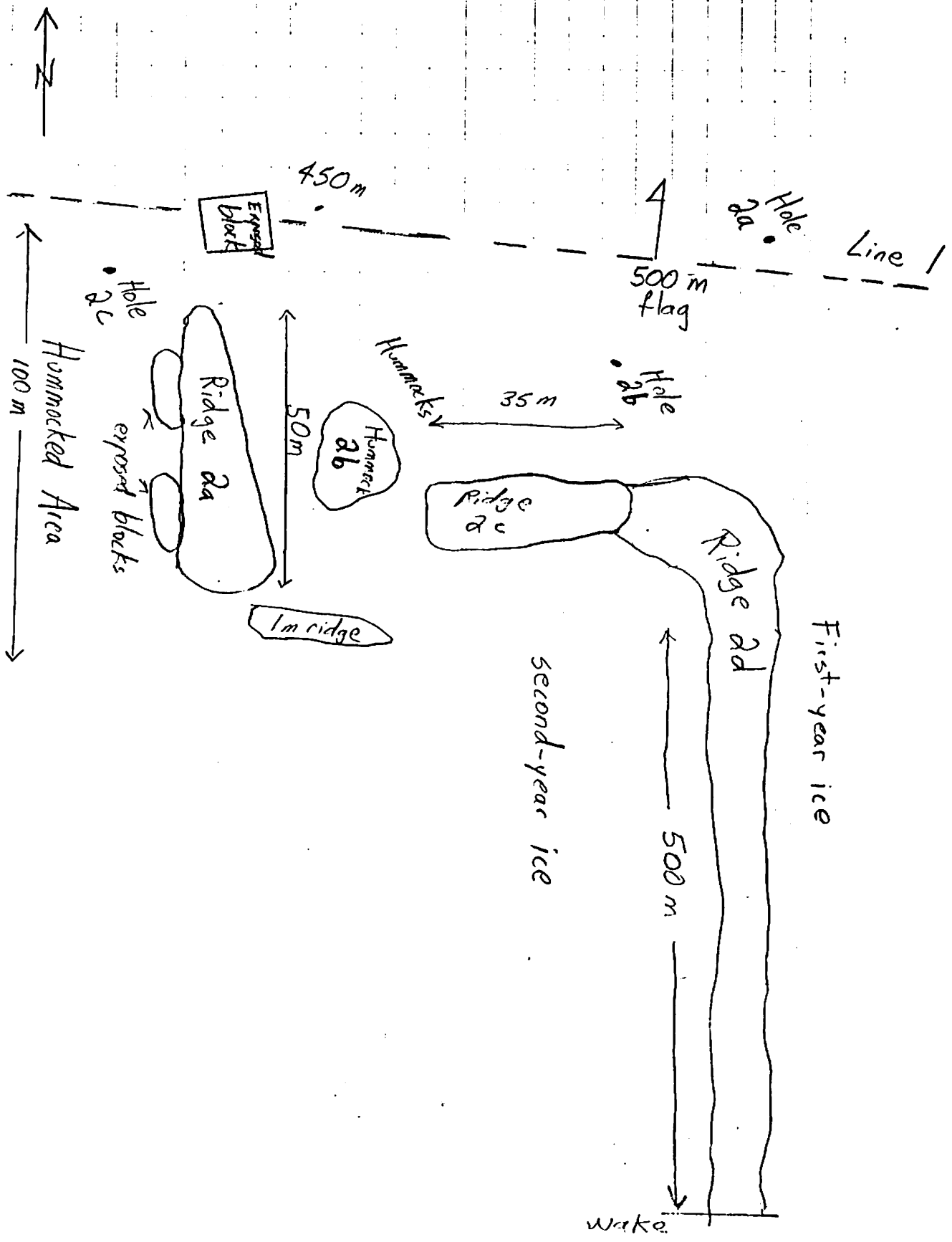
-40cm freeboard.

-consolidated to 3.5m.



Site # 2

March 19/86



Site #2

March 14, 1986

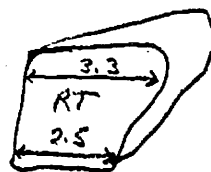
(1 of 3)

Location: On line 1, 450 m from MAC,

- an area of hummocks, second year ridges and first-year ridging.
- ridged where the first-year meets the second-year.

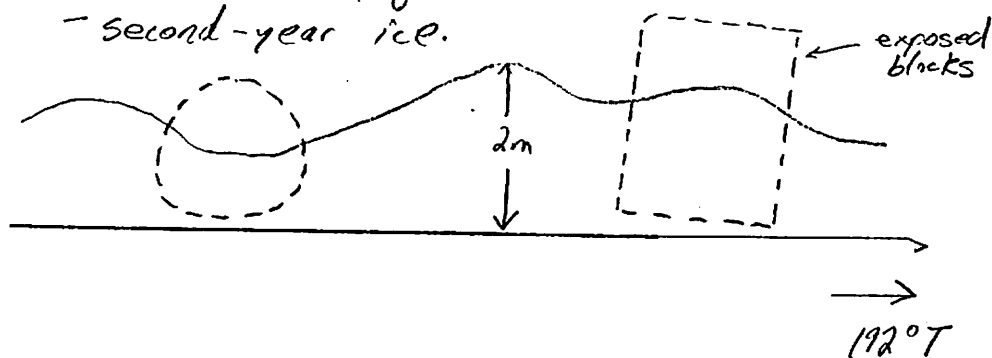
Features: Exposed section (Block)

- 3.3 m long at top
- 2.5 m long at bottom
- second-year ice



Ridge 2a

- orientation $192^\circ T$
- consolidated with two exposed blocks, second year
- 50m long x 16.5m wide
- 2m sail height
- second-year ice.



Hummock 2b

- consolidated, smooth
- 20×20 m
- 1.8m high

Site #2 (continued, 2 of 3)

- Ridge 2c
- orientation $090^{\circ}T$
 - consolidated second-year, smooth
 - 35 m long
 - 2.5 m sail height



- Ridge 2d
- orientation $180^{\circ}T$
 - unconsolidated first-year, blocks.
 - 2.5 m to 3.5 m high
 - starts at the east end of ridge 2c and continues along flow margin to the wake
 - approximately 500 m long.

- Hole 2a
- 1.4 m
 - freeboard 10 cm
 - level first-year ice

- Hole 2b
- 2.0 m
 - freeboard 25 cm
 - second-year ice

- Hole 2c
- > 4.5 m
 - small second-year hummock

Site #2 (continued, 3 of 3)

Notes: due to the density of hummocking and second-year ridging at the eastern edge of the floe backed by first-year ridging this area is believed to be hazardous.