

CANADA

DEPARTMENT OF ENERGY, MINES AND RESOURCES

Geological Survey of Canada



AEROMAGNETIC SURVEY DATA – BAFFIN BAY, NORTH ATLANTIC  
AND ARCTIC OCEANS AND HUDSON BAY

Margaret E. Bower

OPEN FILE 426

*Library copy 5 Map Sheets  
plus 38 page text*

OTTAWA  
1977

*March  
1977*

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## NORTHSTAR TOTAL FIELD MAGNETOMETER DATA

Tape # ..U.T.!!2!...  
Ns003

[illegible]

## NORTHSTAR TOTAL FIELD MAGNETOMETER DATA

Tape # ~~051390~~ 051121  
NS003

FILE # BLOCKS	LINE	FLIGHT DATE	TIME	LAT	LONG	MAP #	ASL	COMMENTS
1 cont. 108	19740514	20-4-74	15 41 30	START		4	1000	BREAK 1548-1550.20
			1549	76-44	73-30			
			1604	77-29	73-30			LINES 5, 14
			1613	78-00	72-22		1500	
			1629	78-00	75-48			TRANSIT TO LINE 22
				END				
				START				
1	19740022	20-4-74	1657	78-43	74-08	4	1000	LINE 22
			1703	78-38	72-47			
			1713	78-33	74-00			
			1723	78-10	75-15			
		2.51	1734 20	END				
2 61	19741213	20-4-74	1737 20	START		4	1000	
			1741 $\frac{1}{2}$	77-54	77-00			LINES 12, 13
			1802	76-58	77-00			
			1808	77-00	77-35			
			1827	77-55	77-30			
				END				TRANSIT TO LINE 70 D

## NORTHSTAR TOTAL FIELD MAGNETOMETER DATA

Tape # 017394 1121  
Ns003.

FILE # BLOCKS	LINE	FLIGHT DATE	TIME	LAT	LONG	MAP #	ASL	COMMENTS
2 CONT. 61	19740010	20-4-74		START		4	1000	LINE 10
			1851	77-47	76-00			
			1858	77-28	76-00			
			1909 $\frac{1}{2}$	76-54	76-00			
		1-39	1916 50	END				
3 46	19740011	20-4-74	1919	76-55	76-35	4	1000	LINE 11
			1930	77-27	76-37			
			1938	77-51	76-38			
				END				
	19740009	20-4-74		START		4	1000	
			1950	77-44	75-30			LINE 9
			2009	76-52	75-30			
		1-16	20 33 50	END				
4 35	19747NS1	22-4-74	15 21 20	START		4	1000	TRANSIT
			1538	76-36	72-08			
			1538	76-43	73-20			
			1553.8	76-48	75-05			
				END				



NORTHSTAR TOTAL FIELD MAGNETOMETER DATA

Tape # UT-2870 1121  
N8003

FILE # BLOCKS	LINE	FLIGHT DATE	TIME	LAT	LONG	MAP #	ASL	COMMENTS
4 con1 35	14740008	22-4-74		START		4		
			1553.8	76-44	75-05			LINE 8
			1609.5	77-30	75-07			
			1613.5	77-40	75-12			
		0.55	1616 10	END				
			1617 00	START		4		
5 97	19741519	22-4-74	1629	78-08	75-32		1000	LINES 15, 16, 17, 18, 19
			1641	78-08	72-58			
			1645	78-11	73-08			
			1653.8	78-16	75-04			
			1657	78-20	75-00			
			1705.5	78-16	73-00			
			1707	78-20	72-59			
			1719.5	78-27	75-27			
			1723.3	78-32	75-00			
			1732.5	78-22	72-50			
				END				
"	19742022	22-4-74		START		4	1000	LINES 20, 21, 22
			1737	78-29	72-46			

## NORTHSTAR TOTAL FIELD MAGNETOMETER DATA

Tape # 077890 1121  
NS003

FILE # BLOCKS	LINE	FLIGHT DATE	TIME	LAT	LONG	MAP #	ASC	COMMENTS
5 CONT. 97			1747.5	78-32	74-31			<del>TRANSIT</del>
			1750	78-40	74-20			
			1800	78-32	72-34			
			1803	78-34	71-55			
			1814.3	78-44	74-10			
				END				
"	1974TNS2	22-4-74		START		4	1000	TRANSIT
			1819.3	78-44	74-10			
			1827	78-26	72-42			
			1836	78-12	73-17			
			1848.3	77-49	74-05"			
		2.36		END				
"	19740706	22-4-74		START			1000	LING 76.2
6			1849.8	77-37	74-35			BREAK AT 1853 - START
48			1904.8	76-49	74-30			NEXT FILE AT 185520
			1909	76-47	74-00			
			1915	77-04	74-00			
			1923	77-34	74-00			
			1940	77-18	72-00			

## NORTHSTAR TOTAL FIELD MAGNETOMETER DATA

Tape # ...077740... 1121  
NS003

FILE # BLOCKS	LINE	FLIGHT DATE	TIME	LAT	LONG	MAP #	ASL	COMMENTS
6 CONT 44			1954	76-36	72-00			
				END				
	19740001	22-4-74		START			1000	
			1957	76-37	71-30			
			2013.5	77-51	71-30			REPEATED
			2022	77-02	71-30			
		1.17	2012.10	END				BROKE OFF LINE 1
7 124	19742627	23-4-74	143300	START		3	1000	
			1458	76-00	67-15			
			1510	75-41	69-10			
			1550	74-35	75-03			
			1618	73-40	78-55			
			1651	74-55	79-18			
			1720	75-48	74-15			
			1746	76-21	69-25			
		3.14	174730	END				
8 34	19740501	23-4-74	180100	START		4	1000	REPEAT 5 + 1
			1812	76-44	73-30			

## NORTHSTAR TOTAL FIELD MAGNETOMETER DATA

Tape # U.T.7390..1121

NS 003

FILE # BLOCKS	LINE	FLIGHT DATE	TIME	LAT	LONG	MAP #	ASL	COMMENTS
8 CONT 34			1827	77-29	73-30			
			1840	77-51	71-30			
			1855	76-37	71-30			
		0.52.	185330	END				
9 190	19740024	25-4-74	14 29 20	START		3	1000	TRANSIT
			1540	75-34	58-45			
			1631	74-10	66-45			
			1651	73-31	69-40			
			1727	72-24	73-51			
				END				BREAK 172710 - 172920
"	19740025	25-4-74		START		3	1000	
			1752	73-19	75-25			
			1825	74-22	71-00			
			1853	75-12	66-50			
			1928	76-04	61-10			
		5.00	192920	END				

190410

(7)

## NORTHSTAR TOTAL FIELD MAGNETOMETER DATA

Tape # UT 1121  
NS 003

FILE # BLOCKS	LINE	FLIGHT DATE	TIME	LAT	LONG	MAP #	ASL	COMMENTS
10	14750129	7-4-75	19 19 40	START			1000	NANSEN SOUND.
120			19 19 00	80-51	78-57			PT. 1 LATE START
			19 20 50	80-46	78-42			2
			19 24 55	80-49	79-37			3
			19 29 15	80-40	79-36			4
			19 32 40	80-42	80-33			5
			19 38 13	80-30	80-25			6
			19 43 15	80-37	81-25			7
			19 48 04	80-24	81-51			8
			19 53 16	80-33	82-45			9
			19 59 48	80-20	83-13			10
			20 05 48	80-32	83-45			11
			20 12 48	80-16	84-15			12
			20 20 34	80-32	85-32			13
			20 26 34	80-19	86-22			14
			20 34 22	80-36	86-43			15
			20 42 52	80-29	87-35			16
			20 47 12	80-40	87-50			17
			20 53 40	80-32	89-23			18
			21 00 22	80-47	88-47			19
			21 08 16	80-41	90-35			20

## NORTHSTAR TOTAL FIELD MAGNETOMETER DATA

Tape # 071121.....

NLS 003

FILE # BLOCKS	LINE	FLIGHT DATE	TIME	LAT	LONG	MAP #	ASL	COMMENTS
10 CONT	19750129	7-4-75	211804	80-55	89-25		1000	PT 21 - CONT. OF F100
120			212728	80-57	91-26			22
			213635	81-10	90-18			23
			214746	81-10	91-47			24
			215510	81-22	91-25			25
			220308	81-17	92-30			26
			220912	81-29	91-54			27
			221707	81-23	93-31			28
			222735	81-40	91-55			29
		3.09	222810	END				
11	19752936	7-4-35	222720	START			1000	
95			222735	81-40	91-55			PT 29
			225800	83-00	94-05			30
			232520	82-27	85-50			31
			234640	83-31	82-00			32
			000710	83-03	75-30			33 CIRCLED
			004140	84-12	67-70			34
			<del>011040</del>					<del>35</del> SEE FILE 17
			<del>012550</del>					36
		2.29	005540	END				

## NORTHSTAR TOTAL FIELD MAGNETOMETER DATA

Tape # ...UT112/....

NS003

FILE # BLOCKS	LINE	FLIGHT DATE	TIME	LAT	LONG	MAP #	ASL	COMMENTS
12	19753738	8-4-75	15 25 40	START				To NORTH POLE
276			15 35	78-12	67-42		10000	
			16 17	80-15	65-55			
			17 01 40	82-31	62-17		1000	ALERT
			18 36	87-00	62-00			
			19 39	NORTH	POLE			CIRCLES
			19 47	"				
			19 57	89-30	140-00			TURN
			21 02	86-27	74-30			
			22 09	83-10	71-00			COAST - CLIMB
		7.15	22 41	END				
13	1975TRNS	10-4-75	11 19 30	START			8000	TRANSIT TO AREA
109			11 43	77-50	73-26			
			12 27 30	80-00	77-10			
			13 20	82-27	85-50		1000	COAST
			14 15 20	85-00	96-00			PT. F
		2.52	14 11 30	END				
14	1975ECRS	10-4-75	14 11 40	START			1000	ALPHA RIDGE
120			14 15 20					PT F

## NORTHSTAR TOTAL FIELD MAGNETOMETER D A

Tape # ..U.T.I.I.2!.....  
NS005

FILE # BLOCKS	LINE	FLIGHT DATE	TIME	LAT	LONG	MAP #	ASL	COMMENTS
4 CONT 120	1975 FGRS	10-4-75	14 35 30	86-00	96-00		1000	P1 C
			14 39 30	86-00	93-30			H
			14 58 50	85-00	94-00			J
			15 02 20	85-00	92-00			k
			15 24	86-00	91-00			L
			15 28 20	86-00	88-30			M
			15 47	85-00	90-00			N
			15 51 45	85-00	88-00			O
			16 12 30	86-00	86-00			P
			16 16 35	86-00	83-30			Q
			16 35 30	85-00	86-00			R
			17 18 50	82-55	80-25			S COAST
		3.08	17 20	END				
15 86	1975 TRN 2	10-4-75	17 16 40	START			1000	
			17 18 50	82-55	80-25		To 8000	P1 S
			18 23 20	80-00	74-40			
			19 11 30	77-50	73-28			
		2.16	19 32 40	END				



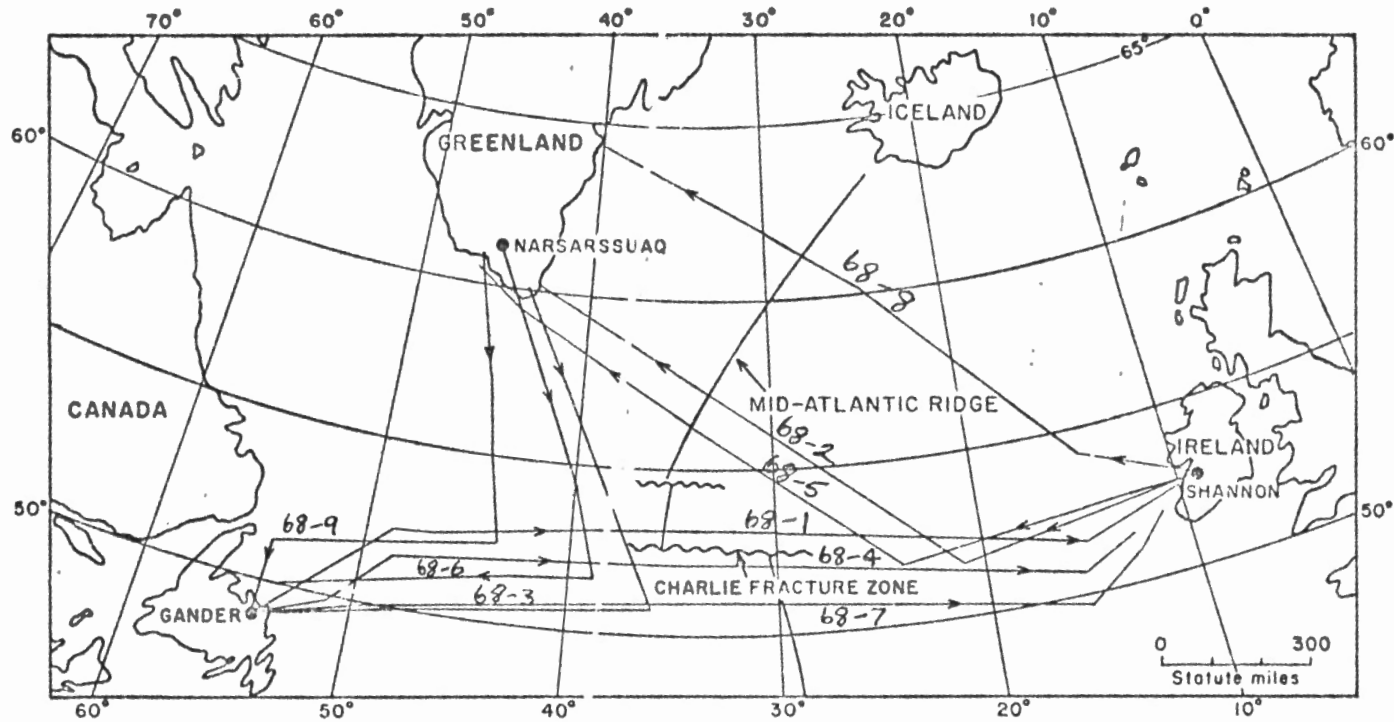
## NORTHSTAR TOTAL FIELD MAGNETOMETER [ A

Tape # ...07.112!...  
N 5003

FILE # BLOCKS	LINE	FLIGHT DATE	TIME	LAT	LONG	MAP #	ASL	COMMENTS
16 33	1975000A	4-4-75	14 08 50	START				NORTH FROM ELLESMERE COAST
			14 09	82-58	67-00			
			14 35	83-52	67-00			
			15 11 30	85-30	67-00			DATA INTERMITTANT
		1-03	15 12	END				DUE TO COLD
17 48	19753436	7-4-75	00 38 40	START				
			00 41 40	84-12	67-00			PT 34
			00 41 40 00 41 40	83-00	60-00			35
			01 25 50	82-10	60-00			36
		.49	01 37 10	END				DATA ENDS
		23-01						

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1968 Operation Tape 1

GSC Paper 69-1A

## NORTHSTAR TOTAL FIELD MAGNETOMETER DATA

Tape # UT 1121  
NS003

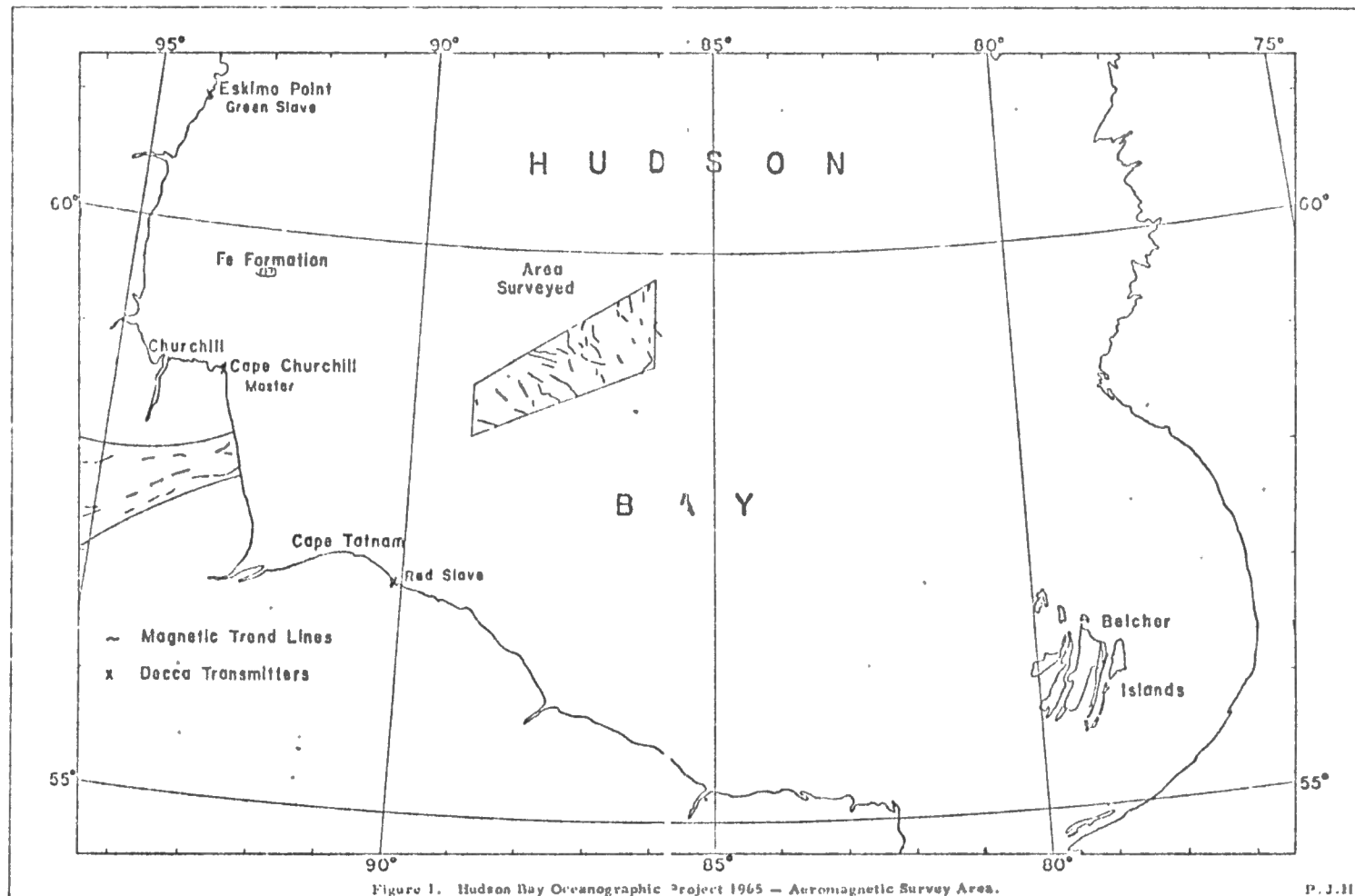
FILE # BLOCKS	LINE	FLIGHT DATE	TIME	LAT	LONG	MAP #	ASL	COMMENTS
18 255	19680008	17-6-68	0952	START		6	1000	SHANNON- NARSS.
			0937	52-40	08-55			
			1051	54-10	14-42			<del>THIS LINE IS ALSO</del>
			1140	55-52	17-05			<del>THIS LINE IS ALSO</del>
			1240	58-05	20-12			
			1340	60-07	24-50	5		
			1440	62-00	29-55			
			1540	63-25	35-56			
			1623	64-22	40-30			
			1648	END				
19 191	19680009	18-6-68	1014	START		5	5000	NARSS - GANDER
			1020	60-44	46-20		1000	ADD 2150 Y FOR
			1050	59-10	45-57			ABSOLUTE TOTAL FIELD
			1120	57-34	45-06			
			1220	54-43	44-25			
			1304	52-20	43-23			BREAK AFTER 13:58
			1450	51-39	51-26			
			1525	51-09	54-17			ADD 4290 FOR A.T.F.
			1615	48-56	54-35			
				END				

# Hudson Bay Survey - 1965

The boundaries of the area are :- 86° W    89° W  
- red decca lanes F0 and H12

Magnetometer data was multiplexed from the bird and boom magnetometers at .5 second intervals, thus the readings from either magnetometer will be 1 second apart. The two magnetometers were purposely offset a bit, and the bird magnetometer normally has the higher reading. During multiplexing the bird readings begin with "00" and the boom readings with "80". At the start and end of trips the boom only may have been in use.

Because the original compilation was done mostly by computer there is no map showing times and positions. A published contour map is available. A description of the computer compilation is contained in National Research Council report LTR - FR-7.



1965 Operation

GSC Paper 66-1A.

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survey at  
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(16)

## SAMPLE BLOCK

LINE #	BIRD	MAC	BOOM	MAC.	DECCA	MISSING
19651208	005C05EC	805C0320	005C05F9	805C0335	005C0606	805C0335
005C0610	805C0209	005C0625	805C033F	005C0518	805C02F0	005C0620
805C0337	005C062A	805C0305	17:19:50			005C0629
805C0372	005C062E	805C02E7	005C0632	805C036C	005C0522	005C0355
005C0F31	805C02E2	005C0328	005C0364	005C0524	805C038F	005C0635
805C0300	005C0634	005C0323	005C063C	805C0376	17:20:02	005C0416
005C0415	005C063F	805C0323	005C063C	805C035A	005C062F	805C0345
005C0639	805C0324	005C0533	805C0349	005C0630	805C0344	005C0631
805C0348	005C0636	805C0334	005C0542	805C0379	005C052C	805C0330
17:20:10	005C0412	005C0415	005C0633	805C0320	005C0656	805C0332
005C0658	805C0383	005C0658	805C0356	005C066C	805C034C	005C0674
805C0300	005C0690	805C032E	005C0697	805C0302	005C06C2	805C03F3
005C0601	005C0400	17:20:20	005C0400	005C0415	005C06F1	805C0448
005C0718	805C045A	005C073C	805C045C	005C0756	805C04A1	005C0783
805C04AA	005C07AD	805C04EA	005C07C2	805C051F	005C07F0	805C053A
005C0P2C	805C0540	005C084A	805C0586	17:20:30	005C0405	005C0415
005C0P7A	805C050F	005C08A4	805C05CE	005C08E3	805C0608	005C0934
805C0666	005C0936	805C0674	005C095C	805C068C	005C0986	805C060A
005C09C5	805C06FF	005C09EC	805C072E	005C0A2B	805C076A	17:20:40
005C0402	005C0415	005C0455	805C07A4	005C0A80	805C07C6	005C0A8F
805C082A	005C08EF	805C0837	005C0828	805C086C	005C085D	805C084F
005C0898	805C0807	005C08CA	805C090C	005C0C0A	805C0962	005C0C54
805C0CA4	17:20:50	005C0994	005C0910	005C0CA1	805C09EF	005C0C03
805C0A37	005C091E	805C0A71	005C0965	805C0A9D	005C0998	805C089A
005C0DE7	805C0A65	005C0E29	805C0B81	005C0E68	805C08DF	005C0EB9
805C0C2P	005C0F00	805C0C40	17:21:00	005C0959	005C0415	005C0F41
805C0CC8	005C0F98	805C0CF5	005C0FE7	805C0D68	005C0E37	805C0D98
005C0E80	805C0DE4	005C0E00	005C0E45	005C0E125	805C0E45	005C0E16A
805C0FCA	005C0E1C5	805C0F19	005C0E205			

## DECCA NAVIGATION SYSTEM

THE PRIMARY NAVIGATION AID FOR THE HUDSON BAY PROJECT WAS THE 6F LAMBDA DECCA CHAIN. RED DECCA LANES WERE USED AS FLIGHT LINES, WITH THE GREEN DECCA LANES FOR ALONG TRACK POSITIONS.

THE TRANSMITTER LOCATIONS WERE:-

MASTER	-	58°44'04.83'' N
		93°12'02.92'' W
RED	-	57°03'02.92'' N
		90°06'33.77'' W
GREEN	-	61°06'21.21'' N
		94°03'05.95'' W

IN THE DIGITAL DATA THE TIME IS FOLLOWED BY THE GREEN AND RED DECCOMETER READINGS; IF EITHER READING WAS MISSING FOR A PARTICULAR TIME BOTH SPACES ARE LEFT BLANK.

ON THE MAP THE DECCA LANES ARE NUMBERED RED A0 TO RED J23, AND GREEN A30 TO GREEN J47, WITH THIS SEQUENCE BEING REPEATED SEVERAL TIMES. IN THE DIGITAL DATA THE TOTAL LANE COUNT TIMES 100 IS RECORDED.

RED F0 - 36000

RED H12 - 42000

GREEN E45 - 8700 SW CORNER OF AREA

GREEN B34 - 20200 NE CORNER OF AREA

IT SHOULD BE NOTED THAT AN ACCURATE TRACK PLOT CANNOT BE OBTAINED SIMPLY BY PLOTTING SUCESSIVE DECCA COORDINATES. BECAUSE OF VARIABLE LAG IN THE DECCOMETERS SOME SORT OF AVERAGING OR SMOOTHING IS REQUIRED. ALSO THERE ARE VARIOUS ERRORS IN THE DECCA DATA, SUCH AS THE 10's DIGIT NOT RESETING WHEN A READING DECREASES FROM A MULTIPLE OF TEN. AS FAR AS POSSIBLE THESE HAVE BEEN NOTED IN THE LOG SHEETS.

A DISCUSSION OF THIS DECCA SYSTEM IS CONTAINED IN GSC PAPER 68-53, "EARTH SCIENCE SYMPOSIUM ON HUDSON BAY".

# DECCA CONVERSION CHART

## RED

<u>MAP</u>	<u>DIGITAL</u>
F 0	360
F 6	366
F 12	372
F 18	378
G 0	384
G 6	390
G 12	396
G 18	402
H 0	408
H 6	414
H 12	420

## GREEN

E 30	72	A 30	180
E 36	78	A 36	186
E 42	84	A 42	192
F 30	90	B 30	198
F 36	96	B 36	204
F 42	102	B 42	210
G 30	108		
G 36	114		
G 42	120		
H 30	126		
H 36	132		
H 42	138		
I 30	144		
I 36	150		
I 42	156		
J 30	162		
J 36	168		
J 42	174		



## NORTHSTAR TOTAL FIELD MAGNETOMETER DATA

HUDSON BAY

Tape # *NS004*  
*UT 743*

FILE # BLOCKS	LINE	FLIGHT DATE	TIME	RED DECCA	GREEN DECCA	MAP #	ASL	COMMENTS
<i>1</i>	<i>19653007</i>	<i>30-7-65</i>	<i>18 56 00</i>	<i>START</i>		<i>8</i>	<i>500</i>	
<i>220</i>			<i>20 00 40</i>	<i>G4</i>	<i>F40</i>			<i>Green wrong at start</i>
			<i>20 28 30</i>		<i>A31</i>			
			<i>20 36 50</i>	<i>G1</i>	<i>A33</i>			
			<i>20 45 10</i>		<i>F41</i>			
			<i>21 22 40</i>	<i>G7</i>	<i>F34</i>			<i>Missed start</i>
			<i>21 53 00</i>		<i>J41</i>			
			<i>22 04 00</i>	<i>G9</i>	<i>J45</i>			
			<i>22 42 40</i>		<i>F37</i>			
			<i>22 54 20</i>	<i>G7</i>	<i>F38</i>			<i>Refly start of G7</i>
			<i>22 58 10</i>		<i>G32</i>			
			<i>00 11 20</i>	<i>END</i>				
<i>2</i>	<i>19650208</i>	<i>02-8-65</i>	<i>14 47 40</i>	<i>START</i>				
<i>256</i>			<i>15 22 50</i>	<i>G8</i>	<i>F38</i>		<i>500</i>	
			<i>15 59 50</i>		<i>J46</i>			
			<i>16 09 00</i>	<i>G10</i>	<i>J45</i>			
			<i>16 47 50</i>		<i>F31</i>			
			<i>16 58 10</i>	<i>G12</i>	<i>F36</i>			
			<i>17 31 20</i>		<i>J45</i>			

## NORTHSTAR TOTAL FIELD MAGNETOMETER DATA

HUDSON BAY

Tape # NS004  
UT 743

FILE # BLOCKS	LINE	FLIGHT DATE	TIME	RED DECCA	GREEN DECCA	MAP #	ASL	COMMENTS
2 CONT.	19650208	02-8-65	17 41 00	G-14	J 43	8	500	
			18 20 30		F 35			
			18 30 00	G-16	F 34			Red reading 10 lanes high
			19 03 20		J 39			when count below 400
			19 14 20	G-18	J 39			
			19 52 00		F 34			
			20 55 30	END				
3	19650308	03-8-65	14 28 00	START				
249			15 10 30	G-12	F 36			Red was 1 lane low
			15 41 10		J 43			all this trip;
			16 03 10	G-14	J 42			intended to fly odd
			16 38 00		F 35			lanes.
			16 45 40	G-16	F 34			
			17 21 40		J 39			
			17 37 40	G-18	J 39			
			18 13 30		F 34			
			18 22 20	G-20	F 33			
			18 58 00		J 38			
			19 07 30	G-22	J 37			
			19 43 20		F 32			
			20 30 10	END				

## NORTHSTAR TOTAL FIELD MAGNETOMETER DATA

HUDSON BAY

Tape # *NS004*  
*UT 743*

FILE # BLOCKS	LINE	FLIGHT DATE	TIME	RED DECCA	GREEN DECCA	MAP #	ASL	COMMENTS
<i>4</i>	<i>19651008</i>	<i>10-8-65</i>	<i>14 45 50</i>	<i>START</i>		<i>8</i>		
<i>260</i>			<i>15 26 30</i>	<i>F0</i>	<i>G 36</i>		<i>500</i>	<i>Red 10 lanes high at time</i>
			<i>16 02 10</i>		<i>B 34</i>			
			<i>16 12 50</i>	<i>F6</i>	<i>B 30</i>			
			<i>16 54 30</i>		<i>G 32</i>			
			<i>17 03 00</i>	<i>F3</i>	<i>G 34</i>			
			<i>17 36 00</i>		<i>B 32</i>			
			<i>17 46 30</i>	<i>F12</i>	<i>A 43</i>			
			<i>18 29 20</i>		<i>F 47</i>			
			<i>18 38 00</i>	<i>F9</i>	<i>G 31</i>			
			<i>19 11 20</i>		<i>A 45</i>			
			<i>19 23 40</i>	<i>F18</i>	<i>A 38</i>			
			<i>20 04 00</i>		<i>F 44</i>			
			<i>21 05 00</i>	<i>END</i>				
<i>5</i>	<i>19651108</i>	<i>11-08-65</i>	<i>14 19 00</i>	<i>START</i>				
<i>299</i>			<i>14 40</i>				<i>500</i>	<i>Large anomaly</i>
			<i>15 42 20</i>	<i>F1</i>	<i>G 35</i>			
			<i>16 23 30</i>		<i>B 34</i>			
			<i>16 33 00</i>	<i>F7</i>	<i>A 47</i>			
			<i>17 09 10</i>		<i>G 32</i>			

## NORTHSTAR TOTAL FIELD MAGNETOMETER DATA

HUDSON BAY

Tape # *NS004*  
UT 743

FILE # BLOCKS	LINE	FLIGHT DATE	TIME	RED DECCA	GREEN DECCA	MAP #	ASL	COMMENTS
5 CONT	19651108	11-8-65	17 19 20	F4	G 33	8	500	
			17 58 00		B 3			
			18 07 00	F10	A 41			Red 10 lanes high at
			18 43 20		G 30			times
			18 48 50	F19	F 44			
			19 25 30		A 38			
			19 31 10	F13	A 42			
			20 07 00		F 47			
			21 30 20	END				
6	19651208	12-8-65	14 35 40	START				
253			15 00 00	F2	G 35			
			15 34 50		B 33			
			15 43 00	F11	A 44			Red 10 lanes low until 1608-30
			16 25 10		G 30			
			16 48 40	F5	G-33			
			17 22 40		B 30			
			17 30 00	F14	A 41			Red 10 lanes low at start
			18 11 00		F 46			
			18 17 30	F8	G-31			Red 10 high at start (23)
			18 52 30		A 46			

## NORTHSTAR TOTAL FIELD MAGNETOMETER DATA

HUDSON BAY

Tape # *NS004*  
*UT 743*

FILE # BLOCKS	LINE	FLIGHT DATE	TIME	RED DECCA	GREEN DECCA	MAP #	ASL	COMMENTS
6 CONT	19651208	12-8-65	19 00 00	F 20	A 37	8	500	Red 10 low at start; error
			19 40 20		F 43			in 10'
			20 40 00	END				
7 182	19651508	15-08-65	17 02 50	START				
			17 42 30	H 8	E 46			Green adjusted - 1800
			18 14 50		J 30			
			18 24 40	H 12	I 45			Red 10 lower high at times
			19 04 40		E 45			
			19 09 10	H 4	F 30			Green 0/5
			19 36 50		J 32			
			19 50 20	H 10	I 45			
			20 29 20		E 45			
			21 32 00	END				
8	19651608	16-08-65	15 00 30	START				
			15 47 50	H 19	E 45			Red not recording 10'p
			15 59 20	F 18	G 39			+ 100' p. during
			16 02 10	E 14	G 42			Control line 1
			16 12 10	H 18	F 42			" 2.
								Control lines corrected on printout

## NORTHSTAR TOTAL FIELD MAGNETOMETER DATA

HUDSON BAY

Tape # *NS004*  
*UT 743*

FILE # BLOCKS	LINE	FLIGHT DATE	TIME	RED DECCA	GREEN DECCA	MAP #	ASL	COMMENTS
8 CONT	19651608	16-08-65	16 21 00	H 17	G 39	8	500	Control line 3
			16 34 00	E 17	I 30			
			16 40 40	E 18	I 44			" 4
			16 53 00	H 17	H 36			
			17 06 40	H 18	I 37			" 5
			17 23 10	E 19	A 36			
			17 37 20	E 20	B 36			" 6
			17 56 00	H 18	I 40			
			18 12 50	G 11	J 44			Red wrong at start; ok
			18 53 30		F 36			at 1826
			18 59 50	G 15	F 35			Green corrected 1912
			19 32 20		J 41			
			19 41 30	G 13	J 43			
			20 22 00	<del>xxxxxx</del>	I 31			
			22 02 10	END				
9	19651708	17-8-65	13 18 00	START				
204			13 49 00	F 15	F 41			
			14 24 20		A 41			
			14 33 20	F 21	A 36			
			15 10 40		F 43			

## NORTHSTAR TOTAL FIELD MAGNETOMETER DATA

HUDSON BAY

Tape # *NS004*  
.....  
UT 743

FILE # BLOCKS	LINE	FLIGHT DATE	TIME	RED DECCA	GREEN DECCA	MAP #	ASL	COMMENTS
9 CONT	19651708	17-8-65	15 16 30	F 16	F 45	8	500	
			15 52 00		A 40			
			15 57 50	F 22	A 35			
			16 34 00		F 43			
			16 40 16	F 17	F 45			
			17 15 00		A 35			
			17 20 00	F 23	A 35			
			17 56 40		F 42			
			18 47 40	END				
10 148	19651808	18-8-65	14 09 20	START				
			15 59 30	G 17	F 34			
			16 34 10		J 40			
			16 38 50	G 23	J 36			
			17 17 24		F 32			
			17 25 30	G 19	F 33			Lost most of G-19
			17 59 30		J 35			
			18 03 20	H 0	J 35			
			18 14 10	END				Changed to different
						operating mode; continues on		26
						File 11		

## NORTHSTAR TOTAL FIELD MAGNETOMETER DATA

HUDSON BAY

Tape # *NS004*  
*UT 743*

FILE # BLOCKS	LINE	FLIGHT DATE	TIME	RED DECCA	GREEN DECCA	MAP #	ASL	COMMENTS
11	1965 1808	18-8-65	18 13 40	START		8	500	On line 140
120			18 41 50	H0	F31			add 1 green lane
			18 48 30	G21	F32			after 1817 $\frac{1}{2}$
			19 22 00		J33			
			19 27 30	H1	J34			
			2005 20		F31			
			2104 30	END				
12	1965 1908	19-8-65	1403 50	START				Red set by hand
253			1503 20	H2	F30			call this trip
			15 39 50		J34			
			15 44 00	H6	J31			
			16 19 20		E41			
			16 26 50	H3	F30			
			1703 20		J33			
			1708 40	H7	J30			
			1743 00		E46			
			1751 50	H5	E47			
			18 28 20		J32			
			1832 20	H9	E49			
			1906 00		E46			
TOTAL	66:30		200800	END				



Tape # NS005

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Contents :- Reykjanis Ridge - 1967. N Atlantic Ocean  
Files 1-8.

Mid-Atlantic Ridge - 1968. N. Atlantic Ocean  
Files 9-15.

Remaining two flights of this  
project are on Tape # NS003, as  
this tape won't hold them.

## NORTHSTAR TOTAL FIELD MAGNETOMETER DATA

Tape # 071145...  
NS 005

FILE # BLOCKS	LINE	FLIGHT DATE	TIME	LAT	LONG	MAP #	ASL	COMMENTS
1	19670012	8-6-67	12 15	START		5	9000	NARSSARSSUAQ - SHANNON
274			1209	61-15	45-35			
			1304	63-08	41-21		1000	
			1400	61-42	35-55			
			1500	59-55	30-28			
			1540	58-35	27-10			
			1646	56-18	22-30	6		
			1800	53-36	17-45			
			1847	51-50	14-05			
			2000	52-43	8-51			
		7:32	1947	END				
2	19670013	11-6-67	09 42	START		6	1000	SHANNON - NARSS.
263			0927	52-47	9-31			
			1000	52-36	12-21			
			1115	52-16	17-55			
			1255	55-55	24-28			
			1443	58-50	31-26			
			1520	60-04	34-30			
			1620	61-35	39-08	5		
			1648	62-15	42-21			
		7:06	1648	END				

## NORTHSTAR TOTAL FIELD MAGNETOMETER DATA

Tape # UT 1145  
NS005

FILE # BLOCKS	LINE	FLIGHT DATE	TIME	LAT	LONG	MAP #	ASL	COMMENTS
3	19670014	15-6-67	0715	START		5	10,000	NARSS. - SHANNON
231			0736	61-10	42-31		1000	
			0833	59-35	37-31			
			0930	58-00	32-18			
			1100	55-08	25-37	6		
			1215	52-38	20-30			
			1242	51-38	19-10			
			1330	52-11	15-00			
			<del>1439</del>					
		6:21	1336	END				
4	19670016	17-6-67	0958	START		6	2500	SHANNON - SONDRESTROM
281			0954	52-43	8-55			
			1023	52-04	10-52		1000	
			1045	52-55	12-10			
			1120	54-11	13-45			
			1210	56-03	16-50			
			1300	57-42	19-16			
			1400	59-48	23-00			
			1500	61-40	27-30			
			1600	63-07	32-15			
			1700	64-28	37-30		To 8000	

NORTHSTAR TOTAL FIELD MAGNETOMETER DATA

Tape # UT 1145  
NS005

FILE # BLOCKS	LINE	FLIGHT DATE	TIME	LAT	LONG	MAP #	ASL	COMMENTS
	19670016	17-6-67	1723	65-05	39-52		13,500	
		7:37	1735	END				
5 234	19670017	19-6-67	1312	START		6		SONDE - SHANNON
			1311	65-33	32-10		1000	
			1400	64-17	32-32			
			1500	62-30	27-30			
			1600	60-19	22-30			
			1700	58-12	18-06			
			1800	56-03	14-10		500 - 1000	
			1928	52-42	9-42			
		6:19	1931	END				
6 289	19670018	22-6-67	1015	START		6	1000	SHANNON - NARSS.
			1003	52-49	9-35			
			1108	53-12	14-45			
			1200	55-02	17-23			
			1300	56-56	20-56			
			1400	58-47	24-43			
			1500	60-40	29-00			
			1600	62-23	33-54			
			1710	64-05	40-35	5	To 11,000	

## NORTHSTAR TOTAL FIELD MAGNETOMETER DATA

Tape # 071145.....  
NS 005

FILE # BLOCKS	LINE	FLIGHT DATE	TIME	LAT	LONG	MAP #	ASL	COMMENTS
	19670018	22-6-67	1805	61-18	45-25	5		
		7:51	1806	END				
1 194	19670019	23-6-67	0937	START		5	1000	MARSS - GANDER
			0910	61-10	45-23			
			0943	60-03	43-17			
			1019	58-34	41-15			
			1100	57-07	43-06			
			1200	54-53	45-41			
			1300	52-38	47-58			
			1330	51-30	49-00			
			1420	50-14	52-07		1400	
			1452	49-25	53-50			
		5:15	"	END				
8 187	19670011	7-6-67	1252	START				GANDER - MARSS.
			1300	49-23	53-49	5	1000	
			1340	50-55	51-42			
			1410	51-56	50-05			
			1430	52-44	49-18			
			1510	54-21	47-40			

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## NORTHSTAR TOTAL FIELD MAGNETOMETER DATA

Tape # 67 1145.....  
NS005

FILE #	LINE	FLIGHT DATE	TIME	LAT	LONG	MAP #	ASL	COMMENTS
BLOCKS								
9	19680001	30-5-68	<del>1115</del> 1208	START		5	1000	CANDER - SHANNON
284			1104	49-27	53-51			
			1150	50-58	51-25			
			1230	52-16	48-39			
			1250	52-18	46-54			
			1350	52-53	41-23			
			1450	53-04	36-30			
			1640	52-55	26-57	6		
			1802	52-14	19-56			
			1858	51-34	15-06		1500	
			1956	52-32	10-00			
		8:39	1952	END				
10	19680002	3-6-68	0943	START		6	1000	SHANNON - NARSSARSSUAQ
304			0923	52-41	8-53			
			1106	52-03	16-36			
			1225	51-32	21-15			
			1420	54-49	27-15	5		
			1616	57-47	34-15			
			1713	59-17	38-25			
		8:20	1803	60-11	42-34			
				END				

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## NORTHSTAR TOTAL FIELD MAGNETOMETER DATA

Tape # 071145.....  
NS003

FILE # BLOCKS	LINE	FLIGHT DATE	TIME	LAT	LONG	MAP #	ASL	COMMENTS
11	19680003	4-6-68	13.42	START		5	6000	NARSS- GANDER
285			1409	60-03	43-16		1000	BLOCK IDENT. WRONG
			1446	58-15	41-26			AFTER 16:17
			1500	57-28	40-56			
			1640	53-12	37-36			
			1730	50-47	36-04			
			1815	50-40	39-17			
			1910	50-21	42-54			
			2005	50-04	46-10			
			2030	49-58	48-06			
			2110	49-30	51-20			
			2138	49-09	53-35			
		7:28	2137	END				
12	19680004	6-6-68	1016	START		5	3000	GANDER- SHANNON
330			1002	48-56	54-36		1000	
			1056	49-53	50-53			
			1137	51-25	48-32			
			1330	52-06	39-41			
			1430	52-11	34-30			
			1510	52-06	30-28			



## NORTHSTAR TOTAL FIELD MAGNETOMETRIC DATA

Tape # 07 1145 .....  
145 005

FILE # BLOCKS	LINE	FLIGHT DATE	TIME	LAT	LONG	MAP #	ASL	COMMENTS
	19680004	6-6-68	1630	51-46	24-57	6	1000	
			1730	51-13	19-53			
			1826 $\frac{1}{2}$	50-32	15-23			
			1900	51-29	12-42			
		9:10	1926	END				
13 279	19680005	10-6-68	0945	START		6	1000	SHANNON - NARSS.
			0931	52-37	09-44			
			0954	52-26	11-59			
			1010	52-33	12-45			
			1130	52-20	19-09			
			1234	51-48	24-17			
			1300	52-48	26-12			
			1510	56-29	38-06	5		
			1656	59-23	43-56			
		7:36	1721	END				
14 233	19680006	11-6-68	1247	START		5	1000	NARSS. - GANDER
			1220	61-02	45-30			
			1300	59-02	43-40			
			1400	56-05	41-08			

## NORTHSTAR TOTAL FIELD MAGNETOMETER DATA

Tape # 071145.....  
NS005

FILE # BLOCKS	LINE	FLIGHT DATE	TIME	LAT	LONG	MAP #	ASL	COMMENTS
	19680006	11-6-68	1500	53-10	39-23	5	1000	<del>GANDER - SHANNON</del>
			1531	51-31	38-10			
			1600	51-30	41-03			
			1630	51-31	43-02			
			1700	51-18	45-25			
			1800	50-47	49-25			
			1855	50-03	53-36			
		6:19	1906	END				
15	19680007	13-6-68	1020	START		5	1000	<del>SHANNON</del>
339			1029	49-10	53-37			GANDER - SHANNON
			1130	50-07	48-08			
			1240	50-40	42-33			
			1410	50-53	35-15			
			1620	50-37	24-34	6		
			1820	49-31	15-30			
			1940	51-56	11-02			
		9:22	1942	END				END TAPE NS005
TAPE NS 003								
18	19680008	17-6-68	0952	START		6	1000	SHANNON - NARSS.
255			0937	52-40	08-55			

NORTHSTAR TOTAL FIELD MAGNETOMETER DATA

Tape # 011145  
~~NS005~~ NS003

FILE # BLOCKS	LINE	FLIGHT DATE	TIME	LAT	LONG	MAP #	ASL	COMMENTS
18 CONT	19680008	17-6-68	1051	54-10	14-42	6	1000	
			1140	55-52	17-05			
			1240	58-05	20-42			
			1340	60-07	24-50	5		
			1440	62-00	29-55			
			1540	63-25	35-36			
			1623	64-22	40-30			
		6:56	1648	END				
19	19680009	18-6-68	1014	START		5	8000	NARSS - CANOE 12
			1020	60-44	46-20		1000	
			1050	59-10	45-57			
			1120	57-34	45-06			
			1220	54-43	44-25			
			1304	52-20	43-33			
			1450	51-39	51-26			
			1525	51-09	54-17			
		6:01	1615	48-56	54-35			
				END				
		TOTAL	69.51					