

Transcript of Worsley's Navigational Log Book

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Version 3.6 16Feb2017

Any transcription errors remain my own.

This text is difficult to read and I am writing what I see. It may not be correct.

The spacing of characters is not exactly as shown.

Each page is kept separate, as it is in the log.

The following individuals have directly contributed to this transcript

George Huxtable. Lars Bergman. Robin Stuart.

And the NavList in general.

KEY

- ☒ A character I cannot read
- ⊖ Lower Limb of Sun Symbol, as Worsley drew it ⊖
- ⊕ Midpoint of Sun Symbol, as Worsley drew it ⊕

Note:

- (1) the log has now been updated with the missing data, 30 April 1916 thru 3 May 1916
- (2) the log has now been corrected via traverse calculations
- (3) I have received a better image of page 99, 4May thru 6 May 1916. This changes almost all of the illegible characters to legible!
- (4) For Monday 8 May the breezes are listed as NNWEWNW. Worsley did NOT use punctuation here. It could read NNW E WNW, but other combinations occur. This was a note to himself, not a record for us. It would have made sense to him for his DR.
- (5) After carefully re-reading the handwritten log and the Dennett transcription, I have modified the text associated with 24 April 1916.
- (6) Added journey planning feature ahead of 24April1916
- (7) Modest changes to some characters as equation checks provide clarity.
- (8) Typographical errors on 7May and 26April found and corrected.
- (9) Updated planning data for 29April based upon equation checks
- (10) Updated a single character for 4May, based upon analysis of Robin Stuart.
 - a. Was "DR N45°E40^m 49.5 49.5 = 88"
 - b. Now is "DR N45°E70^m 49.5 49.5 = 88"
- (11) Updated the departure for 1May, based upon analysis of Lars Bergman
 - a. Was 23+19=35
 - b. Now is 23 19.3 = 35
- (12) Updated 4 May, with correlating updates from Lars and Robin
 - a. Was 44°50'13" Now is 44°50'15" for the resultant longitude
 - b. Was 27.23.8 Now is 22.23.8 for the apparent time
- (13) Updated 5 May,

- a. Was DR N50°E90^m, Now is DR N50°95^m. Worsley appears to correct himself, as both numbers are present, with the 5 larger and heavier, and the 0 the same size as the 9.
- (14) Updated 6 May, based on analysis of Lars Bergman
- a. D long was 52' Now is 1 52'
- (15) Updated 7 May, based on analysis of Lars Bergman
- a. Was 16.1 36.7 Now is 3.1N 36.7
 - b. PM Time sight adding 23 instead of 25 to 39°11, obtaining 39.34
- (16) Updated 29 April.
- a. The noon latitude calculation
 - i. There is a tear in the page due to the logs binding.
 - ii. The observed altitude should read 16.43
 - iii. Due to the tear, the text reads 6.43
 - iv. The corrected altitude of 16.52.30 is very clear
 - v. The observed altitude must be closer than 10 degrees to the corrected altitude
 - vi. The Transcript has filled in this character for completeness, but due to the tear, is not present in the actual log.
 - b. Calculation of course and distance
 - i. It reflects the latest thinking, yet further errors may remain
- (17) Updated course run on 4 May to N36E 52 42 from N36E 52 41
- (18) Updated chronometer to 1^m4^s from 1^m4' on 27 April
- (19) 28 April. Update sum to 79 46 from 19 46 (Worsley's 7's look like 1's)
- (20) Used Q and Θ, to better display the log as Worsley wrote it. These are the lower limb and midpoint of sun observation indications, IE> Observation is the lower limb.
- (21) 7 May, the time of 5.10.14 has floating numbers, as if Worsley tried to get an observation at different times. The floating 39 was updated from a floating 30.
- (22) April 29th. Time transformation from 3^h22^m6^s to arc. Arc was 50°31'34". Should actually be 50°31'30". Quite murky in log. Updated based upon equations.
- (23) 7 May, Longitude in top right corner read 39° 3'6, updated to 39°36, with the ' moved to the line above
- (24) 29 April. The Latitudes 56 and 57 should be denoted ° and not ^s. Very faint, but corrected
- (25) Noon observation and reduction on 26 April "16 37" changed to "16 39". Characters very washed out, yet the arithmetic demands, and the image faintly supports a 9.

Cape Belsham 61°4'S 54°50'	Sec C	10.19649
46'W of Wallis 54°4' 39°0'	+logDLat	2.62325
420 950	=Log Dist	2.81974 = 661
Cos M Lat 57°34' = 9.729.42	To Wallis =	27
Log D Long 950 2.977 72		688
12.707 14	To Leith Harb	62
-Log D Lat 420 2.623 25		750
=Tan Co =N50°30'E10.083 89 -		

Monday, April 24th

Wild Camp for Rating Chron

		<u>192</u>
Slow 10.51		262
24.40.1	<u>O</u>	8°21 ½' AM
+ 1 53		☒☒☒☒ No Obs for Lat
24 41 54		61 . 4 315.34 cd be obtained +
21. 4.35		102.51 ½ 011.03 Long. Of C. Belsham being
3.37.19		172.17 827.95 only approx ^{ly} known to
54°19'.45"		86. 8 ½ 990.05... us, allow 1minute+4sec more
		77.47 144 37...slow = <u>11^{min}55^{sec}</u> slow

11

Took departure from Wild Camp in "James Caird" at 12
 Steered NNE 8^m then E1^m to a break in the stream ice here being
 E+W. Mean of courses to noon on 25th = N64^mWind to 4^PWNW
 to 6A.SE to North
 tuesday to noon West 6-

Tuesday April 25th

North 64 ^m from CWild = WSW 6 o'cast	<u>60°0'S 54°50'</u>
High NW swell cross seas	
Chron <u>192</u>	April 25 th 12 ^M 0" slow losing 5 sec
262	26 th 12 5
	27 th 12 10
	28 th 12 15
	29 th 12 20
	30 th 12 25

Wednesday April 26th

DR N45E110 = 77.8 77.8 = 153	59°50'	58°42' 52°17'
2.23.29	☒☒	NE
26 7	2.26.6 O 15°50 AM	59°46' 50°49'
<u>30 10</u>	+ 2.15 59 50 298.85	
79.46	2 28.21 103.32 012.23	
2.26.35		16°28'
Fast 29	23 6.11 179.12 843.93 WSW gale	16 39 ☒
<u>2.26.6</u>	3.22.10 89.36 982.33 sq. cloudy	73.20 ☒
☒☒☒☒☒	50°32'30" 73.46 137 34 Heavy Seas	<u>13 32</u> ☒
	+ 16	59 47.44
	50.48.30	

Thursday 27th April

Chron 192/262	12 ^m 10 ^s slow	59°46' 50°48'
	N ^{ly} gale o'cast + misty squally	

Friday 28th April

59°52'S 50°0'W allowing AM o'cast PM cloudy
 Light NW to fresh W^{ly} o'cast+misty
 High NW swell
 1^m4^s more slow for rating from Wild
 Camp = 50°16' Chron 12^m15^s slow 59°52' 50°16'

Saturday 29th April

16° 43'		58.42' 48°40'
16 . 52. 30		
73. 7. 30	N35E85DR 24hrs	
14. 29. 45	12 9.8 6.9 = 13	58°38' 50°0'
<u>58. 37. 45</u>	27 ^m W. of Wallis	27 ^m W Wallis
24. 59. 5	=54°4'39°0'	N53E 458m
+ <u>2. 42</u>	58.38 50.0.	to Leith <u>90</u>
25 1 47	274 660=365.8	548
21. 39. 41	137 330	☒☒
3. 22. 6	87.18½ 986.83 56°	Fresh W ^{ly} to WSW breeze
50° 31 30	75. 57½ 958.21 57°	Cloudy+misty High
	4.8	Lumpy sea
	1.6	
	182.9	
	365.8	

Sunday 30th April

N	58.38	50° 0
DR N35°E 78 mile 63.9 44.7 = 84	<u>57.34</u>	<u>48.36</u>
Hove to SW/S gale Heavy sea o'cast		

Monday 1st May

DR	23 19.3=35	57.34	48.36
N40°E 30 ^m		<u>57.11</u>	<u>48. 1</u>
drift SSW mod gale heavy lumpy sea			
Boat lying to sea { boat anchor symbol drawn here } heavily iced up. o'cast			

Tuesday 2nd May

N50°E 45 ^m	Strong SW/S breeze	57.11	48° 1'
o'cast lumpy sea	28.9. 34.5	<u>56.42</u>	<u>46 58</u>

Wednesday 3^d May

SW/S to W/S mod br A chron 12 ^m 40 ^s slow	56°42'	46°58'
N55°E 85 48.8 69.6 = 125	<u>55 53</u>	<u>44°53'</u>
Slow 46	<u>56°13'</u>	<u>45°38'</u>
24.27.9 11°14' Q AM N38°E 12 = 12'E		
24.27.55 56.23 256.78	Bird I To W.P. ¹ B.I. N63°E	294
+ 3.11 105.40 016.44	54°0'S 38°0'W To Leith Harb	<u>53</u>
24.31. 6 173.17 767.75	56.13. 45.38	<u>347</u>
21.27.44 86.38 ½ 985.76	133. 458=262	
3. 3.22 75.24 ½ 026 73	66	
<u>45°50½ W -12 ½ E = 45°38'W</u>		

Blue sky passing cloud

PM Mod WSW to SSE light mod sea. S ly swell. Fine clear weather Able to reduce some parts of our clothing from wet to damp

1916 -
Thursday 4th May

DR N45°E 70 ^m 49.5 49.5 = 88						<u>56.13</u> <u>45.38</u>
Chron A N50°E 5 ^m 3.2N 3.8E = 7'				55°23'		<u>55.23</u> <u>44.10</u>
25.6.26 <u>Q</u>	15°26'30"AM	eye 10 ft		15 59 16		<u>55°31'</u> <u>44.43</u>
Slow 12.45	<u>9.30</u>			71.22.16		N36E <u>52.42</u>
				18 37 44		
				<u>10 44</u>		
25.19.11	15°36'			18° 27'		Bird I ^s N69E 250m
+ 3.18	55.34	247.61				Leith Harb. <u>53</u>
25.22.29	<u>105.58</u>	017.09				<u>303</u>
22.23. 8	177. 8	398.18	SE mod breeze			
2.59.21	88.34	980.52	B.C Fine+clear	mod sea		
44°50'15"	72.58	643.40				

Friday 5th May

SE fresh breeze squally o'cast lumpy						<u>55.31</u> 44 .43
confused sea SW swell clear ☒						1. 1 2. 7
DR N50° E95 ^m						<u>54°30</u> <u>42.36</u>
Wallis 54°4'S 38°14'W						
Breeze fairly to 8PM when					Bird Is	N79°E 163
Shifted to NNE light and gusty					Wallis	N80°E 155

Saturday 6th May

Mod NW gale o'cast clear weather						54° 30' 42°36
lumpy N ^y sea 1PM hove to sea to heavy						<u>4 1 52</u>
to carry on						<u>54° 26' 40°44</u>
DR N30E 16	13.9 8.0		54 4	38 14		
to 1PM S80E 58	10.1 57.1		22	150	Wallis I ^d	
	3.8N 65.1E				N76E 91 ^m	

1916
 Sunday 7th May

NNW gale High N^w sea

Hove to till 1AM then carr^d on again for
 the land. Mod NW/N w sea + high

54°26' 40°44'

3 1 4

NW swell. BC to 6 A when it became foggy

54°23' 39 40

DR S60° E 12^m 6.5 10.4E

N70° E 28 9.6 26.3

,
 54°38' 39°36'

Slow 13^m0^s 3.1N 36.7

25.24.51 O 16°55 AM ☒☒.44

Bird I^d NE56° 68^m

+ 3.32 54.39 237.64

Leith Harb 53

25.28.23 106.49 018.98

121

22.48.19 178.23 149.45

2.40. 4 89.11½ 978.88

40° 1' 72.16½ 384 95

Most unfavorable con-
 ditions for obs^{ing}. Misty with
 boat jumping like a flea
 +no limb for early AM
 sight. Noon lat prob
 ably correct within
 a 10 mile limit

23.19.38 ⊖ 7°21' AM

+ 3.32 54.41½ 238.09

23.23.10 106 47½ 018.92

20.44.22 168.50 988.08

2.38.48 84.25 988.84

39°42' 77. 4 233 93

39 16

5.10.14 26 O 9°49' P.M. N68°E 14^m 5.2 13.0 = 23'

+ 13 54° 8

5.23.14 9°57

Lat proved to be correct within
 about
 ^2^m Long. ditto but chron was
 much slower than I had
 allowed which made us
 about 20 ^{mile} so distance further
 astern than obⁿ showed

+ 3.33 54.33 236.58

5.26.47 106 52 019.10

2.50 3 171.22 876.62

2.36.44 85.41 986.40

39°11' 75.44 118 70

23

39.34 Noon

Monday 8th May

Mod to strong NNW-EWNW breezes o'cast
misty and foggy with some clear intervals
W^{ly}+ N^{ly} swells + lumpy confused sea
DR N78°E 90^m 18.7 88.0 =152

54° 38' 39.34"
19 2 32
54°19 37. 2

12.30 PM sighted land about 9^m ahead, extending 2 miles off Bad Reef

{ Here Worsley sketches what he can see of South Georgia Island, noting another "island to the NE", a "Big Bay to NE of this Island", a "Glacier" between two mountain peaks and finally that "Bad Reef extends 1^m N.W of Id" }

3P.M. stood off Star tack wind NxE 5-6 OMR
From 2^m off shore Heavy W^{ly}swell
 Very bad lumpy confused sea
Stood by for night wind WNW increase.g to a gale with
Rain snow sleet + hail