

ADDITIONAL MARINE LOG BOOK DATA
1911 to 1920

Martin Rhodes , September 1994.

INTRODUCTION

1. The archives at Bracknell and Kew hold two types of maritime record for this period :

Ship's Meteorological Log Books - 2,191 Log Books at Bracknell

Warship Deck Logs - 43,936 Deck Logs at Kew

2. Most of the Ship's Met Log Books are from merchant ships selected by the Met Office to take weather observations. 'Selected ships' were provided with accurate instruments and Met Office Log Books.

3. The Meteorological Branch of the Royal Navy providing the specialist weather recorders in warships, was not formed until 1936. Weather observations from warships in this period were recorded by the Navigating Officer or Officer of the Watch, in the Deck Log. Specialised Meteorological Log Books were kept by one or two Royal Naval ships employed on hydrographic tasks. Of the 2,191 Ship's Met Logs Registered in the archives at Bracknell only 32 are from Royal Naval ships. These are entered in red ink in one of the two registers covering this period, in the other, 'HMS' identifies each warship.

4. Information from the 43,936 warship Deck Logs had not been keyed into the MDB. Random observations extracted from Warship Deck Logs at Kew were compared with fiche records from the MDB and proved without exception to be new observations.

5. Merchant Ship Meteorological Forms kept by merchant ships not keeping a full Met Office Log Book appear to have been in use since around 1900, according to the registers in the archives, but no Met Forms for the period 1911 to 1920 remain in the archives. The low number of observations for this period suggests that this Met Form information also was never keyed.

6. The average number of observations in each of the 2,191 Ship's Met Log Books at Bracknell, is just less than one hundred. As the total number of observations in the MDB for the period is just 189,233 it suggests that all these observations came from Ship's Met Log Books alone and that none of the data in 43,936 Warship Deck Logs at Kew or Met Forms for the period was ever transferred to the MDB.

MARITIME ACTIVITY 1911 TO 1920

7. At the turn of the century the Royal Navy enjoyed the confidence of the British people, but suffered from serious material and manpower weaknesses. Many of the ships and weapons were obsolete, the fleet was undermanned and authoritarianism bequeathed by the Victorian era rather than progressive

management was a characteristic of its senior officers.

8. Admiral Sir John Fisher became First Sea Lord in 1904. He was dynamic and ruthless, yet understood man management and war at sea. In the teeth of powerful opposition he scrapped 150 older ships, focused on the threat from Germany and introduced the all big gun battleship Dreadnought. Launched in 1906, the Dreadnought rendered all earlier battleships obsolete.

9. Although Churchill enjoyed political credit for much of this change, the fleet that fought the First World War was Fisher's creation. His foresight was to prove uncannily accurate predicting the influence of the submarine, the revolution that airborne weapons would bring and the need for large numbers of combined operations craft, 'amphibian hippopotami' as he called them.

10. A strong individualist he did not get on with politicians, the army and to some extent his own staff. He distrusted staff work and regarded discussion as a time wasting destroyer of thought and delayer of action. Traditions of great naval men die hard in the Service and even today selection for and a pass in the Staff Course is not essential for future promotion, whereas in the Army and Royal Air Force a successful Staff Course is mandatory for promotion.

11. The Merchant Fleet enjoying the Royal Navy's dominance of the seas traded throughout the world and the great British Empire in large numbers up to and after the First World War. Even during the war met observations continued. Some 500 logs were received from 'selected' merchant ships during the war years.

12. Weather observations in both Met Log Books and Deck Logs were accurately taken and meticulously recorded throughout this period.

METEOROLOGICAL LOG BOOKS

13. Registers in the archives at Bracknell show that 2191 log books were received between 1910 and 1920. They are logged sequentially as received from 13482 to 15673 and appear in the Maritime Data Base under series 201. Each entry in the register shows the ships name, the Captain's name, the start and completion date of each voyage and its route. The register also gives an assessment of the quality of observation, recording the names of the observers who kept the log and took observations.

14. The quality assessment is given as Good, Very Good or Excellent. There is no assessment below good although occasionally there is an ominous blank without a comment.

15. An example of a page from the style in use is at annex D.* Their location in the archives is shown in annex B.

16. 337 Met Logs recorded in the registers are missing from the shelves of the archives, through no apparent reason. Missing numbers are spread throughout the period 1911 to 1916. The period

* The Annexes to this document are labeled B, D and J to allow common labeling with the annexes to a report on logbook data for 1936 to 1948. The other annexes are not relevant to this document
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1916 to 1920 is complete.

17. Most observations from the Met Log Books have been keyed into the Marine Data Base. However, a proportion of North Atlantic observations have not been keyed. In addition observations at the beginning and end of each voyage often had not been keyed. There is no obvious reason for this but perhaps it was thought that the data base was flush with observations in these areas.

18. By counting the the number of observations not keyed in a sample of 50 Logs and assuming this pattern throughout, it was estimated that 30,000 additional observations might be available to add to the MDB.

DECK LOGS AT KEW

19. There are 43,936 Deck Logs in the archives at Kew from Royal Naval warships, with an average of 177 observations per log, some are fairly blank, others have many more observations than average. Random comparisons with fiche information from the MDB proved weather observations in these logs are not held nor have ever been keyed into the Maritime Data Base.

20. These logs offer over 7 million observations of quality from around the world to add to the Maritime Data Base. This is based on a sample of observations taken every 40 Deck Logs, averaged out and extrapolated for 43,936 Logs.

21. Readings are recorded at the end of each watch 0400, 0800, 1200, 1600, 2000, 2359. The geographical position is only recorded at noon each day. Therefore interpolation would be needed to produce a position for each observation.

22. Throughout this period Deck Logs were issued in two styles, one for large ships and one for smaller warships. The style issued to large warships has an impressive thick hard cover with high quality paper making up 180 pages. One side per day giving one years recordings in one book. Entries are very neat and the high quality paper is as pristine today as the day entries were made eighty odd years ago.

23. Smaller warships had thinner logs covering a shorter period and with less impressive covers. Some of these logs are from river and harbour craft but others give quality world wide observations.

24. The Deck Logs in the archives are numbered with numbers from 32574 to 76510. In the registers they appear by name alphabetically and not by year.

25. The deck logs from the 32 warships also keeping Met Logs duplicate each others observations. A list of these warships is at annex J.

ADDITIONAL OBSERVATIONS AVAILABLE

26. The following could be added to the Data Base:

Met Log Books - 30,000 observations mainly from the North Atlantic.

Warship Deck - 5,760,000 observations if ship's position is interpolated between noon positions.
 Logs 2,000,000 estimated observations from smaller vessels

27. Expressed by Global Area:

	Atlantic		Med	Indian Ocean		Pacific	
	North	South		North	South	North	South
Met Log Book	44%	13%	23%	10%	5%	3%	2%
Warship Deck	45%	7%	25%	8%	5%	7%	3%

28. The simplest and easiest way to add the additional Ship's Met Log Book data would be to key all the observations in all the Met Logs again. This is clearly a very expensive option and it probably is not worth trying to add the 30000 mainly North Atlantic observations.

29. To key the information from 43,936 Deck Logs is a lengthy and costly exercise particularly when access is difficult as in the archives at Kew. Although removal from Kew is not normally allowed the only realistic solution would be to get exceptional approval to remove the logs in batches and either put the information on film or key directly into a data base.

J	H	G	F	E	D	C	B	A
A	B	C	D	E	F	G	H	J

12

H11 H10

J
A

ARC

H09 H08

J
A

H07 H06

J
A

H05 H04

J
A

H03 H02

J
A

H01

Door

DUCT

J	H	G	F	E	D	C	B	A
A	B	C	D	E	F	G	H	J

G07 G08

SB106

J	H	G	F	E	D	C	B	A
A	B	C	D	E	F	G	H	J

G05 G06

J	H	G	F	E	D	C	B	A
A	B	C	D	E	F	G	H	J

G03 G04

J	H	G	F	E	D	C	B	A
A	B	C	D	E	F	G	H	J

G01 G02

J	H	G	F	E	D	C	B	A
A	B	C	D	E	F	G	H	J

J05 J06

AREA J

J	H	G	F	E	D	C	B	A
A	B	C	D	E	F	G	H	J

J03 J04

J	H	G	F	E	D	C	B	A
A	B	C	D	E	F	G	H	J

J01 J02

DUCT

DUCT

Warship Met Log Books

Merchant Ship Met Log Books

Merchant Ship Met Forms

1936 - 1968

Meteorological Log kept on board

S. S. Rheconor

Captain R. B. Neville from Los Angeles to Manila.

DATE	Latitude		Longitude		Current when determined at short intervals.	Course and Distance		Wind at time of observation		Barometer*		True Atmospheric Pressure at Sea Level The barometer reading corrected for Temperature, Height, Gravity, etc. See Marine Observer's Handbook, 5th Edition.	Thermometers.	
	Observed	Dead Reckoning	Observed	Dead Reckoning		Each four hours	Direction	Force 0 to 12	Uncorrected Reading	Att. Therm. Absolute Scale	Dry Bulb		Wet Bulb	
24 th	4	30-26	169-48			East	5	1026.2	296	1024.4	74	71		
	8	30-19	171-00			East	5	1026.9	297	1024.9	74	70		
NOON	30-10	172-04				East	5	1026.0	298	1023.8	78	72		
	4	30-05	173-16			East	5	1025.0	298	1022.6	77	71		
* 06. 7-23	8	30-03	174-12			East	5	1025.0	298	1022.6	77	71		
	4	30-02	174-22			East	5	1025.2	296	1023.1	76	72		
	8	29-57	175-34			ESE	5	1024.8	297	1022.7	75	72		
MIDT.														
28 th	4	29-51	176-45			ESE	5	1022.0	297	1019.9	75	72		
* 02. 4-21	8	29-53	176-50			ESE	5	1023.9	298	1021.6	74	73		
	4	29-46	177-06			ESE	5	1022.8	301	1020.1	79	74		
NOON	29-33	178-58				ESE	5	1022.8	301	1020.1	79	74		
	4	29-14	179-56			ESE	6	1021.1	300	1018.4	77	73		
* 06. 7-23	8	29-57	179-50			ESE	6	1021.1	299	1018.6	78	74		
	4	29-6	178-49			ESE	5	1020.0	299	1017.6	77	74		
MIDT.		28-50	177-41			ESE	4	1014.5	294	1015.0	79	75		
30 th	4	28-35	176-33			ESE	4	1018.0	300	1015.8	80	75		
	8	28-18	175-25			ESE	4	1017.0	301	1014.2	80	75		
NOON	28-06	174-18				SE	4	1014.4	300	1010.6	80	76		
	4	27-50	173-12			SE	4	1014.4	300	1010.6	80	76		
	8	27-35	172-08			SE	5/6	1014.7	297	1012.4	74	73		
MIDT.		27-19	171-02			SSE	6	1012.0	298	1009.5	78	75		
31 st	4	27-04	169-55			South	5	1008.4	299	1006.1	78	76		
	8	26-48	168-49			NWS	4	1010.6	299	1007.9	78	76		
NOON	26-33	168-12				NW	4	1010.9	302	1007.9	81	75		
	4	26-12	167-08			NW	4	1010.0	300	1007.2	81	74		
	8	25-57	166-02			NW	3/4	1012.3	300	1009.5	80	74		
MIDT.		25-41	164-56			W	1/2	1012.8	300	1009.9	80	76		

* Please give Readings of the Ship's Barometer, say at Noon, at various times during the voyage noting whether it is mercurial or aneroid

See last page of log

Hour, Ship's Time	Clouds at time of observation		Weather at time of observation		Sea Surface				Remarks	Rain-fall by Gauge	
	Upper and Middle	Lower	According to Beaufort Notation	Visibility or Fog Intensity	Waves	Swell	Temp by No.	Spec. Grav. by No.			
4	NIL	St-Cu	10	0	8	East	4	ESE	3	74	28 th Block retarded 9 mins.
8	Ci-Cu	NIL	2	6	9	East	4	ESE	3	75	Block retarded 9 mins. Dull weather with passing rain occasionally in earlier part of watch. 7 ⁰⁰ Sky clearing rapidly.
NOON	A-Cu	Cu-Cu	4	6	8	East	4	ESE	3	76	A-Cu predominant in earlier part of watch. Cu predominant later.
4	Ci-Cu	Cu	3	6	9	East	4	ESE	4	74	Fine + clear weather throughout.
8	NIL	Cu-Cu	6	6	8	East	4	ESE	4	75	Sky mainly clear in earlier part of watch. Cu + Ci-Nt increasing from East to 6.
MIDT.	A-St	Cu-Nt	4	6	8	ESE	4	ESE	4	76	10 ⁰⁰ Block retarded 9 mins, wind hauled to ESE. 15 ⁰⁰ Variable sky. Cu + Ci-Nt predominating.
4	A-St	Cu-Nt	4	6	8	ESE	4	ESE	4	76	28 th Block retarded 9 mins 29 th 57' N, 175 th 35' W N 61 E 5 (1923-0433) 09/5
8	NIL	Cu	2	6	8	ESE	4	ESE	4	78	4 ⁰⁰ Block retarded 9 mins. Fine + clear weather.
NOON	NIL	Cu	3	6	8	ESE	4	ESE	4	79	09 ⁰⁰ 29 th 35' N, 177 th 53' W N 13 E 20 (0433-1922) 10/5
4	Ci-Cu	Cu	5	6	8	ESE	4	ESE	4	79	2 ⁰⁰ Wind freshened to F. 6. Sky mainly clear during earlier part of watch.
8	NIL	Cu	3	6	8	ESE	4	ESE	4	79	7 ⁰⁰ Wind moderated to F. 5. Sky generally cloudless throughout.
MIDT.	NIL	ESE	5	6	8	ESE	4	ESE	4	78	10 ⁰⁰ Block retarded 9 mins. Heavy masses of Nt passing over from ESE.
4	NIL	Cu-Nt	4	6	8	ESE	4	ESE	4	79	2 ⁰⁰ Block retarded 9 mins. Nt clouds passing over from ESE throughout.
8	Ci-St	Cu	8	6	8	ESE	3	ESE	4	80	4 ⁰⁰ Block retarded 9 mins. Sky variable from 7 to 10 clouded, Cu predominating.
NOON	A-St	St-Cu	10	0	8	SE	3	South	2	79	10 ⁰⁰ Wind hauled to SE. F. 4. Sky mainly overcast throughout.
4	NIL	Cu-Nt	10	0	8	SE	3	South	2	81	Dull weather with overcast sky.
8	NIL	Nt	10	0	8	SE	4	South	2	81	7 ⁰⁰ 8 ⁰⁰ Heavy rain squall wind increased to F. 6. Dull weather, overcast sky + occasional showers throughout.
MIDT.	A-St	St-Cu	10	0	8	SSE	4	South	2	81	10 ⁰⁰ Block retarded 9 mins. Wind hauled to SSE. F. 6. Squalls increasing in strength duration in latter part of watch.
4	NIL	Nt	10	0	4	South	4	South	3	80	2 ⁰⁰ Block retarded 9 mins 27 th 7' N, 171 th 15' E S 77 W 23 99
8	NIL	Cu	5	6	8	NWS	3	SW	2	80	3 ⁰⁰ 3 ⁰⁰ Heavy rain squall, wind hauled to South. F. 5. 4 ⁰⁰ Block retarded 8 mins. 4 ⁰⁰ 5 ⁰⁰ Frequent heavy rain squalls.
NOON	Ci-St	Cu	6	6	8	NW	3	WNW	3	81	6 ⁰⁰ Wind hauled to NW. F. 4. Sky clearing. 9 ⁰⁰ Wind hauled to NW. F. 4. Variable sky during watch.
4	Ci-St	Cu-Nt	5	6	9	NW	3	WNW	3	81	Variable sky during watch.
8	Ci-St	NIL	2	6	9	NW	3	WNW	3	81	Sky mainly cloudless throughout.
MIDT.	NIL	Cu-Nt	4	6	8	West	1	WNW	1	81	10 ⁰⁰ Block retarded 9 mins. 10 ⁰⁰ Wind hauled to West. F. 2. Sky clear in first part of watch. 11 ⁰⁰ Heavy masses of Cu + Ci-Nt approaching.

so that in the event of the Office Barometer being broken the Ship's can be taken into use and its error can be ascertained.

before commencing.

Warship Met Log Books 1911 to 1920

HMS Mutine	30/11/10 to 29/03/11
	30/03/11 to 27/07/11
	28/07/11 to 17/08/11
	12/03/12 to 20/04/12
	26/08/12 to 22/12/12
	23/12/12 to 21/04/13
	22/04/13 to 01/08/13
	15/11/13 to 03/01/14
	06/03/14 to 22/06/14
Cornwallis	07/08/11 to 03/10/11
Fantome	16/03/11 to 04/11/11
	20/05/13 to 16/09/13
	08/04/14 to 14/08/14
Merlin	01/06/11 to 31/12/11
Sealark	19/03/12 to 09/10/12
	20/06/13 to 20/10/13
Skipjack	01/10/12 to 31/01/13
Hyacinth	09/06/13 to 12/08/13
	24/06/14 to 22/07/14
Worcester	23/09/13 to 25/06/14
	04/11/16 to 11/04/17
Endeavour	01/01/16 to 18/06/16
Zaria	07/07/16 to 07/11/16
	08/11/16 to 07/03/17
	08/03/17 to 05/07/17
	06/07/17 to 29/10/17
	30/10/17 to 22/02/18
	23/02/18 to 18/06/18
	19/06/18 to 16/10/18
	14/02/19 to 16/04/19
Roxburgh	14/12/17 to 07/01/18
Oxfordshire	23/09/18 to 27/02/18