

METEOROLOGICAL
LOG
FOR 4 MONTHS

B.R.E.
04

Corrections of Antarctic
Barometer

Cape Evans. No 1157

Corr - .010.

Height 10 feet.

Cape Adare No 1156

Corr - .012.

Height 12 feet (?)

Ship No 1163

Corr - .005.

Height see register.

Position

The position is given as accurately as possible for every 4 hours, instead of giving course etc. as laid down on the form.

Current

Current observations having been made a special feature are recorded in a book by themselves.

Maximum Temperature

The motion of the ship being found to alter the index in the Minimum Thermometer only the Maximum Temperature is recorded.

The thermometer is in the Stevenson's screen, with the ordinary bulbs, on top of the lab on port side of poop.

Special Observations of Non Meteorological Character.

Zoological, Hydrographical and other subjects, being each made a special study of, are recorded in their own books.

Colour of Sea.

The numbers found under this heading refer to "Code des Couleurs classées d'après la méthode Chevreul simplifiée par Paul Klichowski et Th. Valette.

Colour

When colour is mentioned with a number it refers to the above code.

Temperature

When given without a decimal point is to the nearest degree only.

If read closely, and is an exact degree, it is logged thus, 67.0.

Cloud Velocity.

The following scale is used:—

- | | | |
|--------------|------------|--------------|
| ① Stationary | ① Slow | ③ Fast |
| ② Very slow | ② Moderate | ④ Very fast. |

Cloud Density

Indicated by the suffix 0, 1, 2, 3. Thus 10₂; 60.

0. Very light cloud
1. Light cloud
2. Moderately heavy cloud
3. Heavy dark cloud

Green Flash.

When sun sets on a clear horizon immediately it has disappeared a tiny patch of brilliant green is sometimes seen where he was. Entries are made of this phenomenon, when observed, under this heading.

Mist.

This name has been used for rain clouds even when rain is not falling at the actual moment.

Rain is classified as follows:—

- | | |
|----------|------------|
| Drizzle | Heavy |
| Slight | Very Heavy |
| Moderate | Torrential |

The suffix -ly is used when only an approximate direction can be given; for instance in the case of waves or swell at night, light quality, wind with the ship under weigh, direction of a confused sea etc. Thus:—

N_{ly} = Somewhere in the direction of N.

When a suffix is not used, it is considered that the exact direction has been obtained.

Time 12 hrs Fast on G.M.T. except where otherwise stated.

Form 131.

METEOROLOGICAL LOG.

Name of Vessel Terra Nova Steam ☒ Sail ☐ Rig Gross Register Tonnage

Captain's Name Lieutenant ERB Plover Log kept by M^r Francis Drake assisted by Lieut. H. de P. Kennick R.N.
Lieut. W. Bruce R.N.R.

When filled, or nearly full, this log is to be returned, as quickly as possible, to the Meteorological Office, 63, Victoria Street, London, S.W., whence it will be duly acknowledged. Should a considerable interval be likely to occur between successive voyages, owing to the ship being laid up or a similar cause, the log is to be returned without delay.

ADMIRAL BEAUFORT'S SCALE OF WIND FORCE.

- | | |
|-------------------|---|
| 0 Calm. | |
| 1 Light air | - Just sufficient to give steerage way. |
| 2 Light breeze | - With which a well-conditioned ship-of-war of 1 to 2 knots. |
| 3 Gentle breeze | - Admiral Beaufort's time (1800-1850), with all 3 to 4 knots. |
| 4 Moderate breeze | - full, from - - - - - 5 to 6 knots. |
| 5 Fresh breeze | - Royals, &c. |

FOR SHIPS RIGGED WITH DOUBLE TOPSAILS.*

sails.
b, &c.
per topsails and courses.
ails and courses.
n-topsail and reefed foresail.
ions were made to meet the require-
ble topsails, introduced since Admiral
ne.

Criteria for steamships.

ideration is required for the speci-
the scale for use on board steamships.
purpose it is recommended that as
ty occurs use be made of the equi-
en in Col. 2. Thus, when the ship is
in a calm at 15 knots, the wind felt
posed position on board will be a
breeze, which, according to the table,
n 4 and 5 on the Beaufort scale, and,
lar breeze is felt when the ship is
at 15 knots right before the wind, the
eet of the wind will be 30 knots,
6 and 7 on the Beaufort scale,
to the table of equivalents.
tunities occur from time to time for
the speed of the wind with the
the ship. A hand anemometer may
red if used judiciously and if proper
be made for the motion of the ship.

river.

unimpeded.

How was the screen containing the dry and wet bulbs situated? Stevenson's Double Condensed Screen on Port

Side of Poop on top of Scientist's Laboratory.
For duplicate Hygrometers see below.

Where was the Meteorological Office barometer located? In Wardroom Skylight.

Please note that a dot (.) is now to be used under any letter to augment its significance; instead of a bar (-).

In the space marked—Log kept by—the names of all those who have assisted in keeping the Log should be noted.

A second ordinary ship screen, with duplicate dry & wet bulbs, has been placed on after side of starboard deck above on poop. ^{14767-580.} This is only read when there is any chance of the air from G.R. being affected by the primary hygrometer.

f2)	...	...	Moderate Fog	...	...	Lights, passing vessels, and landmarks generally indistinct under a mile. Fog signals are sounded.	Navigation impeded, additional caution required.
f3)	...	...	Thick Fog	...	...	Ships' lights and vessels invisible at 1 mile or less ...	Navigation suspended.

* If the horizon is indistinct, but still just visible, the symbol "m," for mist, should be used exclusively in the weather column.

LETTERS TO INDICATE THE STATE OF THE WEATHER.

- | | | | | | |
|----------------------|---------------------|--------------|--------------------|------------|--|
| b Blue Sky. | e Wet without rain. | h Hail. | o Overcast. | r Rain. | u Ugly (threatening appearance of Weather). |
| c Clouds (detached). | f Foggy. | l Lightning. | p Passing Showers. | s Snow. | v Visibility. Objects at a distance unusually visible. |
| d Drizzling Rain. | g Gloomy. | m Misty. | q Squally. | t Thunder. | w Dew. |
| | | | | | z Haze. |

NOTE.—A dot (.) under any letter augments its signification: thus, r heavy rain; r very heavy rain; but to express the intensity of the fog the scale should be used. A figure preceding a letter shows how many hours that style of weather had prevailed since last observation: thus, 4 r means four hours' rain; 2½ l means two and a half hours of vivid lightning, &c., &c. It is well to bear in mind that w=dew, but d=drizzle and e=wet without rain; p=passing showers of rain, and q=squalls, but s=snow.

SEA DISTURBANCE SCALE (Provisional. See Explanatory memorandum separately issued).

Scale.	Description.	Height of Waves in feet from crest to trough.	Condition of Surface.
0	Calm ...	...	Glassy.
1	Smooth ...	...	Rippled.
2	...	...	...
3	Slight to moderate ...	Under 5 feet ...	Rocks buoy or small boat. Furrowed.
4	...	...	...
5	Rough to very rough ...	5 to 10 feet ...	Much disturbed; deeply furrowed.
6	...	...	...
7	High to very high ...	11 to 15 feet ...	Rollers with steep fronts.
8	...	16 to 35 feet ...	...
9	Phenomenal ...	36 feet and above ...	Precipitous; towering.
10	...	...	...

NOTE.—The same scale numbers and the corresponding heights from crest to trough may be used for Waves or for Swell, for which separate columns are provided. Care should be taken that the respective directions and amounts of disturbance are entered in their proper columns. If confused, write "Confused" in its respective direction column, stating its chief direction or directions; thus, "Confused N.E. and S.E.," "Confused S.W."

Position

The position is given as accurately as possible for every 4 hours, instead of giving course etc. as laid down on the form.

Current

Current observations having been made a special feature are recorded in a book by themselves.

Maximum Temperature

The motion of the ship being found to alter the index in the Minimum Thermometer only the Maximum Temperature is recorded.

The thermometer is in the Stevenson's screen, with the ordinary bulb, on top of the lats on port side of poop.

Special Observations of Non Meteorological Character.

Zoological, Hydrographical and other subjects, being each made a special study of, are recorded in their own books.

Colour of Sea.

The numbers found under this heading refer to "Code des Couleurs classées d'après la méthode Chevreul.

Simplifiée par Paul Klincksieck et Th. Vallette.

Colour

When colour is mentioned with

Temperature

When given without a decimal

If read closely, and is an exact

Cloud Velocity.

The following scale is used:—

① Stationary

② Very slow

Cloud Density

Indicated by the suffix 0, 1,

0. Very light cloud

1. Light cloud

2. Moderately heavy cloud

3. Heavy dark cloud

Green Flash.

When sun sets on a clear horizon

seen where he was. Entries are made

Miles

This name has been used for previous

Rain is classified as follows:—

Drizzle

Heavy

Slight

Very Heavy

Moderate

Torrential

The suffix -ly is used when only an approximate direction can be given; for instance in the case of waves or swell at night,

light quality, wind with the ship under weigh, direction of a confused sea etc. Thus:—

N-ly = Somewhere in the direction of N.

When a suffix is not used, it is considered that the exact direction has been obtained.

Time 12 hrs Fast on G.M.T. except where otherwise stated.

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Name of Vessel *Terra Nova* Steam or Sail Rig Gross Register Tonnage

Captain's Name *Lieutenant ERB Rous* Log kept by *Mr Francis Drake* *assisted by*
Lieut. H. de P. Kennick R.N.
& Lieut W. Bruce R.N.R.

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ADMIRAL BEAUFORT'S SCALE OF WIND FORCE.

0 Calm.

1 Light air - Just sufficient to give steerage way.

2 Light breeze - With which a well-conditioned ship-of-war of 1 to 2 knots.

3 Gentle breeze - Admiral Beaufort's time (1800-1850), with all 3 to 4 knots.
sail set, would go in smooth water, and "clean full," from

4 Moderate breeze - 5 to 6 knots.

5 Fresh breeze - Royals, &c.

6 Strong breeze - Single-reefed topsails and topgallant sails.

7 Moderate gale - To which she could just carry in chase, "full and 7 Double-reefed topsails, jib, &c.
by"

8 Fresh gale - Triple-reefed topsails, &c.

9 Strong gale - Close-reefed topsails and courses.

0 Whole gale - With which she could scarcely bear close-reefed main-topsail and reefed foresail.

1 Storm - Which would reduce her to storm-stay-sails.

2 Hurricane - Which no canvas could withstand.

FOR SHIPS RIGGED WITH DOUBLE TOPSAILS.*

Topgallant sails.

Topsails, jib, &c.

Reefed upper topsails and courses.

Lower topsails and courses.

Lower main-topsail and reefed foresail.

* These modifications were made to meet the requirements of double topsails, introduced since Admiral Beaufort's time.

ALTERNATIVE SPECIFICATION.

Admiral Beaufort's Numbers.	Description of Wind.	Probable actual velocity of the wind in statute miles per hour.	Probable equivalent pres- sure in pounds upon a circular disc one square foot in area.	Mode of estimating on board Sailing Vessels.	Criteria for steamships.
0	Calm	Under 1	Less than .01	—	Special consideration is required for the specifi- cation of the scale for use on board steamships. For this purpose it is recommended that as opportunity occurs use be made of the equiv- alents given in Col. 2. Thus, when the ship is running in a calm at 15 knots, the wind felt in an exposed position on board will be a moderate breeze, which, according to the table is between 4 and 5 on the Beaufort scale, and if a similar breeze is felt when the ship is running at 15 knots <i>right before the wind</i> , the actual speed of the wind will be 30 knots between 6 and 7 on the Beaufort scale according to the table of equivalents. Other opportunities occur from time to time for comparing the speed of the wind with the speed of the ship. A hand anemometer may be employed if used judiciously and if proper allowance be made for the motion of the ship
1	} Light breeze ...	From 1 to 12 inclusive, average about 7 ...	Between .001 and .04 ...	Sufficient wind for working ship.	
2					
3					
4	} Moderate breeze ...	" 13 to 24 " " " 19 ...	" .05 " .18	} Forces most advantageous for sailing with leading wind and all sail drawing.	
5					
6	} Strong wind ...	" 25 to 38 " " " 32 ...	" .19 " .44	} Reduction of sail becomes necessary even with a leading wind.	
7					
8	} Gale force	" 39 to 54 " " " 47 ...	" .45 " .89	} Considerable reduction of sail neces- sary even with wind quartering.	
9					
10	} Storm force... ..	" 55 to 75 " " " 65 ...	" .90 " 1.70	} Close reefed sail when running ; or hove-to under storm sail.	
11					
12	Hurricane	Above 75	More than 17	No sail can stand even when running.	

SCALE OF FOG INTENSITY.

Scale.	Name.	On Sea.	On River.
...	No Fog or Mist ...	Horizon clear.	...
...	Light Fog or Mist* ...	Horizon invisible, but lights and landmarks generally visible at working distances.	Objects indistinct, but navigation unimpeded.
f2 f3	Moderate Fog ...	Lights, passing vessels, and landmarks generally indistinct under a mile. Fog signals are sounded.	Navigation impeded, additional caution required.
f4 f5	Thick Fog ...	Ships' lights and vessels invisible at 1 mile or less ...	Navigation suspended.

* If the horizon is indistinct, but still just visible, the symbol "m," for mist, should be used exclusively in the weather column.

LETTERS TO INDICATE THE STATE OF THE WEATHER.

b Blue Sky. e Wet without rain. h Hail. o Overcast. r Rain. u Ugly (threatening appearance of Weather).
c Clouds (detached). f Foggy. l Lightning. p Passing Showers. s Snow. v Visibility. Objects at a distance unusually visible.
d Drizzling Rain. g Gloomy. m Mist. q Squally. t Thunder. w Dew. z Haze.

NOTE.—A dot (.) under any letter augments its signification: thus, r heavy rain; r. very heavy rain; but to express the intensity of the fog the scale should be used. A figure preceding a letter shows how many hours that style of weather had prevailed since last observation: thus, 4 r means four hours' rain; 2½ l means two and a half hours of vivid lightning, &c., &c. It is well to bear in mind that w=dew, but d=drizzle and e=wet without rain; p=passing showers of rain, and q=squalls, but s=snow.

SEA DISTURBANCE SCALE (Provisional. See Explanatory memorandum separately issued).

Scale.	Description.	Height of Waves in feet from crest to trough.	Condition of Surface.
0	Calm ...	...	Glassy.
1	Smooth ...	...	Rippled.
2	Slight to moderate ...	Under 5 feet ...	Rocks buoy or small boat. Furrowed.
3			
4	Rough to very rough ...	5 to 10 feet ...	Much disturbed; deeply furrowed.
5			
6	High to very high ...	11 to 15 feet ...	Rollers with steep fronts.
7			
8	Phenomenal ...	16 to 35 feet ...	Precipitous; towering.
9			
10	...	36 feet and above ...	...

NOTE.—The same scale numbers and the corresponding heights from crest to trough may be used for Waves or for Swell, for which separate columns are provided. Care should be taken that the respective directions and amounts of disturbance are entered in their proper columns. If confused, write "Confused" in its respective direction column, stating its chief direction or directions; thus, "Confused N.E. and S.E.," "Confused S.W."

Meteorological Log kept on board P. & O. Steamship "China."

DATE.		Latitude.		Longitude.		Course and Distance.	Total Compass Error.	Ship's Head.	Wind, at the time of observation.	Barometer.* No. 361	Thermometers.	
Year 1902.						Each four hours.				Height of Cistern above Sea 39 feet.	Dry	Wet
Month VII.							Of Compass used for Wind, being Variation and Deviation combined.	By same Compass as Wind.	Direction. State if true, or subject to Compass Error, or only to Variation.	Force 0 to 12.	Bulb. No. 5237	Bulb. No. 1931
Day.	Hour.	Observed.	Dead Reckoning.	Observed.	Dead Reckoning.	True Course.	Distance by Log.			Uncorrected Reading.	Att. Therm.	
25	4								True		In Chart Room in good	In the screen
	8								throughout		position. Ship's Mercurial	which is fixed on
	NOON								voyage.		each day at noon below	the after-side of
	4	Current in last 24 hours mls.									the Chart Room	well protected
	8					Various			S.S.W.	4	30.00	62
												from sun, rain, and spray.
	8					by			S.S.W.	3	30.02	62 63 59
	MIDT.					Coast Line.			S.S.E.	4	29.98	62 62 60
26	4					S. 87° W. Various.	14 12		S.	4	29.76	60 60 59
	8					S. 18 W. S. 62 W. S. 69 W.	4 10 51	19° W.	S. 86° W.	S.	5	29.61 61 60 58
	NOON	49 40 N.	49 40 N.	4 40 W.	4 29 W.	S. 68 W.	61		S.S.W.	6	29.48 (29.60)	62 63 60
	4	Current in last 9 hours W. 7 mls.							S.S.W.	7	29.52	62 61 60
	8					S. 25 W.	48		S.W.	8	29.62	61 60 59
						S. 25 W.	48		S.W. by W.	8	29.72	62 61 58
	MIDT.					S. 25 W. S. 28 W.	6 49	19° W.	W.	8	29.80	61 60 58
27	4					S. 28 W.	51		W.	8	29.89	60 59 56
	8					S. 28 W.	54	19° W.	W.	7	30.10	63 63 59
	NOON	45 15 N.	45 7 N.	7 30 W.	8 4 W.	S. 28 W.	60		W.S.W.	6	30.17	65 65 60
	4	Current in last 24 hours N. 70 E. 23 mls.							N.W. by W.	6	30.26 (30.40)	65 64 59
	8					S. 35 W.	58		N.W. by W.	6	30.34	65 64 58
						S. 35 W.	58	20° W.	N.W. by W.	4	30.41	63 62 58
	MIDT.					S. 35 W. S. 1 W.	46 13		Calm	0	30.40	63 61 59
28	4					S. 1 W.	60	19° W.	N.E.	4	30.32	62 61 57
	8					S. 1 W.	60		N.N.W.	6	30.29	67 68 62
	NOON	39 47 N.	39 47 N.	9 32 W.	9 30 W.	S. 1 W. S. 8 E.	5 62		N.N.E.	4	30.28 (30.39)	68 70 64
	4	Current in last 24 hours None mls.							N.E.	4	30.24	67 72 67
	8					S. 12 E.	62		N. by W.	4	30.21	69 70 66
						S. 42 E. S. 71 E.	12 19	17° W.	N.W. by W.	3	30.20	68 66 62
	MIDT.								Calm	0	30.20	66 66 62

* Please give Readings of the Ship's Barometer, say at Noon, at various times during the voyage, noting whether it is mercurial or aneroid.
 † In the Form of Log now issued separate columns are given for the Names of Upper and Lower Clouds.

Captain T. S. Angus,

from London

to Australia.

Hour.	Clouds.†	Weather.		Sea Surface.						Remarks.	
	When Lower Clouds do not move with the Wind, give the Direction they come from in the "Remarks," (For Plates see "Instructions.")	According to Beaufort Notation.	Fog Intensity. 0 to 5.	Waves.		Swell.		Temp. by No.	Spec. Grav. by No.		
				Direction from.	Disturbance. 0 to 10	Direction from.	Disturbance. 0 to 10				
										Names.	Prop. of Sky Cum. 0 to 10.	Also record when Confused.						Time of Remark.
4											Here give any important Remarks as to phenomena, with the times of their occurrence; especially the times of Changes in Direction and Force of Wind, as well as the Direction, Veering or Backing, Force and Duration of Squalls; the direction from which upper clouds are moving; the Position of Ice and of Derelicts. Also note the hour at which the Ship arrives in or leaves Port. (See "Instructions" for further particulars.)
8											
NOON											
4	Cum.-s.	6	cb	—	0	—	0	—			
8	Cum.	8	c	—	0	—	0	—			1 33 Left Tilbury.
											3 7 Passed Nore L.V.
											4 35 Passed Tongue. 6 2. East Goodwin. French coast and distant objects remarkably clear and distinct. Rainy appearance to W. and N.W.
											10 30 Passed Beachy Head.
MIDT.	Cum. | Nim.	10	or	—	0	—	0	—			
4	Cum. | Nim.	3	bed		S.	3	—	0	57		Rainy appearance.
											3 7 St. Catherine's Light N. 25° W., 4 miles. Sky clearing.
8	Cum.-s.	7	c		S.S.W.	4	—	0	58		
NOON	Cum.-s.	7	cm	1	S.S.W.	5	—	0	58	29	Wind and sea increasing.
4	Cum.-s.	10	or		S.W.	6	W.	4	58		Steep head sea. Ship pitching and rolling heavily.
8	Cum.-s. Nim.	10	op		S.W.	7					
					S.W.	6	W.	5	58		8 0 Ushant Light N. 87° E., 10 miles. Cum.-s. rapidly from S.W.
MIDT.	Cum.	4	bcpq		S.W.	7	W.	5	60		Detached cum. moderately from Westward.
4	Cum.-s. Cum.	4	bcp		W.	5	N.W.	3	60		Cum. from S.W. slowly.
											Cum. round horizon.
8	Cir. Cum. Cum.-s.	3	bc		W.	5	N.W.	3	61		Cir. from N.W.
NOON	Cum.	4	bc		W.	4	—	—	64	28	
4	Cum.	3	bc		W.N.W.	4	N.W.	3	63		
8	Cir.-c. Cum.	2	bc		W.N.W.	4	N.	3	61		8 0 Villano Light S. 16° W. Cir.-c. from N.E.
											11 40 Finisterre S. 89° W., 16 miles.
MIDT.	Cum.	1	bw		W.	3	Confused	4	60		Stars very clear and bright.
4	—	0	bw		N.E.	3	W. and N.W.	3	62		
8	—	0	b		N.N.E.	3	W. and N.W.	1	66		
NOON	—	0	b		N.N.E.	3	N.W.	3	67	27	
4	—	0	b		N.N.E.	3	N.N.W.	4	67		
8	—	0	bm		N.N.W.	3	—	—	67		10 15 St. Vincent Light N. 48° E., 3 miles.
MIDT.	—	0	bw		—	0	W.	2	65		
2a	17	18	19	19a	20	21	20a	21a	22	23	24

25

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.
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Meteorological Log kept on board

"Terra Nova" R.Y.S.

Captain *Paul Chalmers* from *30th November* to *3rd December 1910*

DATE.		Latitude.		Longitude.		Course and Distance.		Total Compass Error.	Ship's Head.	Wind, at the time of observation.	Barometer. No. 1163	Thermometers.	
Year 1910	Month Nov	Observed.	Dead Reckoning.	Observed.	Dead Reckoning.	Each four hours.	Of Compass used for Wind, being Variation and Deviation combined.	By same Compass as Wind.	Direction. State if true or subject to Compass Error, or only to Variation.	Force, 0 to 12.	Height of Cistern above Sea 9 1/2 feet.	Dry Bulb.	Wet Bulb.
Day, Civil Time.	Hour.	The D.R. position is needed daily, in addition to that by Observation, but it should be the result of careful calculation, in order to give any value to the estimation of the current.				Color of True Course.	Distance by Log.	True Course.	Distance by Log.	Force.	Uncorrected Reading.	Att. Therm.	No.
30	4-30												1520
	8-30												1523
1.0	NOON	47	34	170	88								
	4-30												
	8-30												
	MIDT.												
Dec 1.	4-30												
	8-30												
	NOON	50	44	170	88								
	4-30												
	8-30												
	MIDT.												
2	4-30												
	8-30												
	NOON	53	07	172	11								
	4-30												
	8-30												
	MIDT.												
3	4-30												
	8-30												
	NOON	52	12	172	48								
	4-30												
	8-30												
	MIDT.												

Clouds.		Weather.		Sea Surface.		Remarks.	
Hour.	The direction from which the upper clouds are moving, and also that of the lower clouds when they do not move with the wind, should be noted when determinable.	According to Beaufort Notation.	Fog Intensity. 0 to 5.	Waves.	Swells.	Time of Remark.	Here give any important Remarks as to phenomena, with the times of their occurrence; especially the times of Changes in Direction and Force of Wind, as well as the Direction, Veering or Backing, Force and Duration of Squalls; the direction from which upper clouds are moving; the Position of Ice and of Derelicts. Also note the hour at which the Ship arrives in or leaves Port. (See "Instructions" for further particulars.)
Upper.	Lower.	Prop. of Sky obscured. 0 to 100.	Direction from.	Disturbance 0 to 10.	Direction from.	Temp. by No.	Spec. Grav. by No.
4							
8							
1.0	a. st. h. a. cu. st. cu.	8	0.0	N. 4	SSW 6		
4	a. st. a. cu.	6	h. c.	NNW 4	SSW 6	50.8	27.1
8	st. h. cu.	10	0.0	W 4	SSW 7	49.8	
MIDT.	cc. st. cu.	3	h. c.	W 5	SSW 7	51.0	
4	ci-st. st.	10	om.	10NNW 5	-	51.2	
8	st. h. cu.	10	0.0	WSW 5	WSW 6	47.6	
NOON	st.	10	0.0	SW 6	WSW 7	47.0	
4	st. cu.	8	0	SW 6	SSW 8		
8	st. h. cu.	10	0.0	SW 8	SW 8		
MIDT.							
4							
8							
NOON							
4							
8	st. cu. cu. st.	8	C	SSW 8	SSW 8		
MIDT.							
4	st. cu. cu.	7	C	SSW 8	SSW 8		
8							
NOON	st. st. cu.	10	0.0	SW 6	SSW 8	45.2	
4	st. h. cu.	10	0.0	SSW 6	South 8	45.1	
8	st.	10	0.0	SW 5	SSW 7	45.0	
MIDT.	st.	10	0.0	SW 4	South 7	45	

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

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.

Meteorological Log kept on board

"Terra Nova" R.Y.S.

DATE.		Latitude.		Longitude.		Course and Distance.		Total Compass Error.		Ship's Head.		Wind, at the time of observation.		Barometer.*		Thermometers.	
Year 1910		Observed.		Observed.		Each four hours.				Wind		Direction.		Height of Cistern			
Month Dec.		Dead Reckoning.		Dead Reckoning.				Of Compass used for Wind, being Variation and Deviation combined.		By same Compass as Wind.		State if true or subject to Compass Error, or only to Variation.		Force, 0 to 12.		Dry Wet	
Day, Civil Time.						Free Course, Col. of Sea.		Distance by Log.		Wind				Uncorrected Reading.		No. No.	
Hour.										Wind				Att. Therm.		No. No.	
										Wind						1524 1525	
										Wind						1520 1523	
4										Wind							
4										Wind							
9.30										Wind							
NOON		DR.		178						Wind							
4		54 31		50						Wind							
8										Wind							
MIDT.										Wind							
5										Wind							
4										Wind							
8.30						453		46		Wind							
NOON		DR.		176						Wind							
4		56 41		28						Wind							
6										Wind							
8								20 E		Wind							
MIDT.										Wind							
6.130		58 07		177 22						Wind							
4										Wind							
9						429				Wind							
NOON		DR.		177				22 E		Wind							
4		59 07		51						Wind							
8										Wind							
MIDT.										Wind							
7.1										Wind							
4										Wind							
9.9						430				Wind							
NOON		DR.		179				24 E		Wind							
4		61 22		56						Wind							
8										Wind							
9.0										Wind							
MIDT.										Wind							
1										Wind							
2										Wind							
3										Wind							
4										Wind							
5										Wind							
6										Wind							
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9										Wind							
10										Wind							
11										Wind							
12										Wind							
13										Wind							
14										Wind							
15										Wind							
16										Wind							

Meteorological Log kept on board "Terra Nova" Rigs

DATE.		Latitude.		Longitude.		Course and Distance.		Total Compass Error.	Ship's Head.	Wind, at the time of observation.	Barometer.* No. 1163	Thermometers.			
Year 1910	Month Dec.	Observed.	Dead Reckoning.	Observed.	Dead Reckoning.	Each four hours.		Of Compass used for Wind, being Variation and Deviation combined.	By same Compass as Wind.	Direction. State it true, or subject to Compass Error, or only to Variation.	Force. 0 to 12.	Height of Cistern above Sea. feet.		Dry Bulb.	Wet Bulb.
						True Course.	Distance by Log.					Uncorrected Reading.	Att. Therm.		
The D.R. position is needed daily, in addition to that by Observation, but it should be the result of careful calculation, in order to give any value to the estimation of the current.															
Day.	Civil Time.	Hour.													
8th															
		4								South 55W	5	29.56	38°	29.9	
		830					454			S 55W	5	29.74	43	32.0	31.0
NOON		{ 63 20 }		{ 177 22 }						S 55W	5	29.86	48	31.9	30.5
		{ Current in last hours }		{ mls. }								29.86			
		430						26° E.		S 55W	4-5	29.94	46	30.0	27.0
		8								S 55W	3.4	29.96	46	28.1	25.2
										S 55W	4	29.96			
MIDT.										S 55W	4	29.95	41	28.0	-
9th															
		4						34 E		SW W	4	29.95	388	27.8	25.1
		8								SW W	3	29.92	43	29.5	26.8
NOON		{ 65 8 }		{ 177 40 }						SW W	3	29.93	44	32.5	30.0
		{ Current in last hours }		{ mls. }								29.94			
		4								SW W	1-2	29.90	45	29.8	26.8
		524	65 32		178 5							29.91			
		8								West NW	1-2	29.85	42	28.0	26.1
												29.87			
MIDT.			In Pack							Calu	0	29.78	38	27.0	
10th															
		4	In Pack					34 E		NNE	2	29.68	35	28.0	
		530								ENE		29.72			
		845					465			NNE	2	29.62	33	27.0	
												29.66			
NOON		{ 66 38 }		{ 178 47 }						NNE	2	29.60	34	28.0	
		{ Current in last hours }		{ mls. }						ENE		29.64			
		4													
		8								NNE	1-2	29.66	34	32.5	30.8
		1012	66 50		178 51					ENE		29.70			
MIDT.										NNE	2	29.67	35	26.5	
11th															
		4	In Pack					31 E		N	2	29.665	33	27.6	27.5
										NNE		29.70			
		830								NNW	4	29.57	41	-	28.5
										N		29.59			
NOON		{ 66 55 }		{ 178 51 }						NNW	4-5	29.47	32		32.8
		{ Current in last hours }		{ mls. }								29.42			
		4					455 but deeper blue		16	NNW	4-5	29.42	47	24.2	33.9
										NW		29.43			
		8								WNNW	4	29.45	45	31.0	31.0
												29.46			
MIDT.										West WNW	5/4	29.45	41	30.0	30.0
12th															
												29.47			

Meteorological Log kept on board

"Terra Nova" R.Y.S.

DATE.		Latitude.		Longitude.		Course and Distance.		Total Compass Error.	Ship's Head.	Wind, at the time of observation.	Barometer.* No. 1163	Thermometers.			
Year 19	10	Observed.	Dead Reckoning.	Observed.	Dead Reckoning.	Each four hours.		Of Compass used for Wind, being Variation and Deviation combined.	By same Compass as Wind.	Direction. State if true, or subject to Compass Error, or only to Variation.	Force. 0 to 12.	Height of Cistern above Sea. feet.		Dry Bulb.	Wet Bulb.
Month	Dec.	The D.R. position is needed daily, in addition to that by Observation, but it should be the result of careful calculation, in order to give any value to the estimation of the current.				True Course.	Distance by Log.					Uncorrected Reading.	Att. Therm.	No.	No.
Day.	Civil Time.	Hour.					Colour of Sea		Wreck light by fog					1524	1525
12 th		4	S		10			34 E		NW N 4	29.50	49	28.5	28.5	
		8	In pack				45.5 but deeper blue			15 NW 3	29.49	42	32.8	32.5	
		NOON	67	05	178	22				W NW 8	29.50	45	35.0	34.0	
		4	Current in last hours							W NW 8	29.53	47	32.5	32.8	
		8								W NW 2-4	29.55	41	31.8	31.0	
		MIDT.								W NW -	29.56	42	31.0	30.0	
13 th		4-30	In Pack							10 ⁸ NW 2	29.59	36	31.0	31.0	
		8-9								W.S.W. WNW 2	29.60	40	32.0	31.8	
		9-30	67	30	177	58		44 E		SW W 2	29.61	45	32.8	31.0	
		NOON	Current in last hours								29.62				
		4								NW ⁸ N 05 1	29.58	40	31.2	31.0	
		8								SW ⁸ W 1	29.56				
		MIDT.								SE ⁸ S 1-0	29.48	40	32.0	32.0	
14 th		4	In Pack							Calm 0	29.45	35.3	30.6	30.0	
		8-30								SW WSW 2	29.44	46	29.8	29.0	
		NOON	67	28	177	59		44 E		SW WSW 1	29.45	46	35.0	32.9	
		4	Current in last hours								29.46				
		8								SSW WSW 1	29.47	37	29.8	29.0	
		MIDT.								SW ⁸ WSW 3/1	29.57	41	25.5	24.6	
15 th		4	In Pack							SE ⁸ SW 2-3	29.62	39.4	27.5		
		8								SE S 3	29.72	45	25.8	24.5	
		NOON	67	23	177	59		44 E		SSW WSW 3	29.74	40	26.8	25.2	
		4	Current in last hours							SE ⁸ S 2-3	29.80	45	27.8	25.8	
		8								Calm -	29.84	44	29.0	27.0	
		MIDT.								NE ⁸ E 1-2	29.85	39	26.5	25.5	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

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

Captain Lieut. E. R. Evans. R.N. from 12th December to 15th December 1910.

Clouds.		Weather.		Sea Surface.		Remarks.	
Hour.	The direction from which the upper clouds are moving, and also that of the lower clouds when they do not move with the wind, should be noted when determinable.	According to Beaufort Notation.	Fog Intensity. 0 to 5.	Waves.	Swell.	Time of Remark.	Here give any important Remarks as to phenomena, with the times of their occurrence; especially the times of Changes in Direction and Force of Wind, as well as the Direction, Veering or Backing, Force and Duration of Squalls; the direction from which upper clouds are moving; the Position of Ice and of Derelicts. Also note the hour at which the Ship arrives in or leaves Port. (See "Instructions" for further particulars.)
Upper.	Lower.	Direction from.	Disturbance. 0 to 10.	Direction from.	Disturbance. 0 to 10.	Temp. by No.	Spec. Grav. by No.
4							
8							
NOON							
4-5							
8							
MIDT.							
4-30							
8-9							
NOON							
4							
8							
MIDT.							
4							
8							
NOON							
4							
8							
MIDT.							
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NOON							
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MIDT.							
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NOON							
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MIDT.							
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8							
NOON							
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MIDT.							
4							
8							
NOON							
4							
8							
MIDT.							

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.

Meteorological Log kept on board

Terra Nova R.Y.S.

DATE.		Latitude.		Longitude.		Course and Distance.		Total Compass Error.	Ship's Head.	Wind, at the time of observation.	Barometer.* No. 1163	Thermometers.			
Year 1910		Observed.	Dead Reckoning.	Observed.	Dead Reckoning.	Each four hours.		Of Compass used for Wind, being Variation and Deviation combined.	By same Compass as Wind.	Direction, State if true, or subject to Compass Error, or only to Variation.	Force, 0 to 12.	Height of Cistern above Sea 92 feet.		Dry Bulb.	Wet Bulb.
Month Dec.		The D.R. position is needed daily, in addition to that by Observation, but it should be the result of careful calculation, in order to give any value to the estimation of the current.				True Course.	Distance by Log.					Uncorrected Reading.	Att. Therm.	No.	No.
Day.	Hour.														
Civil Time.															

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

Captain E. R. Evans from 16th December to 19th December 1910

Hour.	Clouds.		Weather.		Sea Surface.				Remarks.			
	The direction from which the upper clouds are moving, and also that of the lower clouds when they do not move with the wind, should be noted when determinable.		According to Beaufort Notation.	Fog Intensity, 0 to 5.	Waves.		Swell.		Temp. by No.	Spec. Grav. by No.	Time of Remark.	Here give any important Remarks as to phenomena, with the times of their occurrence; especially the times of Changes in Direction and Force of Wind, as well as the Direction, Veering or Backing, Force and Duration of Squalls; the direction from which upper clouds are moving; the Position of Ice and of Derelicts. Also note the hour at which the Ship arrives in or leaves Port. (See "Instructions" for further particulars.)
	Names.				Direction from.	Disturbance, 0 to 10.	Direction from.	Disturbance, 0 to 10.				
	Upper.	Lower.											Also record when Confused.
4	-	st	10	05			Slight				4.00 Dark + overcast 4 hrs. Slight S commencing	
8	-	st	10	04 S			swell				3.40 Atmosphere clear. Dark sunline N to SW.	
NOON	-	st	10	04 S							Turn S Wind N.N.E 3. Snow moderate.	
4	-	st	10	04 R							8.0 Slight snow	
8	-	st	10	05 3							Forenoon. Snow soft + moderate.	
MIDT.	-	st	10	03 R 3							Turn. Wind increasing gradually.	
4	-	st	10	04 R							Afternoon. Snow moderate to heavy becoming very	
8	-	st	10	05 3							soft and turning into rain (mod.) by	
MIDT.	-	st	10	03 R 3							2.0 p.m. 2.0 Wind dropped to 2.	
4	-	st	10	05 3							8.0 Rain slight	
8	-	st	10	05 3							8.0 Wind backing slowly all the watch.	
MIDT.	-	st	10	03 R 3							Wind. Wind dropped + weather cleared 10/11 afterwards increased in	
4	-	st	10	05 3							4.0 Wind steady in direction with fresh drizzle in off.	
8	-	st	10	05 3							7.0 clearing occasionally for short periods.	
NOON	-	st	10	05 3							5.0 Wind 5.0 5.10 commenced clearing.	
4	-	st	10	05 3							6.0 Wind to 3.0 5.00 weather F 1 wind fell to 3 at 6.20. 7.0 clearing intermittently.	
8	-	st	10	05 3							Drizzle of r on during forenoon.	
MIDT.	-	st	10	05 3							Turn. Very fine snow commenced + continued	
4	-	st	10	05 3							intermittently during afternoon till 2.30 although	
8	-	st	10	05 3							sun managed to show through clouds + quite	
MIDT.	-	st	10	05 3							most of the time. Wind gradually backing	
4	-	st	10	05 3							large Occasional showers of snow.	
8	-	st	10	05 3							Slight swell causing movement in packs.	
NOON	-	st	10	05 3							4.0 Very slight snow from 3.30 ice conditions	
4	-	st	10	05 3							as before but packs very open all round	
8	-	st	10	05 3							these being leads in all directions + indications	
NOON	-	st	10	05 3							of clear water. Iceberg near ship drifting W to SW	
4	-	st	10	05 3							8.30 Commenced to drizzle which became light snow	
8	-	st	10	05 3							at 9. am + ceased entirely about 10. 0.	
MIDT.	-	st	10	05 3							4.40 Commenced to snow heavily	
4	-	st	10	05 3							5.15 Ceased snowing	
8	-	st	10	05 3							8.0 Snow showers about.	
MIDT.	-	st	10	05 3							8-9 Heavy snow showers.	
4	-	st	10	05 3							In Pack	
8	-	st	10	05 3							Turning - Light S.S.W. 3 breezes	
NOON	-	st	10	05 3							St + St Cu. 3	
4	-	st	10	05 3							Fog bank 11.20	
8	-	st	10	05 3								
MIDT.	-	st	10	05 3								
4	-	st	10	05 3								
8	-	st	10	05 3								
NOON	-	st	10	05 3								
4	-	st	10	05 3								
8	-	st	10	05 3								
MIDT.	-	st	10	05 3								
4	-	st	10	05 3								
8	-	st	10	05 3								
NOON	-	st	10	05 3								
4	-	st	10	05 3								
8	-	st	10	05 3								
MIDT.	-	st	10	05 3								
4	-	st	10	05 3								
8	-	st	10	05 3								
NOON	-	st	10	05 3								
4	-	st	10	05 3								
8	-	st	10	05 3								
MIDT.	-	st	10	05 3								
4	-	st	10	05 3								
8	-	st	10	05 3								
NOON	-	st	10	05 3								
4	-	st	10	05 3								
8	-	st	10	05 3								
MIDT.	-	st	10	05 3								
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NOON	-	st	10	05 3								
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MIDT.	-	st	10	05 3								
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NOON	-	st	10	05 3								
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MIDT.	-	st	10	05 3								
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NOON	-	st	10	05 3								
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MIDT.	-	st	10	05 3								
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NOON	-	st	10	05 3								
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MIDT.	-	st	10	05 3								
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NOON	-	st	10	05 3								
4	-	st	10	05 3								
8	-	st	10	05 3								
MIDT.	-	st	10	05 3								
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8	-	st	10	05 3								
NOON	-	st	10	05 3								
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8	-	st	10	05 3								
MIDT.	-	st	10	05 3								
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NOON	-	st	10	05 3								
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8	-	st	10	05 3								
MIDT.	-	st	10	05 3								
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8	-	st	10	05 3								
NOON	-	st	10	05 3								
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8	-	st	10	05 3								
MIDT.	-	st	10	05 3								
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8	-	st	10	05 3								
NOON	-	st	10	05 3								
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MIDT.	-	st	10	05 3								
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NOON	-	st	10	05 3								
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MIDT.	-	st	10	05 3								
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NOON	-	st	10	05 3								
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MIDT.	-	st	10	05 3								
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8	-	st	10	05 3								
NOON	-	st	10	05 3								
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MIDT.	-	st	10	05 3								
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NOON	-	st	10	05 3								
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8	-	st	10	05 3								
MIDT.	-	st	10	05 3								
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8	-	st	10	05 3								
NOON	-	st	10	05 3								
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8	-	st	10	05 3								
MIDT.	-	st	10	05 3								
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8	-	st	10	05 3								
NOON	-	st	10	05 3								
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8	-	st	10	05 3								
MIDT.	-	st	10	05 3								
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8	-	st	10	05 3								
NOON	-	st	10	05 3								
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8	-	st	10	05 3								
MIDT.	-	st	10	05 3								
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NOON	-	st	10	05 3								
4	-	st	10	05 3								
8	-	st	10	05 3								
MIDT.	-	st	10	05 3								
4	-	st	10	05 3								
8	-	st	10	05 3								
NOON	-	st	10	05 3								
4	-	st	10	05 3								
8	-	st	10	05 3								
MIDT.	-	st	10	05 3								
4	-	st	10	05 3								
8	-	st	10	05 3								
NOON	-	st	10	05 3								
4	-											

Meteorological Log kept on board

"Terra Nova" RYS

DATE.		Latitude.		Longitude.		Course and Distance.		Total Compass Error.	Ship's Head.	Wind, at the time of observation.		Barometer.* No. 1163		Thermometers.	
Year 1910		Observed.		Dead Reckoning.		Each four hours.		Of Compass used for Wind, being Variation and Deviation combined.		Direction. State if true or subject to Compass Error, or only to Variation.		Height of Cistern above Sea 95 feet.		Dry Wet Bulb. Bulb.	
Month Dec		The D.R. position is needed daily, in addition to that by Observation, but it should be the result of careful calculation, in order to give any value to the estimation of the current.		Colours of the Sea		Distance by Log.		By Log 2059		Force. 0 to 12.		Uncorrected Reading.		No. 1524 1525	
Day.	Hour.														
Civil Time.															
20 th	4	In		Pack.				4 mi		SW by light		29.38 37.2		15.20 15.23	
	8							E (approx)		South 2		29.36 36		25.0 23.4	
noon	NOON	68 34		179 28				4 mi		SW		29.37 46		33.5 31.5	
	4									SW		29.40 51		30.5 30.0	
	8									SW		29.40 44		27.0 26.2	
	MIDT.									W by S		29.40 43		23.5 23.0	
21 st	4	In		Pack.						SN 4		29.35 34.0		27.3 27	
	8									SSW 5		29.38 39		29.0 27.2	
noon	NOON	68 35		179 11				16.6		SSW 4		29.40 46		30.5 29.5	
	4									SE 5		29.43 40		32.2 29.8	
	8									SSW 4		29.44 47		27.8 27.8	
	MIDT.									South 5		29.40 33		26.0 25.0	
22 nd	4	In		Pack						South 4-5		29.40 36.3		27.1 26.0	
	8									South 4-5		29.40 32.0		27.5 27.0	
noon	NOON	68 26		179 08						South 4-5		29.44 43.0		29.0 27.8	
	4									SW 4-5		29.45 43		29.0 27.8	
	8									SW 3		29.44 42		27.5 27.5	
	MIDT.									South 5		29.45 42		26.5 26.0	
23 rd	4	In		Pack.						WSW 3		29.45 39		24.0 22.9	
	8									SSW 3		29.47 40		26.5 25.5	
noon	NOON	68 34		179 03						SSW 4		29.50 88		28.8 28.0	
	4									SSW 3-4		29.44 114		28.8 28.0	
	8									SSW 3		29.43 40		28.8 28.2	
	MIDT.									WSW 3		29.88 39		29.2 -	

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

Captain *Leut. E. R. Evans R.N.* from *New Zealand* to *Antarctic*

Clouds.		Weather.		Sea Surface.		Remarks.	
The direction from which the upper clouds are moving, and also that of the lower clouds when they do not move with the wind, should be noted when determinable.		According to Beaufort Notation.		Waves. Swell.		Here give any important Remarks as to phenomena, with the times of their occurrence; especially the times of Changes in Direction and Force of Wind, as well as the Direction, Veering or Backing, Force and Duration of Squalls; the Direction from which upper clouds are moving; the Position of Ice and of Derelicts. Also note the hour at which the Ship arrives in or leaves Port. (See "Instructions" for further particulars.)	
Names.		Fog Intensity.		Direction from.		Time of Remark.	
Upper. Lower.		0 to 5.		Also record when Confused.			
4	St 10	0				Morning: Wind South 5.30. Fog 1.	
8	St 10	0.02 F				increasing at times to 3 & not clearing off till 8.0. Cu-St 10	
NOON	St 2	b				Sun generally showing through clouds	
4	actst 2	b				1030 Clouds dispersed sun shining.	
8	actst 1	b					
MIDT.	Clu St 3	b				High clouds travelling from S to N low and travelling fast S.W.	
4	actst 10	oc				230 Sky almost clear. Bank of a St rising S.W. Sea moving from west with wind. 245 Wind shifted to S.W. fresh breeze.	
8	actst 10	oc				40 Sky became overcast with a St + St.	
NOON	actst 5	oc				4.0 Sky became overcast with a St + St.	
4	St 10	oc				4.30 Snow squall lasting 10 mins. (fine & powdery)	
8	St 0	b					
MIDT.	til til 0	b					
4	-	b					
8	St-Cu 6	b					
NOON	St-Cu 2	b					
4	actst 1	b				New Sea water thermometer No 8391	
8	St-Cu -	c				New Sea water thermometer No 8391	
MIDT.	St 10	oc				8.45 Wind dropped - Calm - Sky cleared St-Cu 2	
4	St 10	oc				Sky cleared + wind dropped 9-10.8.0	
8	St 10	oc					
NOON	St 10	oc				2.45 Breeze from W.S.W. fell to force 2.	
4	St 10	oc				3.0 Breeze came away from S.W. 4.	
8	St 10	oc				Clouds + sky V. dark on S & N.B. Horizon	
NOON	St 10	oc					
4	St 10	oc					
8	St 10	oc					
MIDT.	St 10	oc					

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.

Meteorological Log kept on board

Terra Nova Rys

DATE.		Latitude.		Longitude.		Course and Distance.		Total Compass Error.	Ship's Head.	Wind, at the time of observation.	Barometer.*	Thermometers.	
Year 1910		Observed.		Observed.		Each four hours.		Of Compass used for Wind, being Variation and Deviation combined.	By same Compass as Wind.	Direction, State if true, or subject to Compass Error, or only to Variation.	No. 1163	Dry Wet	
Month Dec.		Dead Reckoning.		Dead Reckoning.		Colony True Course.		Distance by Log.		Force, 0 to 12.	Height of Cistern above Sea 9 1/2 feet.	Bulb. Bulb.	
Day, Civil Time.		Hour.		Hour.		The D.R. position is needed daily, in addition to that by Observation, but it should be the result of careful calculation, in order to give any value to the estimation of the current.		Max Temp.		Uncorrected Reading.		No. No.	
24 th		4		2m		Pack		4 mls		E		1524 1525	
		8								SWW 2		1520 1523	
NOON		{ 69 01 178 24 }		{ }		{ }		{ }		SSW 1-2		29.35 44	
4		{ }		{ }		{ }		{ }		WSW		29.37	
8		{ }		{ }		{ }		{ }		SWW 1-2		29.38 47	
MIDT.		{ }		{ }		{ }		{ }		Calm -		29.39	
		{ }		{ }		{ }		{ }		29.41		48	
		{ }		{ }		{ }		{ }		29.42		48	
		{ }		{ }		{ }		{ }		29.43		48	
		{ }		{ }		{ }		{ }		29.44		48	
		{ }		{ }		{ }		{ }		29.46		48	
25 th		4		2m		Pack				Calm 0		29.42 40	
		8								13 North		29.45	
NOON		{ 69 05 178 30 }		{ }		{ }		{ }		NE 4		29.42 44	
4		{ }		{ }		{ }		{ }		NNW 2-3		29.44	
8		{ }		{ }		{ }		{ }		ENE 4		29.41 45	
MIDT.		{ }		{ }		{ }		{ }		NE 4		29.43	
		{ }		{ }		{ }		{ }		E 4		29.38 45	
		{ }		{ }		{ }		{ }		29.40		45	
		{ }		{ }		{ }		{ }		NE 3		29.35 46	
		{ }		{ }		{ }		{ }		E 3		29.37	
		{ }		{ }		{ }		{ }		29.34		45	
		{ }		{ }		{ }		{ }		NE 3		29.30 40	
		{ }		{ }		{ }		{ }		29.33		40	
		{ }		{ }		{ }		{ }		NNW 2		29.32	
		{ }		{ }		{ }		{ }		ENE 2		29.30 46	
		{ }		{ }		{ }		{ }		29.32		46	
		{ }		{ }		{ }		{ }		ENE 4		29.30 49	
		{ }		{ }		{ }		{ }		29.31		49	
		{ }		{ }		{ }		{ }		NNW 3		29.30 48	
		{ }		{ }		{ }		{ }		ENE 3		29.31	
		{ }		{ }		{ }		{ }		29.31		48	
		{ }		{ }		{ }		{ }		NE 5/6		29.29 43	
		{ }		{ }		{ }		{ }		29.31		43	
27 th		4		2m		Pack				E 6		29.285 42	
		8								SE 5		29.31	
NOON		{ }		{ }		{ }		{ }		E 6		29.34 46	
4		{ }		{ }		{ }		{ }		ENE 6		29.35	
8		{ }		{ }		{ }		{ }		E 6		29.37 47	
MIDT.		{ }		{ }		{ }		{ }		E 6		29.38	
		{ }		{ }		{ }		{ }		E 6		29.37 45	
		{ }		{ }		{ }		{ }		E 6		29.38	
		{ }		{ }		{ }		{ }		E 6		29.41 46	
		{ }		{ }		{ }		{ }		E 6		29.42	
		{ }		{ }		{ }		{ }		E 6		29.44 43	
		{ }		{ }		{ }		{ }		E 6		29.46	

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

Captain *Leut E. R. Evans* from *New Zealand* to *Antarctic* *24th December* to *27th December 1910*

Hour.	Clouds.			Weather.		Sea Surface.						Remarks.	
	The direction from which the upper clouds are moving, and also that of the lower clouds when they do not move with the wind, should be noted when determinable.			According to Beaufort Notation.	Fog Intensity. 0 to 5.	Waves.		Swell.		Temp. by No.	Spec. Grav. by No.	Time of Remark.	Here give any important Remarks as to phenomena, with the times of their occurrence; especially the times of Changes in Direction and Force of Wind, as well as the Direction, Veering or Backing, Force and Duration of Squalls; the direction from which upper clouds are moving; the Position of Ice and of Derelicts, Also note the hour at which the Ship arrives in or leaves Port. (See "Instructions" for further particulars.)
	Names.		Prop. of Sky Clouded. 0 to 10.			Direction from.	Disturbance. 0 to 10.	Direction from.	Disturbance. 0 to 10.				
	Upper.	Lower.											
4													
8		St	10.	oc						28.8			
NOON	ast	St cu	10	oc						-			
4	ast	St/cu	3	bc						30.5		pm. 5.0	Sky clouded over, and cleared at 6.0. when wind dropped.
8	alt St	St-cu cu	9	oc									
MIDT.		St	10	0						28.8			
4	ast	St	9	oc						29.2		am. 2.0	SE Airs fell to Calm. Small quantity of blue to SE.
8		St	10	oc						29.5 26.5			
NOON		St/hc	10	oc								4.0	Blue Sky & a St low on horizon. St overhead.
4		hb	10	om						30.0		pm. 4.0	Very slight snow all afternoon.
8		hb	10	om								5.30	Snow commenced to fall more heavily.
MIDT.		hb	10	S 2						28.7			Continuous light snows.
4				4+ 2						29.0		4.0	Snow passing showers from time to time.
8		hb	10	0						29.2 26.5 4.30			Snow changed to drizzle which continued off & on till 10 am then stopped.
NOON		St	10	oc									Wind varying 2 kts about WNE.
4		St	10	oc									
8		St	10	oc						30.0			
MIDT.		St	10	0								2.15	Passing snow showers 8 to 10 Wind gusty & shifting to ENE.
4			10	osf 1				Slight		28.8		4.0	Wind increasing from Eward Snow intermittently.
8		hb	10	os				Slight		29.8 27.0		noon.	Wind, E ^{ly} N. increasing frequent snow squalls.
NOON		hb	10	os S				Slight		29.5		forenoon.	Slight continual snow increasing at times to moderate
4		St	10	oc				Slight				afternoon.	Slight continual snow till 1.30 pm Wind commenced to back immediately after noon, at 1.0. E ^{ly} N.
8		St	10	oc				Slight					
MIDT.		St cu	9	oc									
2a	17	18	19	10a	20	21	20a	21a	22	23	24	25	

Meteorological Log kept on board

"Terra Nova" Rys

DATE.		Latitude.		Longitude.		Course and Distance.		Total Compass Error.	Ship's Head.	Wind, at the time of observation.	Barometer.* No. 1163	Thermometers.			
Year 1910		Observed.		Observed.		Each four hours.		Of Compass used for Wind, being Variation and Deviation combined.	By same Compass as Wind.	Direction, State if true, or subject to Compass Error, or only to Variation.	Force, 0 to 12.	Height of Cistern above Sea 92 feet.		Dry Bulb.	Wet Bulb.
Month Dec.		Dead Reckoning.		Dead Reckoning.		Colours						Uncorrected Reading.	Att. Therm.	No.	No.
Day, Civil Time.		Hour.		Hour.		True Course.		Distance by Log.							
The D.R. position is needed daily, in addition to that by Observation, but it should be the result of careful calculation, in order to give any value to the estimation of the current.															
28 th	4	In Pack.								E by N 4	29.45	408	27.9	27.2	
	8									SE ENE	29.48				
	NOON	69	17	179	42			46 E		ENE 3-4	29.50	416	27.8	26.1	
	4 54	Current in last hours								ENE	29.52				
	8									ENE 2-3	29.50	419	27.9	28.8	
	MIDT.									ENE	29.51				
										NNE 2	29.48	53	28.8	27.8	
										ENE	29.49				
										NNE 2	29.47	58	28.0	27.8	
										ENE	29.48				
										NW N 3	29.42	41	26.5	26.5	
											29.45				
29 th	4	In Pack.						146 E		nnw	29.32	410	27.6		
	8									NNE	29.35				
	NOON	70	01	179	34					nne	29.24	414	27.8	29.8	
	4	Current in last hours								ENE	29.26				
	8							48 E		nly E	29.19	414	30.0	-	
	MIDT.									NE	29.21				
										nly E	29.05	416	27.8	27.8	
										NE	29.07				
										ENE 5	28.89	414	27.8	27.8	
										ESE	28.91				
										both	28.91	38.5	31.0	30.5	
										NW N 4	28.91	38.5			
											28.95				
30 th	4							E		nnw	28.785	37	31.3	31.6	
	8							48		NNE	28.82				
	NOON	72	17	177	09			50		nnw	28.76	39	33.0	33.0	
	4	Current in last hours								NNE	28.80				
	8							56		wnw	28.75	42	31.2	31.2	
	MIDT.									NNW	28.78				
								58		ESE	28.75	49	31.5	31.5	
										SSE	28.76				
								58		SE E	28.76	49	30.2	30.2	
										SSW	28.77				
								59		E by S	28.75	45	31.5	31.0	
										SSE	28.77				
	4														
	8														
	NOON														
	4														
	8														
	MIDT.														

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

Captain *Edgar Evans* from *New Leland* to *Antarctica*

Clouds.		Weather.		Sea Surface.		Remarks.	
The direction from which the upper clouds are moving, and also that of the lower clouds when they do not move with the wind, should be noted when determinable.		According to Beaufort Notation.		Waves.		Here give any important Remarks as to phenomena, with the times of their occurrence; especially the times of Changes in Direction and Force of Wind, as well as the Direction, Veering or Backing, Force and Duration of Squalls; the direction from which upper clouds are moving; the Position of Ice and of Drifts; Also note the hour at which the Ship arrives in or leaves Port. (See "Instructions" for further particulars.)	
Names.		Fog Intensity.		Swell.		Time of Remark.	
Upper.		0 to 5.		Direction from.		Spec. Grav. by No.	
Lower.		0 to 10.		Disturbance.		Temp.	
4	all. ci	3	bc			1.30	Wind fell to force 4. Sea from E. - a St from 70 ENE
8	a. st	2	bc			4.0	Big NW, backed back to W. clear sun shine for 4 hrs
NOON	a. st	2	bc			11.0	Wind ENE 4. Ci Clouds 3. St Clouds to 15. 3
4	a. st	1	b			1.0	Slight halo round sun, but only just discernable over Ci Clouds.
8	bc	1	b			6.0	Halo a little more distinct, approximately 21° 22' radius showing faint red, yellow, white, but only (from inner edge out) disappearing immediately above sun.
MIDT.	st	10	cs			8.30	A. St clouds very low on horizon only.
						4. bc 9	Clouded over rapidly from NW (true) by 9 o'clock
						11.45	Slight snow.
4		0				middle 24.5	Fog 2. came over lasting for about 1 hour & thinning off towards 4 am.
8	bc	10	ocf	1		glazed frost	appeared on whiskers of ropes & rigging.
NOON	bc	10	ocf	1		2.0	Commenced snowing (slight to moderate) which continued during afternoon. Fog during most of afternoon, clearing at times
4	bc	10	02 S3F	152		2.0	Commenced snowing (slight to moderate) which continued during afternoon. Fog during most of afternoon, clearing at times
8	bc	10	04 S4F	2		2.0	Commenced snowing (slight to moderate) which continued during afternoon. Fog during most of afternoon, clearing at times
MIDT.	st	10	02 S2F	2		2.0	Commenced snowing (slight to moderate) which continued during afternoon. Fog during most of afternoon, clearing at times
4	st	10	02 S2F	2		2.0	Commenced snowing (slight to moderate) which continued during afternoon. Fog during most of afternoon, clearing at times
8	st	10	02 S2F	2		2.0	Commenced snowing (slight to moderate) which continued during afternoon. Fog during most of afternoon, clearing at times
NOON	st	10	02 S2F	2		2.0	Commenced snowing (slight to moderate) which continued during afternoon. Fog during most of afternoon, clearing at times
4	st	10	02 S2F	2		2.0	Commenced snowing (slight to moderate) which continued during afternoon. Fog during most of afternoon, clearing at times
8	st	10	02 S2F	2		2.0	Commenced snowing (slight to moderate) which continued during afternoon. Fog during most of afternoon, clearing at times
MIDT.	st	10	02 S2F	2		2.0	Commenced snowing (slight to moderate) which continued during afternoon. Fog during most of afternoon, clearing at times
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NOON	st	10	02 S2F	2		2.0	Commenced snowing (slight to moderate) which continued during afternoon. Fog during most of afternoon, clearing at times
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MIDT.	st	10	02 S2F	2		2.0	Commenced snowing (slight to moderate) which continued during afternoon. Fog during most of afternoon, clearing at times
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MIDT.	st	10	02 S2F	2		2.0	Commenced snowing (slight to moderate) which continued during afternoon. Fog during most of afternoon, clearing at times
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NOON	st	10	02 S2F	2		2.0	Commenced snowing (slight to moderate) which continued during afternoon. Fog during most of afternoon, clearing at times
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MIDT.	st	10	02 S2F	2		2.0	Commenced snowing (slight to moderate) which continued during afternoon. Fog during most of afternoon, clearing at times
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MIDT.	st	10	02 S2F	2		2.0	Commenced snowing (slight to moderate) which continued during afternoon. Fog during most of afternoon, clearing at times
4	st	10	02 S2F	2		2.0	Commenced snowing (slight to moderate) which continued during afternoon. Fog during most of afternoon, clearing at times
8	st	10	02 S2F	2		2.0	Commenced snowing (slight to moderate) which continued during afternoon. Fog during most of afternoon, clearing at times
NOON	st	10	02 S2F	2		2.0	Commenced snowing (slight to moderate) which continued during afternoon. Fog during most of afternoon, clearing at times
4	st	10	02 S2F	2		2.0	Commenced snowing (slight to moderate) which continued during afternoon. Fog during most of afternoon, clearing at times
8	st	10	02 S2F	2		2.0	Commenced snowing (slight to moderate) which continued during afternoon. Fog during most of afternoon, clearing at times
MIDT.	st	10	02 S2F	2		2.0	Commenced snowing (slight to moderate) which continued during afternoon. Fog during most of afternoon, clearing at times
4	st	10	02 S2F	2		2.0	Commenced snowing (slight to moderate) which continued during afternoon. Fog during most of afternoon, clearing at times
8	st	10	02 S2F	2		2.0	Commenced snowing (slight to moderate) which continued during afternoon. Fog during most of afternoon, clearing at times
NOON	st	10	02 S2F	2		2.0	Commenced snowing (slight to moderate) which continued during afternoon. Fog during most of afternoon, clearing at times
4	st	10	02 S2F	2		2.0	Commenced snowing (slight to moderate) which continued during afternoon. Fog during most of afternoon, clearing at times
8	st	10	02 S2F	2		2.0	Commenced snowing (slight to moderate) which continued during afternoon. Fog during most of afternoon, clearing at times
MIDT.	st	10	02 S2F	2		2.0	Commenced snowing (slight to moderate) which continued during afternoon. Fog during most of afternoon, clearing at times
4	st	10	02 S2F	2		2.0	Commenced snowing (slight to moderate) which continued during afternoon. Fog during most of afternoon, clearing at times
8	st	10	02 S2F	2		2.0	Commenced snowing (slight to moderate) which continued during afternoon. Fog during most of afternoon, clearing at times
NOON	st	10	02 S2F	2		2.0	Commenced snowing (slight to moderate) which continued during afternoon. Fog during most of afternoon, clearing at times
4	st	10	02 S2F	2		2.0	Commenced snowing (slight to moderate) which continued during afternoon. Fog during most of afternoon, clearing at times
8	st	10	02 S2F	2		2.0	Commenced snowing (slight to moderate) which continued during afternoon. Fog during most of afternoon, clearing at times
MIDT.	st	10	02 S2F	2		2.0	Commenced snowing (slight to moderate) which continued during afternoon. Fog during most of afternoon, clearing at times
4	st	10	02 S2F	2		2.0	Commenced snowing (slight to moderate) which continued during afternoon. Fog during most of afternoon, clearing at times
8	st	10	02 S2F	2		2.0	Commenced snowing (slight to moderate) which continued during afternoon. Fog during most of afternoon, clearing at times
NOON	st	10	02 S2F	2		2.0	Commenced snowing (slight to moderate) which continued during afternoon. Fog during most of afternoon, clearing at times
4	st	10	02 S2F	2		2.0	Commenced snowing (slight to moderate) which continued during afternoon. Fog during most of afternoon, clearing at times
8	st	10	02 S2F	2		2.0	Commenced snowing (slight to moderate) which continued during afternoon. Fog during most of afternoon, clearing at times
MIDT.	st	10	02 S2F	2		2.0	Commenced snowing (slight to moderate) which continued during afternoon. Fog during most of afternoon, clearing at times
4	st	10	02 S2F	2		2.0	Commenced snowing (slight to moderate) which continued during afternoon. Fog during most of afternoon, clearing at times
8	st	10	02 S2F	2		2.0	Commenced snowing (slight to moderate) which continued during afternoon. Fog during most of afternoon, clearing at times
NOON	st	10	02 S2F	2		2.0	Commenced snowing (slight to moderate) which continued during afternoon. Fog during most of afternoon, clearing at times
4	st	10	02 S2F	2		2.0	Commenced snowing (slight to moderate) which continued during afternoon. Fog during most of afternoon, clearing at times
8	st	10	02 S2F	2		2.0	Commenced snowing (slight to moderate) which continued during afternoon. Fog during most of afternoon, clearing at times
MIDT.	st	10	02 S2F	2		2.0	Commenced snowing (slight to moderate) which continued during afternoon. Fog during most of afternoon, clearing at times
4	st	10	02 S2F	2		2.0	Commenced snowing (slight to moderate) which continued during afternoon. Fog during most of afternoon, clearing at times
8	st	10	02 S2F	2		2.0	Commenced snowing (slight to moderate) which continued during afternoon. Fog during most

Meteorological Log kept on board Terra Nova R.V.S.

DATE.		Latitude.		Longitude.		Course and Distance.		Total Compass Error.	Ship's Head.	Wind, at the time of observation.	Barometer. No. 1163	Thermometers.	
Year 1910		Observed.		Observed.		Each four hours.		Of Compass used for Wind, being Variation and Deviation combined.	By same Compass as Wind Station kept.	Direction. State if true, or subject to Compass Error, or only to Variation.	Force. 0 to 12.	Height of Cistern above Sea. 7 1/2 feet.	Dry Bulb.
Month Dec 31st		Dead Reckoning.		Dead Reckoning.		Colours of Sea.		Distance by Log.		Uncorrected Reading.		Att. Therm.	
Day, Civil Time.		Hour.		Hour.		Current in last hours		mils.					
31st		4								59 E		ESE 6	
										28.70		43	
										28.73			
		8						61		26		ESE 6	
										28.73		44	
										28.76			
		10.18		72		57		174		55			
		NOON		72		52		174		45			
										ESE 6		28.74	
										28.76		46	
										28.76			
		4								27		ESE 6	
										28.82		47	
										28.84			
		8								ESE 6		28.90	
										28.92		47	
										28.92			
		MIDT.								SE 1/2 E 6		28.97	
										28.99		45	
		4											
		8											
		NOON											
		4											
		8											
		MIDT.											
1911		4								E 61		SE 6	
										28.95		42.8	
										28.98			
		8						81		66		SE 6	
										28.98		39	
										28.92			
		NOON		73		5		174		11			
										SE 6		28.99	
										29.03		89	
										29.03			
		4						81		SW 2-3		29.00	
										29.01		49	
										29.01			
		7.0		73		43		174		10			
										98		69	
										SE 1		29.00	
										29.01		51	
										29.01			
		8								Calm		29.97	
										29.97		46	
										28.99			
		MIDT.											
		4											
		8											
		NOON											
		4											
		8											
		MIDT.											

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

Captain E. R. R. Evans

from New Zealand 31 December

to Antarctic January 1st 1911

Clouds.				Weather.		Sea Surface.				Remarks.			
Hour.	The direction from which the upper clouds are moving, and also that of the lower clouds when they do not move with the wind, should be noted when determinable.			According to Beaufort Notation.	Fog Intensity. 0 to 5.	Waves.		Swell.		Temp. by No.	Spec. Grav. by No.	Time of Remark.	Here give any important Remarks as to phenomena, with the times of their occurrence; especially the times of Changes in Direction and Force of Wind, as well as the Direction, Veering or Backing, Force and Duration of Squalls; the direction from which upper clouds are moving; the Position of Ice and of Derelicts. Also note the hour at which the Ship arrives in or leaves Port. (See "Instructions" for further particulars.)
	Names.					Direction from.	Disturbance. 0 to 10.	Direction from.	Disturbance. 0 to 10.				
	Upper.	Lower.	Prop. of Sky Clouded. 0 to 10.										
Time 12 hours Fast on G.M.T.													
4	as	St	10	oms	1	ESE	4			31.1		4.0	Passing showers of snow in which wind increased slightly. Sky broken when clear showing a. lt & send
8		Wb	10	4.54f	1-3	ESE	3	ESE	3	31.2	27.0	6.0	Once again strongest at 2.30 showing tendency to take off at 3.40.
NOON		Wb	10	4.14f	1-3	ESE	3	ESE	5	32.2			Turning. Snow slight to moderate.
4		H-Cu	10	0.453f	2	ESE	3	ENE	5	31.2		7.0	Fog 1-3 all watches. Hove to under lee of island of Pack ice for shelter.
8		H-Cu	10	0.25	-	ESE	3	ENE	5	31.2			Afternoon. Wind varying from 6 up to 8 in the squalls. Snow from very slight to heavy.
MIDT.		St	9	0.95	-	ESE	2	Wb	4	31.0			
4													10.0 Snow at intervals varying from very slight to moderate.
8													1.00 Snow in squalls. Wind decreasing.
NOON													
4													
8													
MIDT.													
4	as	H	8	cb	-	SE	2	EbyN	4	30.7		4.0	Wind gradually decreasing all hours. Sky clearing to West and Coastline Ints. unmarkedly clear after 2 am
8												7.0	6.0 Wind fresh to 8th force 4. Ely swell 6. Sky clearing & wind decreasing
NOON													9.0 ESE swell much the quietest of the two.
4													10.0 In Saline & other mountains visible 110 miles away till 3.0 when extreme visibility ceased. Wind gradually easing all watches.
8													
MIDT.													
4												4.30	Wind dropped calm.
8												6.30	Wind sprang up NE 1
NOON												10.0	Wind dropped calm
4													It Wb winds then calm again.
8													
NOON													
4													
8													
MIDT.													
2a	17	18	19	19a	20	21	20a	21a	22	23	24	25	

Meteorological Log kept on board

Terra Nova R.V.S.

Meteorological Log kept on board															
DATE.		Latitude.		Longitude.		Course and Distance.		Total Compass Error.	Ship's Head.	Wind, at the time of observation.		Barometer.* No. 1163		Thermometers.	
Year 19 11	Month Jan	Observed.	Dead Reckoning.	Observed.	Dead Reckoning.	Each four hours.	Of Compass used for Wind, being Variation and Deviation combined.	Wind, By same Compass as used for Ship's Head.	Direction. State if true, or subject to Compass Error, or only to Variation.	Force, 0 to 12.	Height of Cistern above Sea. 9 1/2 feet.		Dry Bulb.	Wet Bulb.	
											Uncorrected Reading.	Att. Therm.			
Day, Civil Time.		Hour.		The D.R. position is needed daily, in addition to that by Observation, but it should be the result of careful calculation, in order to give any value to the estimation of the current.		Colour of Sky.	Distance by Log.					1524 1525 1520 1523			
2nd												Sun shining on lower			
4								E 77		Calu 2		28.955 44		34.0 33.2	
4.15		74 25		174 01				81		SE 1		28.97 51		33.8 31.5	
8								86		SE 1		28.97 54		35.2 32.2	
1.11.11															
NOON		75 10		173 40											
		Current in last hours		mls.											
4						353		91		W 1		28.95 44		33.2 29.0	
8								98		NW 1		28.95 51		31.5 29.8	
9.30		75 55		172 31				108		NW 1		28.98 48		31.2 28.0	
MIDT.															
3rd															
4.30		76 37		171 31				117		W 3		28.96 46		30.8 29.7	
4.45		77 0		170 35		340		127		W 3		29.05 52		30.5 27.8	
8.29								133		NW 3		29.09 53		31.5 28.2	
NOON		77 22		169 58				135		NW 3		29.00 47		32.0	
4								140		NW 3		29.02 48		31.6 28.0	
8								145		NW 3		29.14 45		30.5 27.5	
MIDT.															
4th															
4										Calu		28.97			
8								162		Calu		28.95			
NOON										Calu		28.95			
4										very light E 1/2 W					
8										Calu					
MIDT.										Calu					
5th															
4															
8															
NOON															
4															
8															
MIDT.															
6th															
4															
8															
NOON															
4															
8															
MIDT.															
7th															
4															
8															
NOON															
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12th															
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MIDT.															
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NOON															
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MIDT.															
15th															
4															
8															
NOON															
4															
8															
MIDT.															
16th															
4															
8															
NOON															
4															
8															
MIDT.															

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

Captain Junt E R G Rhans from 2nd January to 4th January 1911

Hour.	Clouds.		Weather.		Sea Surface.						Remarks.				
	The direction from which the upper clouds are moving, and also that of the lower clouds when they do not move with the wind, should be noted when determinable.			According to Beaufort Notation.	Fog Intensity. 0 to 5.	Waves.		Swell.		Temp. by No.		Spec. Grav. by No.			
	Names.		Direction from.			Disturbance. 0 to 10.	Direction from.	Disturbance. 0 to 10.							
	Upper.	Lower.							Prop. of Sky Clouded. 0 to 10.						
4	alt Ci 6	St 8	2	b									40	Calm with occasional light air from Eastwards. Ci St to E + a St to NW slowly rising. Heavy Clouds at E by breeze 0-1 St clouds on horizon E & SW 4	
8		Cu/St 3	bc												
NOON		Cu/St 5	bc												
4		Cu/St 5	bc												
8		Cu/St 5	bc												
MIDT.		Cu/St 7	bc												
4		ac Cu	Cu St 6	cb										40	Land at 60 miles clearly distinguishable. Breeze, moderate in force. Colour of sea 234 + 240
8			Cu/St 9	bc											
NOON	Cumulus clouds		Cu/St 7	bc											
4			Cu 5	bc											
8			Cu/St	bc											
MIDT.			Cu/St 8	bc											
4															Halo faint - sun.
8															
NOON															
4															
8															
MIDT.															
4															Iridescent clouds near the sun.
8															
NOON															
4															
8															
MIDT.															
4															
8															
NOON															
4															
8															
MIDT.															
2a	17	18	19	19a	20	21	20a	21a	22	23	24	25			

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.

Meteorological Log kept on board

Terra Nova Bys

DATE.		Latitude.		Longitude.		Course and Distance.	Total Compass Error.	Ship's Head.	Wind, at the time of observation.	Barometer.* No. 1168	Thermometers.	
Year 1911		Observed.		Observed.		Each four hours.	Of Compass used for Wind, being Variation and Deviation combined.	By same Compass as Wind.	Direction. State if true, or subject to Compass Error, or only to Variation.	Height of Cistern above Sea 9 1/2 feet.	Dry Bulb.	Wet Bulb.
Month Jan.		Dead Reckoning.		Dead Reckoning.		Time of Day.	Force. 0 to 12.	Uncorrected Reading.	Att. Therm.		No.	No.
Day, Civil Time.		Hour.		Hour.		Distance by Log.						
1st		4					162		Calm			
		8					162		Calm	29.18 46	30.2	30.0
NOON		{		{		Off Cape Evans.		SE WNW 2		29.18 48		
4		{		{		Current in last hours		SE WNW 2		29.15 49	31.8	28.8
8		{		{				SW NNE 1.2		29.07 47	30.0	27.5
MIDT.		{		{				Calm		29.09		
5th		4					162		Calm	28.97 47	27.0	25.7
		8							Calm	28.95 49	32.0	31.5
NOON		{		{		Off Cape Evans.		Calm		28.95 49	32.8	28.8
4		{		{		Current in last hours		Very light E breeze WNW		28.96		
8		{		{				Calm		28.90 41	32.8	29.5
MIDT.		{		{				Calm		28.94		
6th		4					162		Calm			
		8							Calm	28.90 44	30.8	27.5
NOON		{		{		Off Cape Evans.		Calm		28.93 45	36.4	29.0
4		{		{		Current in last hours		Calm		28.94 44		
8		{		{				Calm		28.97		
MIDT.		{		{								
7th		4					162					
		8							S NNW 1.2	29.05 37	30.5	28.8
1 pm		{		{		Off Cape Evans.		Calm		29.14 51	31.8	28.8
NOON		{		{		Current in last hours		S NNW 1.2		29.15		
4		{		{				S NNW 1.2		29.17 50		
8		{		{				S NNW 1.2		29.18	37.0	33.0
MIDT.		{		{				Calm		29.16 45	34.8	30.9
		{		{						29.19		

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

Captain H. L. L. Penzell

from 14th January

to January 1911

Clouds.				Weather.		Sea Surface.						Remarks.	
Hour.	The direction from which the upper clouds are moving, and also that of the lower clouds when they do not move with the wind, should be noted when determinable.			According to Beaufort Notation.	Fog Intensity. 0 to 5.	Waves.		Swell.		Temp. by No.	Spec. Grav. by No.	Time of Remark.	Here give any important Remarks as to phenomena, with the times of their occurrence; especially the times of Changes in Direction and Force of Wind, as well as the Direction, Veering or Backing, Force and Duration of Squalls; the direction from which upper clouds are moving; the Position of Ice and of Derelicts. Also note the hour at which the Ship arrives in or leaves Port. (See "Instructions" for further particulars.)
	Names.		Prop. of Sky Clouded. 0 to 10.			Direction from.	Disturbance. 0 to 10.	Direction from.	Disturbance. 0 to 10.				
	Upper.	Lower.											
	Also record when Confused.												
4													
8	ci	cu	2	bc						31.2	27.0	8.30	Sailed ship alongside fleet off Cape Evans, McMurdo Sound.
NOON	ci ci-st	cu	3	bc									
4	ci ci-st	cu	3	bc									
8	ci ci-st	cu	4	bc									
MIDT.	ci ci-st		3	bc									
4	ci		1	b									
8	ci ci-st	cu	1	b						32.0	27.0		
NOON	ci ci-st	cu	1	b									
4													
8	ci ci-st	cu	1	b									
MIDT.	cu	st	2	bc									Stratus round Eclasp.
4	ci		2	bc								4.0	low fog to seaward. Eclasp smoke vertical.
8	ci ci-st ci		4	bc						31.2			
NOON	ci ci-st ci		7	bc									
4	ci ci-st		8	bc								4.0	Sun shining through.
8				bc									
MIDT.													
4													
8	ast ast		9	bc		S	1			31.0	27.0	8.0	Sun shining through Cumulus on mountains.
1 hour before noon	ast ast		6	bc								1 hour	do
4	ast ast		4	bc									Wind 1-2 commenced at 2 p.m.
8	ast ci-st cu		3	bc									
MIDT.													
2a	17	18	19	19a	20	21	20a	21a	22	23	24		25

Meteorological Log kept on board

Terra Nova R.Y.S.

DATE.		Latitude.		Longitude.		Course and Distance.		Total Compass Error.	Ship's Head.	Wind, at the time of observation.	Barometer.* No. 1163		Thermometers.		
Year 1911	Month Jan.	Observed.	Dead Reckoning.	Observed.	Dead Reckoning.	Each four hours.		Of Compass used for Wind, being Variation and Deviation combined.	Wind Velocity By same Compass as Wind.	Direction, State if true, or subject to Compass Error, or only to Variation.	Force, 0 to 12.	Height of Cistern above Sea 92 feet.		Dry Bulb.	Wet Bulb.
						Colour True Colour.	Distance by Log.					Uncorrected Reading.	Att. Therm.			No.	No.
		The D.R. position is needed daily, in addition to that by Observation, but it should be the result of careful calculation, in order to give any value to the estimation of the current.													
Day, Civil Time.	Hour.														
8th	4							E 162							
	8									Calm		29.20 44		36.5	37.8
	NOON									Calm		29.23 49		36.0	31.5
	4	Current in last hours							9.6	SE 3		29.19 41		33.8	31.0
	8									South NNW 3		29.17 38		30.8	28.2
	MIDT.														
9th	4														
	8							137°		SE W 1.2		29.18 41		30.9	29.9
	NOON	Current in last hours								SE W 1		29.20 42		33.5	
	4	Current in last hours								Calm		29.20 44		34.8	
	8								7	NNE 3		29.19 40		26.4	25.8
	MIDT.														
10th	4							137							
	8									SE W 1		29.15 41		29.8	29.8
	NOON	Current in last hours								SE WNW 2		29.19 44			
	4	Current in last hours								SE WNW 2		29.19 44		32.9	30.5
	8									SE WNW 2		29.20 43		31.8	30.0
	MIDT.														
11th	2:30									nnw ESE 5				22.8	
	4							137 E							
	8								27	nbw SE 6		29.21 29		22.4	22.4
	NOON	Current in last hours								nbw SE 6		29.22 30		21.9	21.9
	4	Current in last hours								nbw SE 5		29.20 28		22.0	22.5
	8									nbw SE 3-4		29.19 31		23.5	22.5
	MIDT.														
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

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

Captain Lieut. H.H. Pennell, R.N. from at Cape Evans to

Hour.	Clouds.		Weather.		Sea Surface.						Remarks.	
	The direction from which the upper clouds are moving, and also that of the lower clouds when they do not move with the wind, should be noted when determinable.		According to Beaufort Notation.	Fog Intensity. 0 to 5.	Waves.		Swell.		Temp. by No.	Spec. Grav. by No.	Time of Remark.	Here give any important Remarks as to phenomena, with the times of their occurrence; especially the times of Changes in Direction and Force of Wind, as well as the Direction, Veering or Backing, Force and Duration of Squalls; the direction from which upper clouds are moving; the Position of Ice and of Derelicts. Also note the hour at which the Ship arrives in or leaves Port. (See "Instructions" for further particulars.)
	Names.				Direction from.	Disturbance. 0 to 10.	Direction from.	Disturbance. 0 to 10.				
	Upper.	Lower.										
4												
8			o	b					31.4	27.0	8	Cu on mountains
NOON	ast	-	o.1	b								do.
4	acu ast	cu	3	bc							5.0	do.
8	acu ast	cu	5	bc								
MIDT.												
4												5.0 a uniform covering of ast rising to acu with a little st-cu below in places. very little cu on mountains. Wind 1.
8	ast	cu st	9	bc					30.4			7.0 Cu on mountains.
NOON	ast	cu st	9	bc								
4	ast acu	cu st	8	bc								6.0 to 6.30 Snow moderate.
8	ast acu	cu nt	6	bc								
MIDT.												
4												5.0 Snow for 1/2 hour.
8	ast	cu nt	9	bc					30.2			8.0 Commenced to snow (mod) forenoon. Snow intermittently up to moderate and wind increased about 10 to force 3 but eased later.
NOON		st nt	10	oc								afternoon. Occasional snow showers
4		st nt	10	oc								8.30 Wind to NW 1-2. White fog over southern side of Enclut.
8		st cu nt st-cu	9	oc								
MIDT.												
2.30		st	10	ocq								2.30 Wind been gradually rising in gusts till now when fairly steady. no snow
4												
8	-	nt	10	ocq	-	1	-	-	29.6	27.0	8.0	Snow moderate to heavy.
NOON	-	nt	10	ocq		1					10.0	Snow moderate to heavy, all forenoon.
4	ocu	st-cu	9	ocq		1					4.30	Ceased snowing.
8	ocu	st-cu	5	bc		1					5.0	Broken to Eastward, blue sky showing weather clearing
MIDT.											11.0	Wind easing all days + first.
2a	17	18	19	19a	20	21	20a	21a	22	23	24	25

Meteorological Log kept on board

Terra Nova Sp. U. S.

METEOROLOGICAL LOG SHEET																
DATE.		Latitude.		Longitude.		Course and Distance.		Total Compass Error.	Ship's Head.	Wind, at the time of observation.		Barometer.* No. 116.2		Thermometers.		
Year 1911	Month Jan.	Day, Civil Time.	Hour.	Observed.	Dead Reckoning.	Observed.	Dead Reckoning.	Each four hours.	Of Compass used for Wind, being Variation and Deviation combined.	By same Compass as Wind.	Direction. State if true, or subject to Compass Error, or only to Variation.	Force. 0 to 12.	Height of Cistern above Sea. 2 1/2 feet.		Dry Bulb.	Wet Bulb.
				Uncorrected Reading.	Att. Therm.	No.	No.									
The D.R. position is needed daily, in addition to that by Observation, but it should be the result of careful calculation, in order to give any value to the estimation of the current.																
12th		4		Off Cape Evans				137								
		8									lt. 1/4	1	29.11	38	23.2	23.2
		NOON									Calu	-	29.19	41	27.0	24.2
		4 5		Current in last hours							20 NW	5	29.05	39	22.2	21.1
		8									NW	5	29.01	34	24.9	23.5
		MIDT.									SE		29.06			
13th		4		Off Cape Evans				137								
		8									NW	5	29.00	29	15.3	15.3
		NOON									NW	5	29.01	30	18.5	18.0
		4		Current in last hours							NW	5	29.00	38	18.8	18.6
		8									NW	5	29.01	27	18.9	18.9
		MIDT.											29.08			
14th		4		Off Cape Evans				137								
		8									WNW	3	29.09	29	19.9	
		NOON									NW	2-3	29.10	30	22.4	21.2
		4		Current in last hours							NW	2	29.14	31	24.5	21.8
		8									NW	2	29.13	34	23.8	22.8
		MIDT.									SE		29.18			
15th		4		Off Cape Evans				137								
		8									lt 1/4	-	29.19	39	26.9	-
		NOON									"	"	29.21	39	25.8	24.8
		4		Current in last hours							"	"	29.23	41	25.8	25.0
		8									NW	2	29.24	39	26.2	25.4
		MIDT.									SE		29.28			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	

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

Captain Lieut. H. H. Penrell R.N. from at Cape Evans to, Maudslayi Sound

Hour.	Clouds.		Weather.		Sea Surface.						Remarks.	
	The direction from which the upper clouds are moving, and also that of the lower clouds when they do not move with the wind, should be noted when determinable.		According to Beaufort Notation.	Fog Intensity. 0 to 5.	Waves.		Swell.		Temp. by No.	Spec. Grav. by No.		
					Direction from.	Disturbance 0 to 10.	Direction from.	Disturbance 0 to 10.				
												Also record when Confused.
Names.		Prop. of Sky Cleared, 0 to 10.										
Upper.	Lower.											
4												
8	ci ast	-	9.	bc						29.2		8. Cu + St on mountains.
NOON	ci ast		9	bc								- do - afternoon. Wind gradually rising in puffs to force 3 direction N by W.
4	ast	cu	3	bc								4.0 Wind increased to force 5.
8	ast	cu	3	bcg								
MIDT.												
4												
8	ci ast	cu	2	bc			1			29.0		9.0 Cumulus on Western mountains.
NOON	ast	cu	1	bc			1					do
4	ast	cu	1	bc			1					Excess ice from cloud all day.
8	ast	cu	1	bc			1					afternoon very remarkable bank of cumuli behind Cape Barnes.
MIDT.												
4												
8	ast	cu	9	oc			1			30.4		
NOON	a-cu ast	cu	5	bc			1					
4	a-cu a-st	cu	5	bc			1					
8	a-cu ast	cu	7	bc			1					Midt. Wind now SE 6
MIDT.												
4												
8	ast	cu	3	bc						30.0		Cu on W. mts
NOON	ast	cu	3	bc								do
4	ast	cu	3	bc								do
8	ast	cu	3	bc								do
MIDT.												
2a	17	18	19	19a	20	21	20a	21a	22	23	24	25

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.

Meteorological Log kept on board Terra Nova R.V.S.

DATE.		Latitude.		Longitude.		Course and Distance.		Total Compass Error.	Ship's Head.	Wind, at the time of observation.	Barometer.* No. 1163	Thermometers.			
Year 19 11	Month Jan.	Observed.	Dead Reckoning.	Observed.	Dead Reckoning.	Each four hours.	Distance by Log.	Of Compass used for Wind, being Variation and Deviation combined.	Wind by same Compass as Wind.	Direction. State if true, or subject to Compass Error, or only to Variation.	Force. 0 to 12.	Height of Cistern above Sea. 9 1/2 feet.		Dry Bulb. No.	Wet Bulb. No.
												Uncorrected Reading.	Att. Therm.		
The D.R. position is needed daily, in addition to that by Observation, but it should be the result of careful calculation, in order to give any value to the estimation of the current.															
Day, Civil Time.	Hour.														
16	4					137									
	8									West NE 1-2		29.30	39	25.2	22.8
	NOON									West NE 1		29.32	39	25.5	23.8
	4									W. NW 2		29.30	37	24.8	22.8
	8									W. SE 1		29.30	36	22.0	
	MIDT.														
16	4					137									
	8									W. NW 2		29.28	34	20.4	20.4
	NOON									W. NW 2-3		29.31	41	15.8	15.8
	4									W. NW 4-5		29.29	40	17.8	17.0
	8								25	W. NW 6		29.27	39	16.0	16.0
	MIDT.									W. NW 3-4		29.28	35	12.0	
18	4														
	8					149				W. NW SE 3		29.25	43	11.5	11.5
	NOON									W. NW SE 2-3		29.27	42	19.0	19.0
	4									W. NW SE 2		29.23	38	20.0	19.1
	8									W. NW SE 1		29.23	39	23.0	21.8
	MIDT.														
	4														
	8														
	NOON														
	4														
	8														
	MIDT.														
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

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

Captain H.H. Pennell from at true winds to

Clouds.		Weather.		Sea Surface.				Remarks.				
Hour.	The direction from which the upper clouds are moving, and also that of the lower clouds when they do not move with the wind, should be noted when determinable.		According to Beaufort Notation.	Fog Intensity. 0 to 5.	Waves.		Swell.		Temp. by No.	Spec. Grav. by No.	Time of Remark.	Here give any important Remarks as to phenomena, with the times of their occurrence; especially the times of Changes in Direction and Force of Wind, as well as the Direction, Veering or Backing, Force and Duration of Squalls; the direction from which upper clouds are moving; the Position of Ice and of Derelicts, Also note the hour at which the Ship arrives in or leaves Port. (See "Instructions" for further particulars.)
	Names.				Direction from.	Disturbance. 0 to 10.	Direction from.	Disturbance. 0 to 10.				
	Upper.	Lower.											Also record when Confused.
4												
8	ast	-	1	b	-	-	-	-	31.4		9.0	No cumulus on Western mountains.
NOON	ast	-	1								10.0	Truck mirage.
4	ast	Cu	4	bc	-	-	-	-				From Very large amount of mirage - little Cu on W mts.
8	ast	Cu	6	bc	-	-	-	-			11.0	Calm with occasional light puffs from Sd. a/cu / ast / W / Sd - a
MIDT.												Snowing to Southward & behind Cape Barnes.
4												Snow moderate all middle and morning.
8		nb	10	0.5					30.1			
NOON		nb	10	04.1							From	Snow moderate all forenoon
4		nb	10	04.3			1					Snow slight to moderate in afternoon - do - log watches.
8		nb St Cu	8	01.3			1				5.0	Ceased snowing.
MIDT.		nb St Cu	8								4.0	Wind commenced to decrease in strength mist a white smoky fog coming up from beyond Inaccessible Island (N. magnetic)
4											1.0	Wind increasing again.
8		nb St Cu	9	C			1		31.6		2.0	Wind force 6
NOON		nb St Cu	5	bc			1				Thick	White smoky fog lifting & settling all watches
4		nb	10	03.5			1				8.0	Mist round Inaccessible Island and mist appearing in patches on sea and round detached Hbs
8		nb St Cu	9	bc							From	Low snow drift over Hut Point
MIDT.		nb St Cu	10	02.5							Ship	shifted berth to close with Cape Evans.
4											9.0	2pm. Thick blackish mist round Cape Barnes. Mist on Western mountains.
8												Commenced to snow (moderate)
NOON												
4												
8												
MIDT.												
2a	17	18	19	19a	20	21	20a	21a	22	23	24	25

Meteorological Log kept on board "Terra Nova" R.S.

DATE.		Latitude.		Longitude.		Course and Distance.		Total Compass Error.	Ship's Head.	Wind, at the time of observation.	Barometer.* No. 1163	Thermometers.	
Year 1911		Observed.	Dead Reckoning.	Observed.	Dead Reckoning.	Each four hours.	Of Compass used for Wind, being Variation and Deviation combined.	By same Compass as Wind.	Direction. State if true, or subject to Compass Error, or only to Variation.	Force. 0 to 12.	Height of Cistern above Sea 9 1/2 feet.	Dry Bulb.	Wet Bulb.
Month Jan.	Day, Civil Time.													Hour.	Uncorrected Reading.	Att. Therm.	No.	No.
The D.R. position is needed daily, in addition to that by Observation, but it should be the result of careful calculation, in order to give any value to the estimation of the current.													
						Colours	Log.						
						True Course.	Distance by Log.						
						the sea							
19 th		Cape Evans				E.	E						
4							149						
8										nnw 2-3	29.20	32.0	18.5 18.0
NOON										SE 2	29.26	39	20.8 20.0
4										nnw 3-4	29.27	45	20.8 20.0
8										SE 6	29.28	38	21.8 20.4
MIDT.										SE	29.29		
and the wet bulb being untainted by salt water.													
20 th		Cape Evans					149						
4							approx			nnw 6	29.25	37	20.8 19.9
8										ESE 8	29.30	46	26.2 22.9
NOON										nnw 1	29.31	47	
4										ESE 2	29.33	45	
8										SE 2	29.32	45	
MIDT.										WNW	29.34		
are in working order; the dry bulb being free of moisture													
21 st		Cape Evans					149			True North approx			
4							approx			SEW 2			
8										SEW 5	29.30	41	29.2 27.0
NOON										SEW 5	29.34	42	30.0 26.9
4											29.37		
8										WNW 6	29.53	53	25.0 22.6
MIDT.										E	29.53		
thermometers, the observer should satisfy himself that both													
22 nd		Cape Evans					162						
4										WNW 2	29.70	44	23.9 21.5
8										E 3	29.73	47	21.4 22.2
NOON										SE 3	29.72	50	27.2
4										SE 3	29.71	48	27.2 24.3
8										SE 3	29.69	49	27.0
MIDT.										SE 3	29.71		
										SE 3	29.68		
Before accepting the readings of the dry and wet bulb													
1		2		3		4		5		6		7	
8		9		10		11		12		13		14	
15		16		17		18		19		20		21	

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

Captain H. L. Pennell from at the hands of to

Clouds.		Weather.		Sea Surface.		Remarks.	
The direction from which the upper clouds are moving, and also that of the lower clouds when they do not move with the wind, should be noted when determinable.		According to Beaufort Notation.		Waves.		Swell.	
Names.		Fog Intensity.		Direction from.		Direction from.	
Upper.		Lower.		Direction from.		Direction from.	
4							
8							
NOON							
4							
8							
MIDT.							
4							
8							
NOON							
4							
8							
MIDT.							
4							
8							
NOON							
4							
8							
MIDT.							
4							
8							
NOON							
4							
8							
MIDT.							
4							
8							
NOON							
4							
8							
MIDT.							

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.

Meteorological Log kept on board

"Terra Nova" R.Y.S.

DATE.		Latitude.		Longitude.		Course and Distance.		Total Compass Error.	Ship's Head.	Wind, at the time of observation.	Barometer.* No. 1163	Thermometers.			
Year 19 11	Month Jan	Observed.	Dead Reckoning.	Observed.	Dead Reckoning.	Each four hours.	Of Compass used for Wind, being Variation and Deviation combined.	Wind Velocity By same Compass as Wind.	Direction. State if true, or subject to Compass Error, or only to Variation.	Force. 0 to 12.	Height of Cistern above Sea. 9 1/2 feet.		Dry Bulb.	Wet Bulb.	
											Uncorrected Reading.	Att. Therm.			No.	No.
		The D.R. position is needed daily, in addition to that by Observation, but it should be the result of careful calculation, in order to give any value to the estimation of the current.				Colour of Sky.	True Course.	Distance by Log.							
Day, Civil Time.	Hour.														
23 rd															
4															
8		Cape Evans.					149 (approx)		WNW E	1-0	29.56	44	25.1	23.5	
NOON		{					"		lt W air	1	29.52	48	29.9	26.0	
4		{ Current in last hours mls. }							SE	1	29.54				
8									SE	NNW	1	29.43	52		
MIDT.											29.44				
									SSW	N	2-3	29.41	50	27.0	23.5
											29.42				
									SSE	NW	3-4	29.24	47	26.0	25.0
24 th											29.26				
4							149		SSW	3-2	29.28	43	26.0	25.5	
8		Cape Evans.							NW	2-3	29.23	45	25.8	24.2	
NOON		{ Glacier Tongue }					174		lt NW		29.24	47	28.5	25.4	
4		{ Current in last hours mls. }							SE		29.26				
8									West	E	2	29.30	48	21.0	22.5
MIDT.											29.32				
25 th															
4							174								
8									West	E	2	29.44	40	23.0	-
NOON		{ Glacier Tongue }							WNW	2	29.50	47	24.8	-	
4		{ Current in last hours mls. }							ESE		29.52		29.2	26.0	
8									Calm	0	29.48	51	29.2	26.0	
MIDT.											29.49				
26 th															
4							174								
8									SE	N	5	29.24	45	28.5	26.4
NOON		{ Glacier Tongue }							SE	N	5	29.28	48	30.5	-
4		{ Current in last hours mls. }									29.30				
8									WNW	3	29.35	53	26.2	23.9	
MIDT.									ESE		29.35				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

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

Captain H. H. Pennell. from

at McMurdo Island to

Hour.	Clouds.		Weather.	Sea Surface.		Remarks.	
The direction from which the upper clouds are moving, and also that of the lower clouds when they do not move with the wind, should be noted when determinable.	Names.		According to Beaufort Notation.	Fog Intensity. 0 to 5.	Waves.	Swell.	Temp. by No.
	Upper.	Lower.					
4							
8	as	gr	3				33.5
NOON							
4							
8	as	cu	1				
MIDT.	as	cu	5				
4	acu	cu	3				
8	acu	cu	4				33.2
NOON							
4							
8							
MIDT.							
4							
8	as		1				30.4
NOON							
4							
8							
MIDT.							
4							
8							
NOON							
4							
8							
MIDT.							

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.

Meteorological Log kept on board

Terra Nova R.V.S.

DATE.		Latitude.		Longitude.		Course and Distance.	Total Compass Error.	Ship's Head.	Wind, at the time of observation.	Barometer.* No. 1163	Thermometers.	
Year 1911		Observed.		Observed.		Each four hours.	Of Compass used for Wind, being Variation and Deviation combined.	Wind, same as Compass, or only to Variation.	Direction, State if true, or subject to Compass Error, or only to Variation.	Height of Cistern above Sea 9 1/2 feet.	Dry Bulb.	Wet Bulb.
Month Jan.		Dead Reckoning.		Dead Reckoning.		Color.	Distance by Log.	Force, 0 to 12.	Uncorrected Reading.	Att. Therm.	No.	No.
Day, Civil Time.		The D.R. position is needed daily, in addition to that by Observation, but it should be the result of careful calculation, in order to give any value to the estimation of the current.		The D.R. position is needed daily, in addition to that by Observation, but it should be the result of careful calculation, in order to give any value to the estimation of the current.		Time of Day.	Time of Day.	Time of Day.	Time of Day.	Time of Day.	Time of Day.	Time of Day.
27 th	4										152.1	152.5
	8										16.2	15.2
	NOON										21.8	19.2
	4										22.8	20.6
	8										23.0	21.8
	MIDT.										22.8	20.6
28 th	4										20.6	19.5
	8										25.5	23.8
	NOON										26.0	23.8
	4										25.5	24.3
	8										23.5	-
	MIDT.										22.0	20.8
29 th	4										24.5	22.5
	8										23.5	22.0
	NOON										26.0	23.8
	4										23.8	21.5
	8										18.2	17.0
	MIDT.										12.8	12.0
30 th	4										13.5	-
	8										23.0	22.0
	NOON										20.0	19.0
	4										20.0	19.2
	8										22.0	21.0
	MIDT.										22.0	21.0

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

Captain H.H. Pennell, Lieut. R.N. and from

at McMurdo Sound to King Edward VII Land.

Clouds.		Weather.		Sea Surface.		Remarks.	
The direction from which the upper clouds are moving, and also that of the lower clouds when they do not move with the wind, should be noted when determinable.		According to Beaufort Notation.		Waves.		Here give any important Remarks as to phenomena, with the times of their occurrence; especially the times of Changes in Direction and Force of Wind, as well as the Direction, Veering or Backing, Force and Duration of Squalls; the direction from which upper clouds are moving; the Position of Ice and of Derelicts. Also note the hour at which the Ship arrives in or leaves Port. (See "Instructions" for further particulars.)	
Names.		Fog Intensity.		Disturbance.		Time of Remark.	
Upper.		0 to 5.		0 to 10.		84, 22.6	
4							
8	ast st	1	bc			32.0	9.0
NOON	st	1	bc	n	3	29.5	26.5
4							
8	ast	2	bc	nw	3	29.5	
MIDT.	st	2	bc				
4	ast	2	bc	nw	2	32.0	
8	ast	2	bc	n	3	32.2	
NOON	ast	2	bc			31.0	
4	ast	2	bc	n	3	32.4	
8	ast	2	bc	n	3	32.4	
MIDT.	ast	2	bc	n	3	31.8	
4	ast	2	bc	n	3	30.8	
8	ast	2	bc	n	3	30.8	
NOON	ast	2	bc	n	3	30.8	
4	ast	2	bc	n	3	30.8	
8	ast	2	bc	n	3	30.8	
MIDT.	ast	2	bc	n	3	29.2	
4	ast	2	bc	n	3	29.5	
8	ast	2	bc	n	3	30.0	
NOON	ast	2	bc	n	3	29.1	
4	ast	2	bc	n	3	29.5	
8	ast	2	bc	n	3	29.0	
MIDT.	ast	2	bc	n	3	29.0	

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.

Meteorological Log kept on board "Terra Nova" R.Y.S.

DATE.		Latitude. S		Longitude. W		Course and Distance.	Total Compass Error.	Ship's Head.	Wind, at the time of observation.	Barometer.* No. 1163	Thermometers.	
Year 1911	Month Jan	Observed.	Dead Reckoning.	Observed.	Dead Reckoning.	Each four hours.	Of Compass used for Wind, being Variation and Deviation combined.	Wind, By same Compass as Wind.	Direction. State if true, or subject to Compass Error, or only to Variation.	Height of Cistern above Sea 9 1/2 feet.	Dry Bulb.	Wet Bulb.
Day.	Hour.	The D.R. position is needed daily, in addition to that by Observation, but it should be the result of careful calculation, in order to give any value to the estimation of the current.		Time Course.		Distance by Log.	E.	W.	Force. 0 to 12.	Uncorrected Reading.	Att. Therm.	No. 1524 1525
3rd	4	2.10 am										18.5 17.8
	8	7.12 am										20.1 19.2
	NOON	7.8	29	171	06							22.2 21.0
	4	Current in last hours										18.9 17.9
	8	7.8	28	170	53							22.8 21.8
	MIDT.	10.17 pm										25.2 22.2
2nd	4	4.50 am										24.5 22.5
	8	7.7	49	168	01							25.5 24.0
	NOON	7.7	38	166	17							25.0 23.8
	4	Current in last hours										25.0 23.5
	8											28.0 22.0
	MIDT.											21.0 19.2
2nd	4	4.0 am										20.8
	8	9.18 am										23.0 22.4
	NOON	7.6	56	159	0							21.8 19.0
	4	Current in last hours										16.9
	8	7.7	06	157	54							10 9.5
	MIDT.	8.06 pm										
3rd	4											10.5 10.0
	8											6.2
	NOON											7.5
	4	Current in last hours										12.8
	8	7.8	18	162	22							11.0
	MIDT.	11.45										17.9

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

Captain H.L. Pennell. Just from 9.10.11.12.13.14.15.16.17.18.19.20.21.22.23.24.25.26.27.28.29.30.31.32.33.34.35.36.37.38.39.40.41.42.43.44.45.46.47.48.49.50.51.52.53.54.55.56.57.58.59.60.61.62.63.64.65.66.67.68.69.70.71.72.73.74.75.76.77.78.79.80.81.82.83.84.85.86.87.88.89.90.91.92.93.94.95.96.97.98.99.100.101.102.103.104.105.106.107.108.109.110.111.112.113.114.115.116.117.118.119.120.121.122.123.124.125.126.127.128.129.130.131.132.133.134.135.136.137.138.139.140.141.142.143.144.145.146.147.148.149.150.151.152.153.154.155.156.157.158.159.160.161.162.163.164.165.166.167.168.169.170.171.172.173.174.175.176.177.178.179.180.181.182.183.184.185.186.187.188.189.190.191.192.193.194.195.196.197.198.199.200.201.202.203.204.205.206.207.208.209.210.211.212.213.214.215.216.217.218.219.220.221.222.223.224.225.226.227.228.229.230.231.232.233.234.235.236.237.238.239.240.241.242.243.244.245.246.247.248.249.250.251.252.253.254.255.256.257.258.259.260.261.262.263.264.265.266.267.268.269.270.271.272.273.274.275.276.277.278.279.280.281.282.283.284.285.286.287.288.289.290.291.292.293.294.295.296.297.298.299.300.301.302.303.304.305.306.307.308.309.310.311.312.313.314.315.316.317.318.319.320.321.322.323.324.325.326.327.328.329.330.331.332.333.334.335.336.337.338.339.340.341.342.343.344.345.346.347.348.349.350.351.352.353.354.355.356.357.358.359.360.361.362.363.364.365.366.367.368.369.370.371.372.373.374.375.376.377.378.379.380.381.382.383.384.385.386.387.388.389.390.391.392.393.394.395.396.397.398.399.400.401.402.403.404.405.406.407.408.409.410.411.412.413.414.415.416.417.418.419.420.421.422.423.424.425.426.427.428.429.430.431.432.433.434.435.436.437.438.439.440.441.442.443.444.445.446.447.448.449.450.451.452.453.454.455.456.457.458.459.460.461.462.463.464.465.466.467.468.469.470.471.472.473.474.475.476.477.478.479.480.481.482.483.484.485.486.487.488.489.490.491.492.493.494.495.496.497.498.499.500.501.502.503.504.505.506.507.508.509.510.511.512.513.514.515.516.517.518.519.520.521.522.523.524.525.526.527.528.529.530.531.532.533.534.535.536.537.538.539.540.541.542.543.544.545.546.547.548.549.550.551.552.553.554.555.556.557.558.559.560.561.562.563.564.565.566.567.568.569.570.571.572.573.574.575.576.577.578.579.580.581.582.583.584.585.586.587.588.589.590.591.592.593.594.595.596.597.598.599.600.601.602.603.604.605.606.607.608.609.610.611.612.613.614.615.616.617.618.619.620.621.622.623.624.625.626.627.628.629.630.631.632.633.634.635.636.637.638.639.640.641.642.643.644.645.646.647.648.649.650.651.652.653.654.655.656.657.658.659.660.661.662.663.664.665.666.667.668.669.670.671.672.673.674.675.676.677.678.679.680.681.682.683.684.685.686.687.688.689.690.691.692.693.694.695.696.697.698.699.700.701.702.703.704.705.706.707.708.709.710.711.712.713.714.715.716.717.718.719.720.721.722.723.724.725.726.727.728.729.730.731.732.733.734.735.736.737.738.739.740.741.742.743.744.745.746.747.748.749.750.751.752.753.754.755.756.757.758.759.760.761.762.763.764.765.766.767.768.769.770.771.772.773.774.775.776.777.778.779.780.781.782.783.784.785.786.787.788.789.790.791.792.793.794.795.796.797.798.799.800.801.802.803.804.805.806.807.808.809.810.811.812.813.814.815.816.817.818.819.820.821.822.823.824.825.826.827.828.829.830.831.832.833.834.835.836.837.838.839.840.841.842.843.844.845.846.847.848.849.850.851.852.853.854.855.856.857.858.859.860.861.862.863.864.865.866.867.868.869.870.871.872.873.874.875.876.877.878.879.880.881.882.883.884.885.886.887.888.889.890.891.892.893.894.895.896.897.898.899.900.901.902.903.904.905.906.907.908.909.910.911.912.913.914.915.916.917.918.919.920.921.922.923.924.925.926.927.928.929.930.931.932.933.934.935.936.937.938.939.940.941.942.943.944.945.946.947.948.949.950.951.952.953.954.955.956.957.958.959.960.961.962.963.964.965.966.967.968.969.970.971.972.973.974.975.976.977.978.979.980.981.982.983.984.985.986.987.988.989.990.991.992.993.994.995.996.997.998.999.1000.1001.1002.1003.1004.1005.1006.1007.1008.1009.1010.1011.1012.1013.1014.1015.1016.1017.1018.1019.1020.1021.1022.1023.1024.1025.1026.1027.1028.1029.1030.1031.1032.1033.1034.1035.1036.1037.1038.1039.1040.1041.1042.1043.1044.1045.1046.1047.1048.1049.1050.1051.1052.1053.1054.1055.1056.1057.1058.1059.1060.1061.1062.1063.1064.1065.1066.1067.1068.1069.1070.1071.1072.1073.1074.1075.1076.1077.1078.1079.1080.1081.1082.1083.1084.1085.1086.1087.1088.1089.1090.1091.1092.1093.1094.1095.1096.1097.1098.1099.1100.1101.1102.1103.1104.1105.1106.1107.1108.1109.1110.1111.1112.1113.1114.1115.1116.1117.1118.1119.1120.1121.1122.1123.1124.1125.1126.1127.1128.1129.1130.1131.1132.1133.1134.1135.1136.1137.1138.1139.1140.1141.1142.1143.1144.1145.1146.1147.1148.1149.1150.1151.1152.1153.1154.1155.1156.1157.1158.1159.1160.1161.1162.1163.1164.1165.1166.1167.1168.1169.1170.1171.1172.1173.1174.1175.1176.1177.1178.1179.1180.1181.1182.1183.1184.1185.1186.1187.1188.1189.1190.1191.1192.1193.1194.1195.1196.1197.1198.1199.1200.1201.1202.1203.1204.1205.1206.1207.1208.1209.1210.1211.1212.1213.1214.1215.1216.1217.1218.1219.1220.1221.1222.1223.1224.1225.1226.1227.1228.1229.1230.1231.1232.1233.1234.1235.1236.1237.1238.1239.1240.1241.1242.1243.1244.1245.1246.1247.1248.1249.1250.1251.1252.1253.1254.1255.1256.1257.1258.1259.1260.1261.1262.1263.1264.1265.1266.1267.1268.1269.1270.1271.1272.1273.1274.1275.1276.1277.1278.1279.1280.1281.1282.1283.1284.1285.1286.1287.1288.1289.1290.1291.1292.1293.1294.1295.1296.1297.1298.1299.1300.1301.1302.1303.1304.1305.1306.1307.1308.1309.1310.1311.1312.1313.1314.1315.1316.1317.1318.1319.1320.1321.1322.1323.1324.1325.1326.1327.1328.1329.1330.1331.1332.1333.1334.1335.1336.1337.1338.1339.1340.1341.1342.1343.1344.1345.1346.1347.1348.1349.1350.1351.1352.1353.1354.1355.1356.1357.1358.1359.1360.1361.1362.1363.1364.1365.1366.1367.1368.1369.1370.1371.1372.1373.1374.1375.1376.1377.1378.1379.1380.1381.1382.1383.1384.1385.1386.1387.1388.1389.1390.1391.1392.1393.1394.1395.1396.1397.1398.1399.1400.1401.1402.1403.1404.1405.1406.1407.1408.1409.1410.1411.1412.1413.1414.1415.1416.1417.1418.1419.1420.1421.1422.1423.1424.1425.1426.1427.1428.1429.1430.1431.1432.1433.1434.1435.1436.1437.1438.1439.1440.1441.1442.1443.1444.1445.1446.1447.1448.1449.1450.1451.1452.1453.1454.1455.1456.1457.1458.1459.1460.1461.1462.1463.1464.1465.1466.1467.1468.1469.1470.1471.1472.1473.1474.1475.1476.1477.1478.1479.1480.1481.1482.1483.1484.1485.1486.1487.1488.1489.1490.1491.1492.1493.1494.1495.1496.1497.1498.1499.1500.1501.1502.1503.1504.1505.1506.1507.1508.1509.1510.1511.1512.1513.1514.1515.1516.1517.1518.1519.1520.1521.1522.1523.1524.1525.1526.1527.1528.1529.1530.1531.1532.1533.1534.1535.1536.1537.1538.1539.1540.1541.1542.1543.1544.1545.1546.1547.1548.1549.1550.1551.1552.1553.1554.1555.1556.1557.1558.1559.1560.1561.1562.1563.1564.1565.1566.1567.1568.1569.1570.1571.1572.1573.1574.1575.1576.1577.1578.1579.1580.1581.1582.1583.1584.1585.1586.1587.1588.1589.1590.1591.1592.1593.1594.1595.1596.1597.1598.1599.1600.1601.1602.1603.1604.1605.1606.1607.1608.1609.1610.1611.1612.1613.1614.1615.1616.1617.1618.1619.1620.1621.1622.1623.1624.1625.1626.1627.1628.1629.1630.1631.1632.1633.1634.1635.1636.1637.1638.1639.1640.1641.1642.1643.1644.1645.1646.1647.1648.1649.1650.1651.1652.1653.1654.1655.1656.1657.1658.1659.1660.1661.1662.1663.1664.1665.1666.1667.1668.1669.1670.1671.1672.1673.1674.1675.1676.1677.1678.1679.1680.1681.1682.1683.1684.1685.1686.1687.1688.1689.1690.1691.1692.1693.1694.1695.1696.1697.1698.1699.1700.1701.1702.1703.1704.1705.1706.1707.1708.1709.1710.1711.1712.1713.1714.1715.1716.1717.1718.1719.1720.1721.1722.1723.1724.1725.1726.1727.1728.1729.1730.1731.1732.1733.1734.1735.1736.1737.1738.1739.1740.1741.1742.1743.1744.1745.1746.1747.1748.1749.1750.1751.1752.1753.1754.1755.1756.1757.1758.1759.1760.1761.1762.1763.1764.1765.1766.1767.1768.1769.1770.1771.1772.1773.1774.1775.1776.1777.1778.1779.1780.1781.1782.1783.1784.1785.1786.1787.1788.1789.1790.1791.1792.1793.1794.1795.1796.1797.1798.1799.1800.1801.1802.1803.1804.1805.1806.1807.1808.1809.1810.1811.1812.1813.1814.1815.1816.1817.1818.1819.1820.1821.1822.1823.1824.1825.1826.1827.1828.1829.1830.1831.1832.1833.1834.1835.1836.1837.1838.1839.1840.1841.1842.1843.1844.1845.1846.1847.1848.1849.1850.1851.1852.1853.1854.1855.1856.1857.1858.1859.1860.1861.1862.1863.1864.1865.1866.1867.1868.1869.1870.1871.1872.1873.1874.1875.1876.1877.1878.1879.1880.1881.1882.1883.1884.1885.1886.1887.1888.1889.1890.1891.1892.1893.1894.1895.1896.1897.1898.1899.1900.1901.1902.1903.1904.1905.1906.1907.1908.1909.1910.1911.1912.1913.1914.1915.1916.1917.1918.1919.1920.1921.1922.1923.1924.1925.1926.1927.1928.1929.1930.1931.1932.1933.1934.1935.1936.1937.1938.1939.1940.1941.1942.1943.1944.1945.1946.1947.1948.1949.1950.1951.1952.1953.1954.1955.1956.1957.1958.1959.1960.1961.1962.1963.1964.1965.1966.1967.1968.1969.1970.1971.1972.1973.1974.1975.1976.1977.1978.1979.1980.1981.1982.1983.1984.1985.1986.1987.1988.1989.1990.1991.1992.1993.1994.1995.1996.1997.1998.1999.2000.2001.2002.2003.2004.2005.2006.2007.2008.2009.2010.2011.2012.2013.2014.2015.2016.2017.2018.2019.2020.2021.2022.2023.2024.2025.2026.2027.2028.2029.2030.2031.2032.2033.2034.2035.2036.2037.2038.2039.2040.2041.2042.2043.2044.2045.2046.2047.2048.2049.2050.2051.2052.2053.2054.2055.2056.2057.2058.2059.2060.2061.2062.2063.2064.2065.2066.2067.2068.2069.2070.2071.2072.2073.2074.2075.2076.2077.2078.2079.2080.2081.2082.2083.2084.2085.2086.2087.2088.2089.2090.2091.2092.2093.2094.2095.2096.2097.2098.2099.2100.2101.2102.2103.2104.2105.2106.2107.2108.2109.2110.2111.2112.2113.2114.2115.2116.2117.2118.2119.2120.2121.2122.2123.2124.2125.2126.2127.2128.2129.2130.2131.2132.2133.2134.2135.2136.2137.2138.2139.2140.2141.2142.2143.2144.2145.2146.2147.2148.2149.2150.2151.2152.2153.2154.2155.2156.2157.2158.2159.2160.2161.2162.2163.2164.2165.2166.2167.2168.2169.2170.2171.2172.2173.2174.2175.2176.2177.2178.2179.2180.2181.2182.2183.2184.2185.2186.2187.2188.2189.2190.2191.2192.2193.2194.2195.2196.2197.2198.2199.2200.2201.2202.2203.220

Meteorological Log kept on board "Terra Nova" R.Y.S.

DATE.		Latitude. <i>S</i>		Longitude. <i>W</i>		Course and Distance.	Total Compass Error.	Ship's Head.	Wind, at the time of observation.	Barometer.* No. <i>1163</i>	Thermometers.				
Year <i>1911</i>	Month <i>Feb 7</i>	Observed.	Dead Reckoning.	Observed.	Dead Reckoning.	Each four hours.	Of Compass used for Wind, being Variation and Deviation combined.	Wind, By same Compass as Wind.	Direction. State if true, or subject to Compass Error, or only to Variation.	Force. 0 to 12.	Height of Cistern above Sea <i>9 1/2</i> feet.	Dry Bulb.	Wet Bulb.		
Day. Civil Time.	Hour.	The D.R. position is needed daily, in addition to that by Observation, but it should be the result of careful calculation, in order to give any value to the estimation of the current.				Colours of Sea.	Distance by Log.				Uncorrected Reading.	Att. Therm.	No.	No.	
3rd (cont)															
	4	<i>halo showing red, yellow, green, purple, white</i>													
	8	<i>Sun 14° 40'</i>													
	NOON														
	P.M. <i>4.60</i>	Current in last hours mls.													
	8	<i>Sky clearing rapidly disclosing Ci-cu and Ci-st clouds above. Wind eased to 5 but stronger in gusts.</i>													
		<i>Between 10. & 11.0 p.m. Snow squall passed ahead of ship.</i>													
	MIDT.														
4th															
	4								<i>109 off shore South</i>	<i>3</i>	<i>28.85</i>	<i>35</i>	<i>19.0</i>	<i>18.5</i>	
	8.30								<i>South</i>	<i>2</i>	<i>28.93</i>	<i>41</i>	<i>25.0</i>	<i>24.5</i>	
	NOON	<i>Bay of Whales</i>							<i>South</i>	<i>2</i>	<i>28.97</i>	<i>35</i>	<i>20.8</i>	<i>20.5</i>	
	4	Current in last hours mls.							<i>South</i>	<i>2</i>	<i>28.95</i>	<i>38</i>	<i>20.8</i>	<i>20.5</i>	
	8	<i>Proceeded.</i>				<i>430</i>	<i>115</i>		<i>South</i>	<i>1-2</i>	<i>28.95</i>	<i>37</i>	<i>14.5</i>	<i>18.5</i>	
									<i>South</i>	<i>2-3</i>	<i>28.92</i>	<i>40</i>	<i>24.5</i>	<i>23.5</i>	
	MIDT.								<i>South</i>	<i>2-3</i>	<i>28.96</i>				
5th															
	4								<i>SE</i>	<i>2</i>	<i>28.88</i>	<i>37</i>	<i>15.5</i>	<i>15.5</i>	
	9.22 am								<i>SE</i>	<i>3</i>	<i>28.93</i>				
	8	<i>78</i>	<i>15</i>	<i>170</i>	<i>42</i>		<i>107</i>		<i>SE</i>	<i>2-3</i>	<i>28.50</i>	<i>29</i>	<i>17.5</i>	<i>17.5</i>	
	NOON	<i>78</i>	<i>12</i>	<i>171</i>	<i>50</i>		<i>105</i>		<i>SE</i>	<i>1</i>	<i>28.82</i>	<i>42</i>	<i>21.0</i>	<i>-</i>	
	4	Current in last hours mls.							<i>SE</i>		<i>28.80</i>	<i>42</i>	<i>23.2</i>	<i>22.8</i>	
	8					<i>430</i>	<i>121</i>		<i>SE</i>	<i>2</i>	<i>28.78</i>	<i>46</i>	<i>26.0</i>	<i>24.9</i>	
	MIDT.						<i>140</i>		<i>SE</i>	<i>3-4</i>	<i>28.75</i>	<i>43.8</i>	<i>29.0</i>	<i>28.0</i>	
6th															
	4						<i>140</i>		<i>SE</i>	<i>5/6</i>	<i>28.78</i>				
	8						<i>120</i>		<i>SE</i>	<i>4</i>	<i>28.73</i>	<i>37</i>	<i>28.8</i>	<i>28.2</i>	
	NOON	<i>77</i>	<i>52</i>	<i>172</i>	<i>04</i>		<i>120</i>		<i>SE</i>	<i>-</i>	<i>28.78</i>	<i>41</i>	<i>29.0</i>	<i>28.5</i>	
	4	Current in last hours mls.							<i>SE</i>	<i>2-3</i>	<i>28.80</i>	<i>43</i>	<i>29.9</i>		
	8						<i>98</i>		<i>SE</i>	<i>1-2</i>	<i>28.85</i>	<i>49</i>	<i>31.5</i>	<i>29.0</i>	
							<i>101</i>		<i>SE</i>	<i>1-2</i>	<i>28.85</i>	<i>44</i>	<i>29.0</i>	<i>29.0</i>	
	MIDT.						<i>105</i>		<i>SE</i>	<i>4</i>	<i>28.89</i>	<i>45.5</i>	<i>28.0</i>	<i>27.8</i>	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

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

Captain H.H. Pennell to "KE VII" Land

Clouds.		Weather.		Sea Surface.		Remarks.	
Hour.	The direction from which the upper clouds are moving, and also that of the lower clouds when they do not move with the wind, should be noted when determinable.	According to Beaufort Notation.	Fog Intensity. 0 to 5.	Waves. Direction from. Disturbance. 0 to 10.	Swell. Direction from. Disturbance. 0 to 10.	Temp. by No.	Spec. Grav. by No.
	Names. Upper. Lower.						
4							
8							
NOON							
4							
8							
MIDT.							
4	St 9 c			South 2			Fast to sea ice Bay of Whales
8	St 9 bc 1			" 2			
NOON	St 9 bc				24.5		
4	St 8 bc			2	24.5		
8	St -			3 SW 3 26.8			at sea off Barrier.
MIDT.	St -						
4	St 10 0			SE 2 S 2			
8	St 10 0			2 E 3 29.8			8.15 Stronger gusts of wind off Barrier for about 10 mins.
NOON	St 10 0			2 SE 3 30.1			9.0 Wind NE 2
4	St 10 0			2 SE 3 30.0			11.0 Eased to 1.
8	St 10 0			2 SE 3 30.8			6.0 Wind SSE force 4.
MIDT.	St 10 0			2 SE 3 30.8			7.30 do - eased to 2.
	St 10 0			2 SE 3 30.8			9.0 Sky overcast, light fall of snow.
	St 10 0			2 SE 3 30.8			11.15 Sky cleared.
4	Cast 10 ocsg m			S 5 S 4 31.0			Squalls of light snow from 3 to 4
8	Cast 10 ocst			2 S 4 31.8			Occasional slight fall of snow during watch.
NOON	St 9 oc			2 SW 4 31.1			
4	St 10 oc			2 SW 4 31.0			Occasional slight fall of snow during watch. 24.5. wind to SE 1-2
8	St 10 oc			2 SW 4 31.0			a gradually round to NW.
MIDT.	St 10 oc			2 SW 4 31.0			7.30 commenced to drizzle. S.O. Very fine misty rain.
	St 10 oc			2 SW 4 31.0			Midt. light sky breeze freshening

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.

Meteorological Log kept on board Terra Nova RYS

DATE.		Latitude. S		Longitude. E		Course and Distance.		Total Compass Error.	Ship's Head.	Wind, at the time of observation.	Barometer.* No.	Thermometers.		
Year 1911	Month Feb	Observed.	Dead Reckoning.	Observed.	Dead Reckoning.	Each four hours.	Of Compass used for Wind, being Variation and Deviation combined.	By same Compass as Wind.	Direction. State if true, or subject to Compass Error, or only to Variation.	Force. 0 to 12.	Height of Cistern above Sea. feet.		Dry Bulb.	Wet Bulb.
											Uncorrected Reading.	Att. Therm.			No.	No.
The D.R. position is needed daily, in addition to that by Observation, but it should be the result of careful calculation, in order to give any value to the estimation of the current.														
Day.	Civil Time.	Hour.					True Course.	Distance by Log.						
7 th		4					E	107		E by N 5 SSW	28.89	40	28.5	28.0
		8						110		E by N 5-6 SSW	28.93	41	25.9	25.5
		NOON	{					113		E by N 6 SSW	28.94	44	25.0	24.5
		4	{					117		East 5-6 SSW	28.97	47	22.5	22.5
		8	77	17	174	32		354	121	E by N 5 SSW	29.00	48	21.5	
		MIDT.						125		NW 5-6	29.02	43	20.8	20.8
8 th		4						128		SW 7 SE	29.08	43	25.0	24.5
		8				358		358	133	SW 2 N	29.03	45	32.2	30.5
		NOON	{					132		NW 2 S	29.06	50	33.0	31.8
		4	{					453	453	SE 2 WNW	29.07	53	33.0	
		8	{					153	(approx)		29.09			
		MIDT.	{					"			29.08			
9 th		4	{					"		North 2 SSE	29.08			
		8	{					"		NW 4 ESE	29.14	38	15.0	14.0
		NOON	{					"			29.19			
		4	{					"			29.19	36	15.2	
		8	{					"			29.24			
		MIDT.	{					"		WNW 3 E	29.37	41	20.8	
10 th		4	{					148		NW 3 SSW	29.08	38	24.5	24.2
		8	{					144		WNW 3 ENE	29.34	31	25.0	24.5
		NOON	{					140		WNW 4 ENE	29.39	38	25.8	24.5
		4	{					157		SE 1 WNW	29.36	88	27.8	27.0
		8	{					335	335	SE 3-4 WNW	29.32	45	30.1	28.0
		MIDT.	{					146		SE 3 WNW	29.27	47	28.0	27.0

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

Captain Head H.H. Pennell from K.E.D. Land to the Islands Id.

Hour.	Clouds.		Weather.		Sea Surface.					Remarks.		
	The direction from which the upper clouds are moving, and also that of the lower clouds when they do not move with the wind, should be noted when determinable.		According to Beaufort Notation.	Fog Intensity. 0 to 5.	Waves.		Swell.		Temp. by No.	Spec. Grav. by No.	Time of Remark.	Here give any important Remarks as to phenomena, with the times of their occurrence; especially the times of Changes in Direction and Force of Wind, as well as the Direction, Veering or Backing, Force and Duration of Squalls; the direction from which upper clouds are moving; the Position of Ice and of Derelicts. Also note the hour at which the Ship arrives in or leaves Port. (See "Instructions" for further particulars.)
	Names.				Direction from.	Disturbance. 0 to 10.	Direction from.	Disturbance. 0 to 10.				
	Upper.	Lower.										
Also record when Confused.												
4		St	10	0		EbyN 6	EbyN 4	31.0			Wind increasing gradually	
8		Stu nr	10	os		"	5	"	31.1		Snow slight.	
NOON		Ncu	10	oc		"	5	"	31.5	50	Clouds breaking & showing low a-cu above lower clouds (Ncu) travelling at great speed before the wind	
4		Stcu	10	oc		Ead 5	Ead	31.6			hottie drawing water to SW ^a (true)	
8		Stcu	10	oc		"	5	"	31.2		Wind gradually backing from 1030 on	
MIDT.		Stcu	10	ocq		NLS EbyN 5	EbyN 6	29.8			Squalls frequent.	
4		Ncu acu	10 2	ocq bz		NK 7	NK 5	30.0			Wind shifted, two points st from, lulling a little & then freshened to 8.	
8	ci	Stu cu	1	bc		Conf 3	Conf 3	32.2		6.0	Wind eased to 4.0	
NOON	ci ast	Stu cu	1	bc		-	1	SW 2	32.1	7.0	Wind to SW.	
4	cu cist	Stu cu	1	bc					32.2			
8												
MIDT.												
4	a-st cu	cu	1	bc						4.0	off Glacier Tongue.	
8	ci Coat ast	-	3	bc								
NOON											Great mirage all day.	
4										8.0	Very little a-st.	
8	ast	St nr	10	oc						9.30	Commenced to snow - slight	
MIDT.	ast	St nr	8	ocd					32.2		Midt. mirage.	
4		St nr	10	os. 1							Snowing continuously. (mod)	
8		St nr	10	os. 2		W 3	WNW 3	29.8			do -	
NOON	acu ast	St Stu	8	oc		WNW 3	WNW 3	29.8		11.30	Ceased snowing.	
4		Stcu	9	oc		-	1	W 3	29.8	2.10	Wind dropped suddenly calm.	
8		cu Stu	-	bc		-	-	SE 3	32.1	4.0	lower clouds from WSW. (2). Light variable airs all afternoon.	
MIDT.	a-st a-st acu	cu cu nr	7	bc				SE 3	32.0	9.0	Wind set in a steady light breeze low send drifting moderately.	
2a	17	18	19	19a	20	21	20a	21a	22	23	24	25

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.

Meteorological Log kept on board "Terra Nova" R.Y.S.

DATE.		Latitude. S		Longitude. E		Course and Distance.	Total Compass Error.	Ship's Head.	Wind, at the time of observation.	Barometer.* No. 1163	Thermometers.	
Year 1911	Month Feb.	Observed.	Dead Reckoning.	Observed.	Dead Reckoning.	Each four hours.				Height of Cistern above Sea 9.2 feet.	Dry Bulb.	Wet Bulb.
Day.	Hour.	The D.R. position is needed daily, in addition to that by Observation, but it should be the result of careful calculation, in order to give any value to the estimation of the current.				Of Compass used for Wind, being Variation and Deviation combined.	Wind By same Compass as Wind.	Direction. State if true, or subject to Compass Error, or only to Variation.	Force. 0 to 12.	Uncorrected Reading.	Att. Therm.	No.
		Colours of Sea				Distance by Log.						
11.	4							SE 3/4	29.25	38.0	26.0	25.0
	8	74	38	168	55			ESE 3.4	29.22	37.0	24.8	23.2
	NOON	74	18	169	24	328		ESE 3	29.25	41	25.1	23.8
	4	Current in last hours						NE 3	29.23	46	27.9	25.8
	8							SE 3	29.20	49	24.5	-
	MIDT.							E 3	29.17	45.8	25.0	25.0
12.	4							East 4	29.12	42	26.5	26.2
	8							ESE 4	29.05	40	-	26.5
	NOON					404		ESE 4	29.08	46	27.4	27.0
	4	Current in last hours						NE 5	28.99	42	26.0	25.2
	8	7.10 time to make Tack.						SE 7	28.99	44	26.8	26.0
	MIDT.							E 7	29.01		27.5	-
13.	4							ESE 9	28.98	42	27.0	27.0
	8							E 8	28.94	44	28.2	27.0
	NOON	71	18	171	15			ESE 8	28.95	43	29.2	28.0
	4	Current in last hours				405		ESE 7	29.00	47	29.0	27.5
	8							SE 8	28.98	49	29.0	27.2
	MIDT.							SE 8	29.00	45	27.3	26.8
	4											
	8											
	NOON											
	4											
	8											
	MIDT.											

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

Captain *Lieut H.H. Pennell* from *Two Mundo Id* to *Robertson Bay*

Clouds.		Weather.		Sea Surface.		Remarks.	
Hour.	The direction from which the upper clouds are moving, and also that of the lower clouds when they do not move with the wind, should be noted when determinable.	According to Beaufort Notation.	Fog Intensity. 0 to 5.	Waves. Direction from. 0 to 10.	Swell. Direction from. 0 to 10.	Temp. by No.	Spec. Grav. by No.
	Names. Upper. Lower.						
4	St 10	c		St 2		30.0	
8	St 10	bc		St 2		29.8	
NOON	St 10	bc		ENE 2	ENE 2	29.6	
4	St 10	bc		2 NE 3		29.0	
8	St 10	bc		NE 3		28.8	
MIDT.	St 10	ocs		3 ENE 3		28.6	
4	St 10	ocs		3		30.5	
8	St 10	ocs		3 ESE 3	3 ESE 3	30.0	
NOON	St 10	bc		5 ESE 5	4 ESE 4	29.9	
4	St 10	bc		5 ESE 5	5 ESE 5	29.9	
8	St 10	bc		5 ESE 5	5 ESE 5	29.9	
MIDT.	St 10	ocs		6 ESE 6	8 ESE 8	28.8	
4	St 10	o		7 SE 8			
8	St 10	bc		7 E 8		28.8	
NOON	St 10	ocs		7 ESE 7	8 ESE 8	28.9	
4	St 10	ocs		7 ESE 7	8 ESE 8	28.9	
8	St 10	bc		8 SE 8	8 SE 8		
MIDT.	St 10	bc		8 SE 8	8 SE 8	29.2	
Remarks continued							
4pm generally with increase of wind, passing over from time to time.							
7.30 Wind shifted to SE & increased to 8							
8pm Wind & sea increasing. Snow squalls more powerful & of greater frequency.							
NOON Crest of waves increasing							
4.00 Wind 9 increasing to 10 in squalls. Sea up to 30 feet, but after 2 or 3 heavy							
8 waves generally quieter for some minutes. First watch. Snow moderate.							
MIDT. Squalls of force 10 accompanied by snow.							
2a	17	18	19	19a	20	21	20a 21a 22 23 24
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.							25

Meteorological Log kept on board Terra Nova R.Y.S.

DATE.		Latitude.		Longitude.		Course and Distance.		Total Compass Error.	Ship's Head.	Wind, at the time of observation.	Barometer.*	Thermometers.			
Year 1911		Observed.		Observed.		Each four hours.		Of Compass used for Wind, being Variation and Deviation combined.	Wind, at the time of observation.	Direction, State if true, or subject to Compass Error, or only to Variation.	Force, 0 to 12.	Height of Cistern above Sea feet.		Dry Bulb.	Wet Bulb.
Month		Dead Reckoning.		Dead Reckoning.		Type Course.						Uncorrected Reading.				Att. Therm.		No.	No.
Day, Civil Time.	Hour.	The D.R. position is needed daily, in addition to that by Observation, but it should be the result of careful calculation, in order to give any value to the estimation of the current.										and the wet bulb being untainted by salt water.			
14	4							60							
	8														
	NOON	70	04	172	43	405									
	4														
	8														
	MIDT.														
15	4							38							
	8														
	NOON	69	41	173	22	50									
	4														
	8														
	MIDT.														
16	4							49							
	8														
	NOON	70	28	168	47	403									
	4														
	8														
	MIDT.														
17	4														
	8														
	NOON	71	10	168	42	46									
	4														
	8														
	MIDT.														

Meteorological Log kept on board "Terra Nova" R.Y.S.

DATE.		Latitude.		Longitude.		Course and Distance.		Total Compass Error.	Ship's Head.	Wind, at the time of observation.		Barometer.* No. 1163		Thermometers.	
Year 1911	Month Feb.	Observed.	Dead Reckoning.	Observed.	Dead Reckoning.	Each four hours.		Of Compass used for Wind, being Variation and Deviation combined.	Wind by same Compass as Wind.	Direction, State of sky, or subject to Compass Error, or only to Variation.	Force, 0 to 12.	Height of Cistern above Sea. 9 1/2 feet.		Dry Bulb.	Wet Bulb.
						Colours True of Course.	Distance by Log.					Uncorrected Reading.	Att. Therm.			No.	No.
		The D.R. position is needed daily, in addition to that by Observation, but it should be the result of careful calculation, in order to give any value to the estimation of the current.													
Day, Civil Time.	Hour.					Colours True of Course.	Distance by Log.								
18	4	1.20 am off Cape Adare						67							
	8							(approx)							
	NOON	Robertson Bay.				403				SSE 2	29.15	45			
	4	Current in last hours Cape Adare.				deeper				SW	29.16				
	8									Calu -	29.22	47			
	MIDT.										29.23				
19	4							67							
	8							(approx)							
	NOON	- do -								SW 8	29.33	40			
	4	Current in last hours								air WNW	29.36				
	8									Calu -					
	MIDT.									W. air	29.34	44			
										WSW	29.35				
20	4	5.0 am proceeded.						67							
	8							(approx)							
	NOON							74		NE 3	29.22	37			
	4	Current in last hours						74		ESE	29.26				
	8					405		74		NE 5	29.18	35			
	MIDT.							74		E	29.22				
								74		NE 5	29.13	37			
								73		ESE	29.17				
								73		NE 6	29.05	37			
								73		ESE	29.09				
								73		NE 5-7	29.10	36			
21	4							72		NE 4-7	29.14				
	8.30	68	59	168	55			72		ENE SE 6	29.07	35			
	NOON	68	41	168	29			68		ENE SE 6	29.11				
	4	Current in last hours						53		ENE SE 6	29.09				
	8	68	40	165	45	404		51		ENE SE 4	29.05	37			
	MIDT.							48		ENE SE 4	29.09				
								48		ENE SE 4	29.21	45			
								48		ENE SE 4	29.22				
								48		ENE SE 4	29.27	42			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

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

Captain H.H. Pennell Lt. from at Robertson Bay 8 at Sea

Hour.	Clouds.		Weather.		Sea Surface.				Remarks.			
	The direction from which the upper clouds are moving, and also that of the lower clouds when they do not move with the wind, should be noted when determinable.		According to Beaufort Notation.	Fog Intensity. 0 to 5.	Waves.		Swell.		Temp. by No.	Spec. Grav. by No.	Time of Remark.	Here give any important Remarks as to phenomena, with the times of their occurrence; especially the times of Changes in Direction and Force of Wind, as well as the Direction, Veering or Backing, Force and Duration of Squalls; the direction from which upper clouds are moving; the Position of Ice and of Derelicts. Also note the hour at which the Ship arrives in or leaves Port. (See "Instructions" for further particulars.)
	Names.				Direction from.	Disturbance. 0 to 10.	Direction from.	Disturbance. 0 to 10.				
	Upper.	Lower.											Also record when Confused.
4												
8	ast	stcu	1	bc					29.0			
NOON	ast	cu	1	bc					28.9			
4	ast	stcu	4	bc								
8	ast	stcu		bc								
MIDT.												
4												
8	ast	stcu	8	bc					29.2		8.0 No snow in the immediate vicinity but much snow to SW & NW.	
NOON	ast	stcu									9.30 to 12.0 Snow slight to moderate.	
4	ast	stcu	7	bc							Occasional slight snow during afternoon.	
8											4.0 A suspicion of snow falling.	
MIDT.												
4												
8	ast	stcu	9	bc							5.0 Proceeded from Charleston Bay.	
NOON	ast	stcu	4	bc								
4	ast	stcu	10	bc							4.0 Snowy/slightly during latter half of afternoon.	
8	ast	stcu	10	bc							Occasional slight snow during drop.	
MIDT.	ast	stcu	10	bc							10.0 Wind increased to 7. 10.50 Snow squall lasting 10 mins.	
4	ast	stcu	10	bc							11.30 Wind fell to 5 between squalls	
8	ast	stcu	10	bc							Midt. Sea easing down.	
NOON	ast	stcu	10	bc							4. Light snow throughout, thickening from 3 to 4 a.m.	
4	ast	stcu	10	bc							Morning snow slight to moderate. F 1 to 3.	
8	ast	stcu	10	bc							Morning occasional snow flurries. Slight to moderate. No wind in them.	
MIDT.	ast	stcu	10	bc							Afternoon. Sun showing mistily most of the time.	
2a	ast	stcu	10	bc							Evening. Weather improving generally.	
17	ast	stcu	10	bc							8.0 Cirrus in stripes running in NW & SSE direction.	
18	ast	stcu	10	bc								
19	ast	stcu	10	bc								
20	ast	stcu	10	bc								
21	ast	stcu	10	bc								
22	ast	stcu	10	bc								
23	ast	stcu	10	bc								
24	ast	stcu	10	bc								

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.

Meteorological Log kept on board "Terra Nova" R.Y.S.

DATE.		Latitude.		Longitude.		Course and Distance.	Total Compass Error.	Ship's Head.	Wind, at the time of observation.	Barometer.*	Thermometers.				
Year 1911	Month 26 th	Observed.	Dead Reckoning.	Observed.	Dead Reckoning.	Each four hours.	Of Compass used for Wind, being Variation and Deviation combined.	By same Compass as used for Barometer.	Direction. State if true, or subject to Compass Error, or only to Variation.	No.	Dry Bulb.	Wet Bulb.			
Day, Civil Time.	Hour.	The D.R. position is needed daily, in addition to that by Observation, but it should be the result of careful calculation, in order to give any value to the estimation of the current.				Colours True Course.	Distance by Log.		Force, 0 to 12.	Height of Cistern above Sea, feet.	Uncorrected Reading.	Att. Therm.			
22 nd	4	68	42	165	57		410		ESE 1	29.22	35	29.8	29.0		
	8						46		W by S 5	29.20	34	29.0	26.9		
NOON		69	15	164	21		46		SEW 4	29.18	38	28.0			
	4	69	23	163	59		44		South 2	29.20	42	26.8	29.5		
	8	9.05 stopped off land.					42		SW by S 2	29.24	43	22.8	21.2		
MIDT.		69	43	163	24		42		W 2	29.26					
23 rd	4	69	43	163	17		44 (approx)		SW 1-2	29.30	33	11	10		
	8	10.00 Proceeded.					75		SEW 3	29.30	34	13.8	12.0		
NOON		69	29	162	49	4.05	68		SW 2-3	29.38	40	11.8	11.2		
	4	69	19	162	14		76		W 1	29.37	44	22.0	20.1		
	8						74		NE ESE 3	29.38	44	23.0	22.0		
MIDT.							68		NE 3	29.35		26.0	25.0		
24 th	4	Home to					73		E by N 4.5	29.20	35	21.0	21.0		
	8						61		E by S 5.6	29.16	31	-	21.0		
NOON							56 (approx)		E by N 6	29.18	35	24.5			
	4						"		E by N 5	29.18	32	25.0			
	8	Home to					"		E by N 5.6	29.20	33	27.0			
MIDT.							"		NE 5	29.25		28.5	28.0		
25 th	4	68	47	159	14		"		W ENE 3-4	29.29	33.5	28.0	27.0		
	8	10.12am Proceeded.					40		W by N 2-3	29.29	33	-	28.0		
NOON							48		W by N 3	29.33	32	28.2	27.0		
	4	2.20 stopped & reequipped off land.					50		West 3	29.29	35	25.8	25.2		
	8	69	02	159	21		54 (approx)		-	29.08	37				
MIDT.		In Pack.							SW W 3	29.10	37	18.0	17.0		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

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

Captain *Leut. H.L. Pennington* from *Exploring north of S. Victoria Land* to

Hour.	Clouds.		Weather.		Sea Surface.				Remarks.			
	The direction from which the upper clouds are moving, and also that of the lower clouds when they do not move with the wind, should be noted when determinable.		According to Beaufort Notation.	Fog Intensity. 0 to 5.	Waves.		Swell.		Temp. by No.	Spec. Grav. by No.	Time of Remark.	Here give any important Remarks as to phenomena, with the times of their occurrence; especially the times of Changes in Direction and Force of Wind, as well as the Direction, Veering or Backing, Force and Duration of Squalls; the direction from which upper clouds are moving; the Position of Ice and of Derelicts, Also note the hour at which the Ship arrives in or leaves Port. (See "Instructions" for further particulars.)
	Names.	Prop. of Sky Clouded 0 to 10.			Direction from.	Disturbance. 0 to 10.	Direction from.	Disturbance. 0 to 10.				
Upper.	Lower.											
4	Cist	cu	4	bc	ESE	2	ESE	4	29.2		Wind to WSW 1	
8	ast	cu	9	bc		2	ESE	3	29.4		Slight snow for 10 minutes.	
NOON		st cu	10	ocsf	sw	4	sw	4	29.4		Wind gradually veering to South.	
4	ast	st cu	7	bc		2	sw	3	29.4		Higher layers of lower clouds from NW (2)	
8	ast	st cu	3	bc		2	sw	3	29.0		Green flash at sunset. Much mirage.	
MIDT.												
4	Cist	cu	4	bc								
8	ast	cu	3	bc			WNW	3	28.4			
NOON	Cist	cu	7	bc			SW	3	28.5			
4	ast	cu		ocms			WNW	3	28.8		4.0 Very light snow.	
8	st	nt		ocms			Pack	28.8				
MIDT.	st	nt	10	ocms			NE 3	28	4		Thick with very fine snow 10/30 to mid.	
4	st	nt	10	ocms			NE 4	28	4		Thick weather, wind increasing intermittent snow, the whole watch.	
8	st	nt	10	ocms			NE 4	28.5	4		6.00 Snow moderate to heavy. Wind gradually increasing.	
NOON	st	nt	9	ocms			NE 5	28.6	6		7.00 Wind to ESE. Snow moderate to heavy, cleared considerably & stopped snowing 11.30	
4	st	nt	10	ocms			NE 5	28.6	6		12.30 Resumed snowing	
8	st	nt	10	ocms			NE 6	28.5	6		1.00 Snow mod. to heavy. Fine snow throughout. dense at times.	
MIDT.	st	nt	10	ocms								
4	st	nt	10	ocms			NE 4	28.2	4		Snow all night. Moderate.	
8	st	nt	10	ocms			NE 4	28	4		6.45 Cleared temporarily & sun appeared.	
NOON	st	nt	10	ocms			NE 4	29.2	3		7.30 Snowing again. Sky light to Sd.	
4	st	nt	8	bc			NE 2	29.4	4		4.0 Wind increasing slightly.	
8	st	nt									5.40 Commenced to snow (moderate)	
MIDT.	st	nt	9	bc								
2a	17	18	19	10a	20	21	20a	21a	22	23	24	25

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.

Meteorological Log kept on board Terra Nova R.Y.S.

DATE.		Latitude.		Longitude.		Course and Distance.	Total Compass Error.	Ship's Head.	Wind, at the time of observation.	Barometer.*	Thermometers.	
Year 1911		Observed.		Observed.		Each four hours.	Of Compass used for Wind, being Variation and Deviation combined.	Wind, by same Compass as Wind.	Direction, State if true, or subject to Compass Error, or only to Variation.	Height of Cistern above Sea.	Dry Bulb.	Wet Bulb.
Month Feb		Dead Reckoning.		Dead Reckoning.		True Course.			Force, 0 to 12.	Uncorrected Reading.	Att. Therm.	
Day, Civil Time.		Hour.		Hour.		Distance by Log.						
26 th		In Pack.										
4							54 (approx)	SW ^{1/2} S	1-2	29.03	34	15.0 15.0
8		9.0. Paved.					"	W	-	28.89	34	15.0 14.8
NOON		1.26 pm		158° 39'			60	SW ^{1/2} S	1	28.98	40	16.2 15.0
4		4.38 pm		158° 37'			72	SW ^{1/2} S	1	28.95	43	12.5 12.0
8		10.45 pm		158° 15'			73	Caln	-	28.86	40	14.0 13.0
MIDT.		11.25		None to.			77	East SSE	2	28.80	36.5	14.0 13.5
27 th		5.30 Paved.										
4							57 (approx)	East SSE	3	28.76	36.5	16.0 15.0
8							42	East SE	3	28.72	38	21.8 20.0
NOON		OR 68 37		158° 41'			33	East SE	3-4	28.75	41	22.8 21.2
4		Current in last hours					55 (approx)	East SE	3-4	28.70	43	21.5 -
8						405	34	SE	4	28.69	43	
MIDT.		11.40		None to.			77	East SSE	4	28.70	42	22 -
28 th		5.30 Paved.										
4							50 (approx)	West NW	5	28.74	41	11
8		4.45 am		160° 34'			32	West NW	4	28.75	34	
NOON		6.8 14		160° 38'		403	45 (approx)	SSW	5	28.88	35	138
4		6.0 pm		160° 22'			63	SSW	2	28.94	34	17.5
8							62	WNW	3	28.95	43	26.0
MIDT.							53	WNW	3	28.93	45	25.0 24.0
1 st March		10 am till 5.30		None to.								
4							44 (approx)	ENE	3.4	28.87	40	27.0 25.0
8							61	ENE	3/4	28.78	41	27.5 26.5
NOON		OR 67 32		159° 37'		405	21	ESE	4	28.95	46	29.5
4		1.0 pm		None to			40 (approx)	ESE	3	28.70	50	30.0
8							"	NE	2/3	28.70	49	29.5
MIDT.							"	NE	2	28.75	50	30.0

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

Captain H. D. Pennington from Exploring north of to South Victoria Land

Hour.	Clouds.		Weather.		Sea Surface.		Remarks.	
	Upper.	Lower.	Direction.	Force.	Direction.	Force.	Direction.	Force.
4	lt	nb	10	0				
8	lt	nb	10	0				
NOON	lt	nb	9	0				
4	lt	nb	7	0				
8	lt	nb	7	0				
MIDT.	lt	nb	1	0				
4	lt	nb	5	0				
8	lt	nb	8	0				
NOON	lt	nb	8	0				
4	lt	nb	9	0				
8	lt	nb	8	0				
MIDT.	lt	nb	10	0				
4	lt	nb	10	0				
8	lt	nb	10	0				
NOON	lt	nb	2	0				
4	lt	nb	9	0				
8	lt	nb	9	0				
MIDT.	lt	nb	2	0				
4	lt	nb	10	0				
8	lt	nb	10	0				
NOON	lt	nb	10	0				
4	lt	nb	10	0				
8	lt	nb	10	0				
MIDT.	lt	nb	10	0				

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.

Meteorological Log kept on board Terra Nova R.Y.S.

DATE.		Latitude.		Longitude.		Course and Distance.		Total Compass Error.		Ship's Head.		Wind, at the time of observation.		Barometer.* No. 1163		Thermometers.	
Year 1911	Month March	Observed.	Dead Reckoning.	Observed.	Dead Reckoning.	Each four hours.		Of Compass used for Wind, being Variation and Deviation combined.	Wind Velocity By same Compass as Wind.	Direction. State if true, or subject to Compass Error, or only to Variation.	Force. 0 to 12.	Height of Cistern above Sea 92 feet.		Uncorrected Reading.	Att. Therm.	Dry Bulb.	Wet Bulb.
						Color	Distance by Log.					True Course.	No.					No.
Day, Civil Time.		Hour.		The D.R. position is needed daily, in addition to that by Observation, but it should be the result of careful calculation, in order to give any value to the estimation of the current.		Sea		E		Gauge Dist. to Buoy.						1524 1525 1620 1623	
2nd		4		5.45 Proceeded.				34 (approx)									
8		8.00 am. 67 35		159 42		405		West 14		3		West NNW 3 28.85 45		28.85 45		23.5	
NOON		1.14 pm. 67 30		160 30				32		West 3		28.86 45		28.86 45		21.0	
3.33		4		Current in last hours		mls.		32		WNW 1		28.86 44		28.86 44		23.0	
8.40		67 25		160 40				27		WNW 3		28.75 45		28.75 45		24.0 22.5	
MIDT.								34 (approx)		ENE 4		28.66 47		28.66 47		26.0 28.5	
3rd		4		Stopped in Pack.				40 (approx)		E 6.5		28.59 43		28.59 43		27.0 27.0	
8								40 (approx)		E 5		28.68 45		28.68 45		27.0 27.0	
NOON		67 22		160 31				40		SE 8		28.80 40		28.80 40		28.5 28.0	
4		Current in last hours		mls.				40		SE 3		28.99 43		28.99 43		30.5 29.0	
8								40		SE 2		29.12 44		29.12 44		28.5 27.5	
MIDT.								38 (approx)		Calm 0		29.20 47		29.20 47		27.5 26.5	
4th		4		Stopped in Pack.				30 (approx)		Calm 0		29.22 44		29.22 44		27.2 26.8	
8		8.00 am.		Proceeded.				20		NNW 3		29.20 42		29.20 42		27.8 26.8	
NOON		67 18		160 38				49		West 3		29.17 44		29.17 44		29.5	
4		Current in last hours		mls.				52		NW 3		29.09 45		29.09 45		26.0 25.0	
8		67 06		160 54				52		SW 2		28.94 44		28.94 44		26.3	
MIDT.								59		ENE 2-3		28.86 44		28.86 44			
4										ENE		28.87		28.87			
8																	
NOON																	
4																	
8																	
MIDT.																	
1		2		3		4		5		6		7		8		9	
10		11		12		13		14		15		16		17		18	

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

Captain H.H. Pennell, R.N. from Exploring north of South to Victoria Land.

Clouds.		Weather.		Sea Surface.				Remarks.				
Hour.	The direction from which the upper clouds are moving, and also that of the lower clouds when they do not move with the wind, should be noted when determinable.		According to Beaufort Notation.	Fog Intensity. 0 to 5.	Waves.		Swell.		Temp. by No.	Spec. Grav. by No.	Time of Remark.	Here give any important Remarks as to phenomena, with the times of their occurrence; especially the times of Changes in Direction and Force of Wind, as well as the Direction, Veering or Backing, Force and Duration of Squalls; the direction from which upper clouds are moving; the Position of Ice and of Derelicts. Also note the hour at which the Ship arrives in or leaves Port. (See "Instructions" for further particulars.)
	Names.				Direction from.	Disturbance. 0 to 10.	Direction from.	Disturbance. 0 to 10.				
	Upper.	Lower.										
4			045								Snow slight	
8	st	st	9	015		2	5	3	29.5		50	Snow ceased.
NOON	ast	st	7	bc		2	5	3	29.8			
4	acu	st	4	bc		Pack			29.5			Slight swell in pack.
8	ci	st	9	bc		Pack						
MIDT.	nt	10	os			Pack						Thick. Snow thick
4	nt	10	os								1.30	Wind East. Wind increased till 2 am & then fell gradually.
8	st	10	osq								Midnight	Snowing all the watch.
NOON	do	8	bc									Occasional slight snow during morning.
4	st	10	os									Thick. long heavy swell from E. end.
8	st		bc			Ely 8	3					big swell increasing
MIDT.	—	10	bc			East	3					Thick. Slight aurora australis in length. E to W. detached from
4	st	10	bc								0.20	Sky cleared.
8	st	10	0			East	3				2.40	Clouded over & sent out aurora and stars.
NOON	st	8	bc			East	3				4.0	high air from NW
4	ci	st	5	bc		East	3				5.0	very long swell.
8	ci	st	7	bc		n	3	29.26			4.0	Very windy looking across to N & S.
MIDT.	st	9	cs								7.0	low & rather thick alt st from W & S. @ gradually overclouding the whole Eastern sky. Considerable
4	aurora of varying altitude over most of the day sky.											
8	Calm with occasional light northerly air.											
NOON	8.0 P.M. Surface of sea just frozen. Sky though still unsettled looking											
4	better than at 7 pm.											
8	10.0. Commenced snowing.											
MIDT.												
2a	17	18	19	19a	20	21	20a	21a	22	23	24	25

Meteorological Log kept on board "Terra Nova" R.Y.S.

DATE.		Latitude.		Longitude.		Course and Distance.	Total Compass Error.	Ship's Head.	Wind, at the time of observation.	Barometer.* No. 1163	Thermometers.				
Year 19 11	Month June	Observed.	Dead Reckoning.	Observed.	Dead Reckoning.	Each four hours.	Of Compass used for Wind, being Variation and Deviation combined.	By same Compass as Wind.	Direction. State if true, or subject to Compass Error, or only to Variation.	Force. 0 to 12.	Height of Cistern above Sea 9 1/2 feet.	Dry Bulb.	Wet Bulb.		
Day, Civil Time.	Hour.	The D.R. position is needed daily, in addition to that by Observation, but it should be the result of careful calculation, in order to give any value to the estimation of the current.				Calms	True Course.	Distance by Log.			Uncorrected Reading.	Att. Therm.	No.	No.	
5th	4	1.40 am	6.20 am	Home to		E	N.E.	3	→		28.84	39	25.5	24.5	
	8	10.10 am				93	East	2	SE		28.86				
	NOON	66	44	161	18	405	10	E by air	1	E	28.82	39	26.9	25.0	
	4	5.25 pm					116	SSE	1	SSW	28.83	45	27.8	26.4	
	8	66	19	161	38		54	S by	2	SW	28.86	413	25.2	24.0	
	MIDT.						50	S by W	4	SW	28.85	42	16.5	16.5	
							50	S by	4	→ SW →	28.86	43	18.0	18.0	
6th	4	4.55 am	65	35	160	46			SW by S	4.5	28.94	38	20.0	18.5	
	8						56		W		28.97				
	NOON	65	14	161	24		19		West by S	4	28.95	33	24.0	20.5	
	4	Current in last hours					43		WNW		28.99				
	8						43		SW	4-5	29.00	40	26.0	23.9	
	MIDT.	11.40 pm	Home to.				43		W		29.02				
							35		SW by W	4	29.02	41	27.5	26.5	
									W		29.03				
									West	4	28.98	42	30.0	20.0	
									NW		28.99				
							25		West	2-3			28	27	
7th	4	6.0 am.	Proceeded.						WNW						
	8														
	NOON	65	0	161	22										
	4	Current in last hours													
	8														
	MIDT.														
7th	4	6.0 am	Proceeded.				24		Slo.	3					
	8						29		West	2	28.99	40.0	29.0	27.5	
	NOON	65	0	161	22	405	24		WNW		29.01				
	4	Current in last hours							West by W	3	28.96	40.0	30.5	24.8	
	8								NNW		28.98				
	MIDT.	10.30	Home to.				21		NNE	3	28.93	44	31.8	21.0	
									NE		28.94				
									SW by S	6	28.98	43	24.0	23.0	
									WSW		29.02				
									SW	4	29.10	41	21.0	20.0	
									WSW		29.11				
									NNW	3	29.05	43	25.7	25.0	
									N		29.06				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Meteorological Log kept on board Terra Nova CRYS

DATE.		Latitude. <i>S</i>		Longitude. <i>E</i>		Course and Distance.	Total Compass Error.	Ship's Head.	Wind, at the time of observation.	Barometer.* No. <i>1163</i>	Thermometers.					
Year <i>1911</i>	Month <i>March</i>	Observed.	Dead Reckoning.	Observed.	Dead Reckoning.	Each four hours.	Of Compass used for Wind, being Variation and Deviation combined.	By same Compass as Wind.	Direction. <i>State if true, or subject to Compass Error, or only to Variation.</i>	Force. 0 to 12.	Height of Cistern above Sea. <i>9 1/2</i> feet.		Dry Bulb.	Wet Bulb.		
											Uncorrected Reading.	Att. Therm.			No.	No.
Day. Civil Time.		Hour.		The D.R. position is needed daily, in addition to that by Observation, but it should be the result of careful calculation, in order to give any value to the estimation of the current.										The wet bulb being untainted by salt water.		
						<i>Cloud</i>	<i>Temp</i>	<i>Sea</i>	<i>Distance by Log.</i>	<i>E</i>	<i>gauge</i>					
<i>8th</i>		<i>4</i>		<i>6.30 found del.</i>					<i>22</i>	<i>(approx)</i>	<i>nnw</i>	<i>4</i>	<i>28.95</i>	<i>38</i>	<i>30.5</i>	<i>30.0</i>
		<i>8</i>				<i>405</i>			<i>87</i>		<i>North</i>	<i>3</i>	<i>28.80</i>	<i>39</i>	<i>30.0</i>	<i>29.5</i>
		<i>NOON</i>		<i>DR. 64 23 161 39</i>					<i>42</i>		<i>nnw E</i>	<i>4</i>	<i>28.69</i>	<i>45</i>	<i>30.9</i>	<i>30.0</i>
		<i>4</i>		<i>Current in last hours</i>					<i>44</i>		<i>ENE</i>	<i>4</i>	<i>28.68</i>	<i>37</i>	<i>31.0</i>	<i>31.0</i>
		<i>8</i>							<i>44</i>		<i>ESE</i>	<i>4</i>	<i>28.52</i>	<i>37</i>	<i>31.0</i>	<i>31.0</i>
		<i>MIDT.</i>							<i>44</i>		<i>SSE</i>	<i>4</i>	<i>28.53</i>	<i>37</i>	<i>31.0</i>	<i>31.0</i>
									<i>44</i>		<i>SW</i>	<i>5.6</i>	<i>28.70</i>	<i>44</i>	<i>30.0</i>	<i>30.0</i>
<i>9th</i>		<i>4</i>		<i>8.06</i>					<i>42</i>		<i>SSW</i>	<i>7</i>	<i>28.80</i>	<i>42</i>	<i>27.0</i>	<i>27.0</i>
		<i>8</i>		<i>63 03 160 56</i>					<i>38</i>		<i>South</i>	<i>6.7</i>	<i>29.00</i>	<i>43</i>	<i>25.0</i>	<i>24.0</i>
		<i>NOON</i>		<i>DR. 62 51 160 55</i>					<i>38</i>		<i>SW</i>	<i>5</i>	<i>29.07</i>	<i>45</i>	<i>28.5</i>	<i>26.0</i>
		<i>4</i>		<i>Current in last hours</i>		<i>404</i>			<i>35</i>		<i>SW</i>	<i>5</i>	<i>29.12</i>	<i>45</i>	<i>30.5</i>	<i>29.0</i>
		<i>8</i>							<i>35</i>		<i>SW</i>	<i>5</i>	<i>29.23</i>	<i>44</i>	<i>31.5</i>	<i>30.0</i>
		<i>MIDT.</i>							<i>40</i>		<i>SW</i>	<i>5.4</i>	<i>29.28</i>	<i>41</i>	<i>29.0</i>	<i>29.0</i>
<i>10th</i>		<i>4</i>							<i>40</i>		<i>WSW</i>	<i>7 1/4</i>	<i>29.09</i>	<i>39</i>	<i>35.0</i>	<i>33.0</i>
		<i>8</i>							<i>40</i>		<i>WSW</i>	<i>5</i>	<i>28.92</i>	<i>36</i>	<i>36.0</i>	<i>35.0</i>
		<i>NOON</i>		<i>DR. 62 0 162 03</i>		<i>405</i>			<i>5</i>		<i>West</i>	<i>6 1/7</i>	<i>28.80</i>	<i>44</i>	<i>35.5</i>	<i>35.5</i>
		<i>4</i>		<i>Current in last hours</i>					<i>29</i>		<i>WSW</i>	<i>7-8</i>	<i>28.85</i>	<i>45</i>	<i>36.0</i>	<i>34.8</i>
		<i>8</i>							<i>"</i>		<i>WSW</i>	<i>7-8</i>	<i>28.98</i>	<i>47</i>	<i>35.0</i>	<i>34.0</i>
		<i>MIDT.</i>							<i>"</i>		<i>SSW</i>	<i>6-8</i>	<i>29.10</i>	<i>45</i>	<i>34.0</i>	<i>32.0</i>
<i>11th</i>		<i>4</i>							<i>36</i>		<i>SSW</i>	<i>7 1/5</i>	<i>29.20</i>	<i>44</i>	<i>35.0</i>	<i>34.0</i>
		<i>8</i>				<i>404</i>			<i>34</i>		<i>WSW</i>	<i>4</i>	<i>29.20</i>	<i>42</i>	<i>34.0</i>	<i>33.0</i>
		<i>NOON</i>		<i>61 13 163 11</i>					<i>34</i>		<i>SSW</i>	<i>2</i>	<i>29.20</i>	<i>42</i>	<i>33.5</i>	<i>32.5</i>
		<i>4</i>		<i>Current in last hours</i>					<i>32</i>		<i>SE</i>	<i>2</i>	<i>29.23</i>	<i>46</i>	<i>34.0</i>	<i>32.0</i>
		<i>8</i>		<i>5.38 pm 61 10 163 01</i>					<i>34</i>		<i>SE</i>	<i>2</i>	<i>29.27</i>	<i>45</i>	<i>33.5</i>	<i>32.5</i>
		<i>MIDT.</i>							<i>34</i>		<i>NE</i>	<i>3.4</i>	<i>29.27</i>	<i>39</i>	<i>34.0</i>	<i>33.0</i>

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

Captain H.H. Pennelly from Cape Horn north of to South Victoria Land

Clouds.		Weather.		Sea Surface.				Remarks.				
Hour.	The direction from which the upper clouds are moving, and also that of the lower clouds when they do not move with the wind, should be noted when determinable.		According to Beaufort Notation.	Fog Intensity. 0 to 5.	Waves.		Swell.		Spec. Grav. by No.	Time of Remark.	Here give any important Remarks as to phenomena, with the times of their occurrence; especially the times of Changes in Direction and Force of Wind, as well as the Direction, Veering or Backing, Force and Duration of Squalls; the direction from which upper clouds are moving; the Position of Ice and of Derelicts. Also note the hour at which the Ship arrives in or leaves Port. (See "Instructions" for further particulars.)	
	Names.				Direction from.	Disturbance. 0 to 10.	Direction from.	Disturbance. 0 to 10.				
	Upper.	Lower.										
4	St	10	0		WNW	2	SW	3		Mid to 1 am. Faint auroral lights showing. Sun shining thro'. Suspicion of snow.		
8	St	10	0			2	W	3		Midnoon. Snow fine + slight.		
NOON	St nr	10	045		WNW	4	NE	4	30.0	Afternoon. Snow.		
4	St nr	10	045	3	W	4	W	4	31	Hoop. Snow + sleet. The heavier the greater of the two.		
8	St nr	10	035	3	W	5	SE	5	31	First. Intermittent drizzling sleet all the watch. Snow shifted to SSE + gradually worked to South. Observed phosphorescence to a slight degree in the water.		
MIDT.	St nr	10	045	1	S	6	W					
4	St	10	045		SW	7	SW	6				
8	aca cu nr	7	bcg		SW	7	SW	7	29.	9.0 am. hatched drizzling water to NW.		
NOON	aca nr	10	0		SW	7	SW	7	31.6	8 Wind squalls occasionally 6-7		
4	aca nr	10	0		SW	7	SW	7	33.5	10.1 Phosphorescence in water		
8	aca nr	9	0		SW	7	SW	7	33.8	10.10 10 mms snow.		
MIDT.	aca nr	8	0		SW	7	SW	7		9.50 Aurora fine, commenced.		
4	St	10	045		SW	4	SW	6		2.0 Sky clouded.		
8		10	045	1	SW	5	SW	7	34.8	2.3 Thick with fine snow		
NOON	aca nr	10	045		W	7	W	7	35.0	3.1 Wind freshened again, light fine snow.		
4	St	10	045		W	7	W	7	35.0	4.0 Squalls of hail occasional.		
8	St	10			W	8	W	7	34	10.0 Drizzling sleet + hail.		
MIDT.	cu nr	8	0		SW	7	SW	7		10.30 Aurora commenced.		
4	St	1	0		SW	6	SW	6		0.30 Slight aurora clouded out.		
8	aca nr	10	0		SW	5	SW	6	35	2.0 Sky cleared. Wind decreasing		
NOON	aca nr	10	045		SW	4	SW	5	35.2	8.0 Suspicion of snow. Sun trying to shine through mist		
4	aca nr	10	0		SW	3	SW	5	35.3	9.0 Slight fine snow all forenoon.		
8	aca nr	10	0		SW	3	SW	6	35.2	9.0 Breeze freshened + took up from NE		
MIDT.	aca nr	10	0		SW	4	SW	5	35.5	10.10 Aurora commenced. Consisted of arcs of light SW with streaks of incandescent light shooting towards Zenith. Display lasted 10 mins.		
2a	17	18	19	19a	20	21	20a	21a	22	23	24	25

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.

Meteorological Log kept on board

Tetra nova. RyS.

[illegible]

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

Captain W H Pennell RN from

Antarctic to New Zealand

[illegible]

⁸⁰ that in the event of the Office Barometer being broken, the Ship's can be taken into use, and its error can be ascertained.

Meteorological Log kept on board

Terra nova R. y. S.

DATE.		Latitude.		Longitude.		Course and Distance.		Total Compass Error.	Ship's Head.	Wind, at the time of observation.	Barometer. No. 1163	Thermometers.			
Year 1911	Month	Observed.	Dead Reckoning.	Observed.	Dead Reckoning.	Each four hours.	Of Compass used for Wind, being Variation and Deviation combined.	Wind Velocity By same Compass as Wind.	Direction. State if true or subject to Compass Error, or only to Variation.	Force. 0 to 12.	Height of Cistern above Sea. 9 1/2 feet.	Dry Bulb.	Wet Bulb.		
Day. Civil Time.	Hour.	The D.R. position is needed daily, in addition to that by Observation, but it should be the result of careful calculation, in order to give any value to the estimation of the current.				Colour of Sea.	Distance by Log.				Uncorrected Reading.	Att. Therm.	No.	No.	
15th	4						32		10NW	5/12			36.0	35.0	
	8						"		SW	4	29.41	47	35.9	34.0	
	NOON	58	25	161	22		"		W by S	4	29.58	44	37.9	36.5	
	4	Current in last hours					28		WNW	4	29.52	47	37.8	37.0	
	8						"		W by S	4	29.61	47	39.9	38.0	
	MIDT.						"		SW by W	4	29.72	45	40.0	39.0	
	4								W						
	8														
	NOON	Current in last hours													
	4														
	8														
	MIDT.														
16th	4						27		W by S	4	29.80	43	40.3	38.5	
	8						"		West	5/6	29.83	45	41.1	40.0	
	NOON	56	46	162	32		"		W by S	6	29.93	48	42.2	40.8	
	4	Current in last hours					"		West	6	30.00	50	42.8	40.5	
	8						"		West	6	30.00	50	42.5	41.9	
	MIDT.						"		SW by W	3	30.08	51	42.0	41.2	
17th	4	6.0 am	55	56	163	84	25		West	3/4	30.12	47	42.0	41.0	
	8	9.16 am	55	54	163	38	20		West by W	2-3	30.05	49	43.5	41.8	
	NOON	56	14	163	48	404	26		West by N	2-3	29.90	53	44.0	42.5	
	4	Current in last hours					"		West by N	3	29.90	53	44.0	42.2	
	8						"		West by N	2	29.74	50	43.0		
	MIDT.						"		West by N	1-2	29.70	50	41.2	41.2	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

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

Captain Lieut Hkh Pennell.

from

Antarctic

to

New Zealand

		Clouds.		Weather.		Sea Surface.						Remarks.	
Hour.	The direction from which the upper clouds are moving, and also that of the lower clouds when they do not move with the wind, should be noted when determinable.		Fog Inten- sity. 0 to 5.	According to Beaufort Notation.	Waves.		Swell.		Temp. by No.	Spec. Grav. by No.	Time of Remark.	Here give any important Remarks as to phenomena, with the times of their occurrence; especially the times of Changes in Direction and Force of Wind, as well as the Direction, Veering or Backing, Force and Duration of Squalls; the direction from which upper clouds are moving; the Position of Ice and of Derelicts, Also note the hour at which the Ship arrives in or leaves Port. (See "Instructions" for further particulars.)	
	Names.				Direction from.	Distur- bance. 0 to 10.	Direction from.	Distur- bance. 0 to 10.					
	Upper.	Lower.											
													Also record when Confused.
4	St	10	94+		Conf	4	W	6			230 to 3. Wind backed from WNW 4 to South 4, not suddenly.		
8	St cu	9	c		W	4	Conf	6	36.5		Continuous rain (all watch) Drizzle to moderate, till 3.45.		
NOON	cu	9	21+		W	4	W	6	36.3		afternoon. Rain occasionally accompanied by snow.		
4	St	10	94+		W	4	W	6	36.5		PM		
8	St cu	10	0		W	4	W	6	39		6.15 Sky clearing showing a cu + high Ci Clouds, the latter in stripes running in a NNE. + SSW line.		
MIDT.	cu	8	c/p		WSW	5	W	6			principally in SE quarter of heavens.		
4													
8													
NOON													
4													
8													
MIDT.													
4	cu	8	c		WSW	5	W	5			Two squalls after 2 am		
8	St cu	10	oc		W	5	W	6	39		Low cumulus travelling fast from S to SSW		
NOON	St cu	10	oc		W	5	WSW	6	40.2		7.0 Wind freshening.		
4	St	10	oc		W	5	WSW	7	41.0		8.0 Wind freshening.		
8	St	10	0		W	5	W	7	40.2		Wind inclined to back in the squalls.		
MIDT.	St	10	0		SW	4	SW	4	40		9pm. Signs of swell from SW.		
4	St	10	oc		SW	4	W	3			4.30 Fog intensity 1.		
8	St	8	c			3	SW	4	43.9		Wind gradually backing after 10.0		
NOON	cu	4	bc			3	SW	4	43.9		Mid. Wind falling light.		
4	St	6	bc			3	SW	5	41		Mon. Wind gradually veering and falling light.		
8	St	10	01+mf	3		3	Conf	5	41		PM 1.0. Sky half covered with Ci Cu, St, + windy looking false Aurora		
MIDT.	St	10	0df	2	WSW	2	WSW	4			the lower clouds having all disappeared		
2a		17	18	19a	20	21	20a	21a	22	23	24		
											25		

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.

Meteorological Log kept on board

DATE.		Latitude.		Longitude.		Course and Distance.	Total Compass Error.	Ship's Head.	Wind, at the time of observation.	Barometer.*	Thermometers.		
Year 19	Month	Observed.	Dead Reckoning.	Observed.	Dead Reckoning.	Each four hours.	Of Compass used for Wind, being Variation and Deviation combined.	By same Compass as Wind.	Direction. State if true, or subject to Compass Error, or only to Variation.	No. _____	Height of Cistern above Sea _____ feet.	Dry Bulb.	Wet Bulb.
Day, Civil Time.	Hour.	The D.R. position is needed daily, in addition to that by Observation, but it should be the result of careful calculation, in order to give any value to the estimation of the current.				True Course.	Distance by Log.		Force. 0 to 12.	Uncorrected Reading.	Att. Therm.	No.	No.
1	4											and the wet bulb being untainted by salt water.	
	8												
	NOON	{ Current in last hours mls. }											
	4												
	8												
	MIDT.												
2	4											are in working order; the dry bulb being free of moisture.	
	8												
	NOON	{ Current in last hours mls. }											
	4												
	8												
	MIDT.												
3	4											thermometers, the observer should satisfy himself that both	
	8												
	NOON	{ Current in last hours mls. }											
	4												
	8												
	MIDT.												
4	4											Before accepting the readings of the dry and wet bulb	
	8												
	NOON	{ Current in last hours mls. }											
	4												
	8												
	MIDT.												

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

127 loaded ~~at~~ Right
Punches 2. White -
verified 20

E.G.

CORRECTION OF ANTARCTIC BAROMETERS.

Cape Evans, No. 1157.

Correction $-.010$.

Height 10 feet.

Cape Adare, No. 1156.

Correction $-.012$.

Height 12 feet (?)

Ship, No. 1163.

Correction $-.005$.

Height - see register.

