METEOROLOGICAL LOG
FOR 4 MONTHS

July 24
for var

Sept 20
Dw.

Log A

Position given as near as poss. every 4 hours. sometimes interpolated from two observed positions.

Min. Therm^r N.G. on account of motion of ship affecting pos^n of index.

Temp. When given without a dec. pt. is to the nearest degree; If read closely & is an exact degree, it is logged thus 67.0

Cloud velocity.

(0) stationary ½ very slow ① slow

② Moderate ③ fast (4). V^y fast.

Cloud Density Indicated by suffixes. 0 1 2 3. thus 10_3

0 very light cloud

1 light cloud

2. Moderately heavy cloud

3. Heavy dark cloud.

Get times of steaming & Course ea. day

Form 131.

METEOROLOGICAL LOG.

Name of Vessel _____ Steam or Sail _____ Rig _____ Gross Register Tonnage _____

Captain's Name _____ Log kept by _____

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.

			For Ships rigged with Double Topsails.*
0 Calm.			
1 Light air	Just sufficient to give steerage way.		
2 Light breeze	With which a well-conditioned ship-of-war of Admiral Beaufort's time (1800–1850), with all sail set, would go in smooth water, and "clean full," from	1 to 2 knots.	
3 Gentle breeze		3 to 4 knots.	
4 Moderate breeze		5 to 6 knots.	
5 Fresh breeze	To which she could just carry in chase, "full and by"	Royals, &c.	
6 Strong breeze		Single-reefed topsails and topgallant sails.	Topgallant sails.
7 Moderate gale		Double-reefed topsails, jib, &c.	Topsails, jib, &c.

How was the screen containing the dry and wet bulbs situated? Stevenson's double louvred screen Port side of poop. on top of Taxidermist's lab

Where was the Meteorological Office barometer located? Skylight of ward room

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.

14767—500.

…pper topsails and courses.

…sails and courses.

…in-topsail and reefed foresail.

…tions were made to meet the require… …ble topsails, introduced since Admiral … …ime.

… Criteria for steamships.

…sideration is required for the specifi… the scale for use on board steamships. … purpose it is recommended that as …ity occurs use be made of the equiv… …ven 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, …ilar breeze is felt when the ship is … at 15 knots *right before the wind*, the …peed of the wind will be 30 knots, … 6 and 7 on the Beaufort scale, … to the table of equivalents.

…rtunities occur from time to time for …g the speed of the wind with the … the ship. A hand anemometer may …yed if used judiciously and if proper …e be made for the motion of the ship.

…River.

…unimpeded.

…ution required.

* 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.
c Clouds (detached).
d Drizzling Rain.
e Wet without rain.
f Foggy.
g Gloomy.
h Hail.
l Lightning.
m Misty.
o Overcast.
p Passing Showers.
q Squally.
r Rain.
s Snow.
t Thunder.
u Ugly (threatening appearance of Weather).
v Visibility. Objects at a distance unusually visible.
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, 2	Smooth	…	Rippled.
3, 4	Slight to moderate	Under 5 feet	Rocks buoy or small boat. Furrowed.
5, 6	Rough to very rough	5 to 10 feet	Much disturbed; deeply furrowed.
7, 8	High to very high	11 to 15 feet; 16 to 35 feet	Rollers with steep fronts.
9, 10	Phenomenal	36 feet and above	Precipitous; towering.

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."

(14767—24.) Wt. 22539—7196. 500. 11/09. D & S.

Position given as near as poss. every 4 hours. sometimes interpolated from two observed positions.

Min. Therm.r N.G. on account of motion of ship affecting posn of index.

Temp. When given without a dec. pt. is to the nearest degree. If read closely & is an exact degree, it is logged thus 67.0

Cloud velocity.

(0) stationary (½) very slow (1) Slow
(2) Moderate (3) fresh (4). V.y fast.

Cloud Density indicated by suffixes. 0 1 2 3. thus 10_3

0 very light cloud
1 light cloud
2. Moderately heavy cl...
3. He...

Get times of steaming & Course ea. day.

Form 131.

METEOROLOGICAL LOG.

Name of Vessel _____ Steam or Sail _____ Rig _____ Gross Register Tonnage _____

Captain's Name _____ Log kept by _____

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 3 Gentle breeze 4 Moderate breeze	With which a well-conditioned ship-of-war of Admiral Beaufort's time (1800–1850), with all sail set, would go in smooth water, and "clean full," from	1 to 2 knots. 3 to 4 knots. 5 to 6 knots.	
5 Fresh breeze 6 Strong breeze 7 Moderate gale 8 Fresh gale 9 Strong gale	To which she could just carry in chase, "full and by"	Royals, &c. Single-reefed topsails and topgallant sails. Double-reefed topsails, jib, &c. Triple-reefed topsails, &c. Close-reefed topsails and courses.	For Ships rigged with Double Topsails.* Topgallant sails. Topsails, jib, &c. Reefed upper topsails and courses. Lower topsails and courses.
10 Whole gale	With which she could scarcely bear close-reefed main-topsail and reefed foresail.		Lower main-topsail and reefed foresail.
11 Storm	Which would reduce her to storm-stay-sails.		
12 Hurricane	Which no canvas could withstand.		

* 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 pressure 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 specification of the scale for use on board steamships. For this purpose it is recommended that as opportunity occurs use be made of the equivalents 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 *right before the wind*, the actual speed of the wind will be 30 knots, between 6 and 7 on the Beaufort scale, according to the table of equivalents.
1 2 3	Light breeze ...	From 1 to 12 inclusive, average about 7 ...	Between 0·01 and 0·4 ...	Sufficient wind for working ship.	
4 5	Moderate breeze ...	„ 13 to 24 „ „ „ 19 ...	„ 0·5 „ 1·8	Forces most advantageous for sailing with leading wind and all sail drawing.	
6 7	Strong wind ...	„ 25 to 38 „ „ „ 32 ...	„ 1·9 „ 4·4	Reduction of sail becomes necessary even with a leading wind.	
8 9	Gale force	„ 39 to 54 „ „ „ 47 ...	„ 4·5 „ 8·9	Considerable reduction of sail necessary even with wind quartering.	
10 11	Storm force... ...	„ 55 to 75 „ „ „ 65 ...	„ 9·0 „ 17·0	Close reefed sail when running; or hove-to under storm sail.	
12	Hurricane	Above 75	More than 17	No sail can stand even when running.	

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.

SCALE OF FOG INTENSITY.

Scale.	Name.	On Sea.	On River.
0	No Fog or Mist	Horizon clear.	
1	Light Fog or Mist*	Horizon invisible, but lights and landmarks generally visible at working distances.	Objects indistinct, but navigation unimpeded.
2 } 3 }	Moderate Fog	Lights, passing vessels, and landmarks generally indistinct under a mile. Fog signals are sounded.	Navigation impeded, additional caution required.
4 } 5 }	Thick Fog	Ships' lights and vessels invisible at ¼ 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.
c Clouds (detached).
d Drizzling Rain.
e Wet without rain.
f Foggy.
g Gloomy.
h Hail.
l Lightning.
m Misty.
o Overcast.
p Passing Showers.
q Squally.
r Rain.
s Snow.
t Thunder.
u Ugly (threatening appearance of Weather).
v Visibility. Objects at a distance unusually visible.
w Dew.
z Haze.

Note.—A dot (·) under any letter augments its signification: thus, ṛ heavy rain; r̤ 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 l̤ 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; p̤=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 2 3	Smooth	... ...	Rippled.
4 5	Slight to moderate	Under 5 feet	Rocks buoy or small boat. Furrowed.
6	Rough to very rough	5 to 10 feet	Much disturbed; deeply furrowed.
7 8	High to very high	11 to 15 feet ... ... 16 to 35 feet	Rollers with steep fronts.
9 10	Phenomenal	36 feet and above	Precipitous; towering.

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."

(14767—24.) Wt. 22539—7196. 500. 11/09. D & S.

Specimen Sheet of Log.

Meteorological Log kept on board *P. & O. Steamship "China."* H.M. *S.Y. Terra Nova*

Captain *T. S. Angus,* **from** *London* **to** *Australia.*

DATE. Year 1902. Month VII. June. Day. Civil Time.	Hour.	Latitude. Observed.	Latitude. Dead Reckoning.	Longitude. Observed.	Longitude. Dead Reckoning.	Course and Distance. Each four hours. True Course.	Course and Distance. Distance by Log.	Total Compass Error. Of Compass used for Wind, being Variation and Deviation combined.	Ship's Head. By same Compass as Wind.	Wind, *at the time of observation.* Direction. State if *true*, or subject to Compass Error, or only to Variation.	Wind, *at the time of observation.* Force 0 to 12.	Barometer.* No. 361. Height of Cistern above Sea 39 feet. Uncorrected Reading.	Barometer.* Att. Therm.	Thermometers. Dry Bulb. No. 5237	Thermometers. Wet Bulb. No. 1931
25 / 16th	4							No. 2059.							
	8									True throughout the		In Chart Room in good position. Ship's Mercurial given for comparison each day at noon below the M.O. reading.		In the screen which is fixed on the after-side of the Chart Room well protected from sun, rain, and spray.	
	NOON	° ′ ° ′	° ′ ° ′							voyage.					
		Current in last 24 hours			mls.										
	4	49	55′	6	46	Various				S.S.W.	4	30·00	62		
	8	—	35	7	26	by				S.S.W.	3	30·02	62	63	59
	MIDT.	49	15	8	6	Coast Line.				S.S.E.	4	29·98	62	62	60
26	4	48	58			S. 87° W. Various.	14 12			S.	4	29·76	60	60	59
	8	48	40			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	° ′ ° ′	° ′ ° ′	° ′ ° ′						S.	5				
		~~49 40 N. 49 40 N.~~	4 ° 40 W.	4 29 W.		S. 68 W.	61			S.S.W.	6	29·48	62	63	60
		Current in last 9 hours	W.	7 mls.								(29·60	62)		
	4					S. 25 W.	48			S.S.W. S.W.	7 8	29·52	62	61	60
	8					S. 25 W.	48			S.W. S.W.byW.	8 8	29·62	61	60	59
	MIDT.					S. 25 W. S. 28 W.	6 49	19° W.	S. 47° W.	W.S.W. W.	8 8	29·72 29·80	62 61	60	58
27	4					S. 28 W.	51			W. W.	8 8	29·89 29·94	60 60	59	56
	8					S. 28 W.	54	19° W.	S. 47° W.	W.	7	30·10	63	63	59
	NOON	° ′ ° ′	° ′ ° ′	° ′ ° ′						W.S.W.	6	30·17	65		
		45 15 N. 45 7 N.	7 ° 30 W.	8 4 W.		S. 28 W.	60			N.W.byW.	6	30·26	65	65	60
		Current in last 24 hours	N. 70 E.	23 mls.								(30·40	64)		
	4					S. 35 W.	58			N.W.byW. N.W.byW.	6 6	30·34	65	64	59
	8					S. 35 W.	58	20° W.	S. 55° W.	N.W.byW.	4	30·41	63	62	58
	MIDT.					S. 35 W. S. 1 W.	46 13			Calm N.E.byN.	0 3	30·40	63	61	59
28	4					S. 1 W.	60	19° W.	S. 20° W.	N.E. N.byE.	4 5	30·32	62	61	57
	8					S. 1 W.	60			N.N.W.	6	30·29	67	68	62
	NOON	° ′ ° ′	° ′ ° ′	° ′ ° ′						N.N.E. N.E.	4 4	30·28	68	70	64
		39 47 N. 39 47 N.	9 ° 32 W.	9 30 W.		S. 1 W. S. 8 E.	5 62					(30·39	66)		
		Current in last 24 hours	None	mls.											
	4					S. 8 E. S. 7 W. S. 12 E.	16 42 2			N.E.	4	30·24	67	72	67
	8					S. 12 E.	62			N.byW.	4	30·21	69	70	66
	MIDT.					S. 42 E. S. 71 E.	12 19	17° W.	S. 54° E.	N.W.byW. Calm	3 0	30·20 30·20	68 66	66	62
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Hour.	Clouds.† Names.	Clouds.† Prop. of Sky Clouded 0 to 10.	Weather. According to Beaufort Notation.	Weather. Fog Intensity. 0 to 5.	Sea Surface. Waves. Direction *from*.	Waves. Disturbance. 0 to 10	Swell. Direction *from*.	Swell. Disturbance. 0 to 10	Temp. by No.	Spec. Grav. by No.	Time of Remark.	Remarks.
	When *Lower* Clouds do not move with the Wind, give the Direction they come *from* in the "Remarks." (For Plates see "Instructions.")				Also record when Confused.				5880	1214		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.)
4												
8												
NOON												
4	Cum.-s.	6	cb		—	0	—	0	—		1·33	Left Tilbury.
8	Cum.	8	c		—	0	—	0	—		4·35	Passed Tongue. 6·2. East Goodwin. French coast and distant objects remarkably clear and distinct. Rainy appearance to W. and N.W.
MIDT.	Cum. | Nim.	10	or		—	0	—	0	—		10·30	Passed Beachy Head.
4	Cum. | Nim.	3	bcd		S.	3	—	0	57		3·7	Rainy appearance. 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. S.W.	7 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.
8	Cir. Cum. Cum.-s.	3	bc		W.	5	N.W.	3	61			Cum. round horizon. 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.
MIDT.	Cum.	1	bw		W.	3	Confused	4	60		11·40	Finisterre S. 89° W., 16 miles. 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

* 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.

† In the Form of Log now issued separate columns are given for the Names of Upper and Lower Clouds.

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

Captain Lt E.R.G.R. Evans. from England to Christchurch NZ.

DATE. Year 1916 Month June. Day. Civil Time.	Hour.	Latitude. N. Observed.	Latitude. N. Dead Reckoning.	Longitude. W. Observed.	Longitude. W. Dead Reckoning.	Course and Distance. Each four hours. True Course.	Course and Distance. Each four hours. Distance by Log.	Total Compass Error. Of Compass used for Wind, being Variation and Deviation combined.	Ship's Head. By same Compass as Wind.	Wind, at the time of observation. Direction. State if true, or subject to Compass Error, or only to Variation.	Wind, at the time of observation. Force. 0 to 12.	Barometer.* No. Adie 1165. Height of Cistern above Sea 9½ feet. Uncorrected Reading.	Barometer.* Att. Therm.	Thermometers. Reg. + Zambra. Dry Bulb. No. 8395	Thermometers. Wet Bulb. No. 8396
		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.													
16.	4							Var. 20°59 W.							
	8														
	NOON	° ' Current in last hours	° '	° '	° ' mls.										
	4	49	55	6	46					E.S.E.	4	30.32	57	56.5	53.5
	8	—	35	7	26			19°W.		—	4	30.26	58	56.5	54.0
	MIDT.	—	15	8	6					—	5	30.23	59	57	55
17th	4	48	58	8	42					S.E.	5	30.19	58	57.5	56
	8		40	9	18					S.E.	4	30.20	63	59.0	57.0
	NOON	° ' 48 Current in last 24 hours	° ' 21	° ' 9 °	° ' 58 mls.					S.E.	3 4	30.24	70	61.8	59.8
	4	48	7	10	41					S.S.E.	3	30.24	70	61.5	57.5
	8	47	47	11	05					SW	061	30.28	66	67.6	62
	MIDT.	47	26.	11	14					S	0-1	30.29	66	65	61
	4														
	8														
	NOON	° ' Current in last hours	° '	° '	° ' mls.										
	4														
	8														
	MIDT.														
18th	4	47	5	11 24						S.E.	1	30.32	65	65	60.5
	8	46	43	H 33				67°8		S.E.	1	·36	68	62	60.4
	NOON	° ' 46 Current in last 24 hours	° ' 21	° ' 11 ° 45	° ' mls.					S	0-1	·39	73	70.2	64
	4	45	58	11 55						Calm.		·39	73	71.0	64.2
	8	—	35	12 5						E	0-1	·37	68	65.0	62.0
	MIDT.	—	10	12 16						E.S.E.	1	·32	67	63	60
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.

Hour.	Clouds. Names. Upper.	Clouds. Names. Lower.	Clouds. Prop. of Sky Clouded. 0 to 10.	Weather. According to Beaufort Notation.	Weather. Fog Intensity. 0 to 5.	Sea Surface. Waves. Direction from.	Waves. Disturbance. 0 to 10.	Swell. Direction from.	Swell. Disturbance. 0 to 10.	N.Z. Temp. by No. 8392	Hydr. Spec. Grav. by No. 2078	Time of Remark.	Remarks. 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.)
	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.					Also record when Confused.							
4													
8													
NOON													Keeping G.M.T.
4	Low Cir. C.	Cum. Str.	7	bc.		SE.	4	SE.	4	5		4.	Apatch of haze over most of sky.
8	Cir. C.	Str.	1	b.z.		E.S.E.	4	E.S.E.	4			8.40	Very low + light mackerel sky to N.
MIDT.	Cir.		3	bc.		E.S.E.	4	E.S.E.	4			9.25	Mackerel sky disappeared. Wind in squalls increasing in force
4	Cir. S.	Str.	9	0 C.		S.E.	4	S.E.	4	58.5		4. AM.	Wind slightly unsteady in force + diren
8	low Cir. S.	Cum. Str.	9	Cm.		SE	4	S.E. S.S.W.	4	56.8		6.0	Sun shining through Clouds.
NOON		Cum Str	9	C.m.		S.E.	3	Rec. Notes	4	57.5		9.0	Wind easing
4	Cir. C.	Cum Str	5	b.c.m.		SSE	3	Nil	4	60.5		10.0	Put clock back 20 mins
8	Cir C. Cir S.	Cum Str.	5	bc.			1	Cross	4	60.0		Noon.	Swell from 3 dirns E.S.E. (main) S.S.E. + S.S.W. Some small detached ragged Cum. also low scud from S.W. ③
MIDT.			10	0			1	Cross	4	60.2		4.0 PM.	Swell from 3 dirns E.S.E. S.S.E. (main) + S.S.W.
4	Pm. 5.30 Wind dropped calm.											7.30	Sun set behind very heavy black Cum.? S. cloud. stretching for over 90° across western horizon
8	8.0. Swell SW + S.E. The western heavens covered by a thick black rain cloud. moving from SW.												To Eastward Stratus + low Cir. C. fine weather looking. ② To Eastward some windy
NOON	Cumulus + the higher Clouds; with Stratus												above S.E. horizon.
4	8.10	Completely clouded over		Cum	S. 10							9.30.	occasional specks of phosphor ce in ship's wake.
8	10.0	Lie of strata S.W.		Thin clouds.								11.	Horizon to S. clear. Prop.n cloud. 9
MIDT.	*	Put clock back 20'		Time 40'									midnight. Cross swell S.E. + S. slow on G.M.T.
4		Str	10	o.m.			1	Confus	4	60.7		3 AM.	Sky overcast. Low lying streak of light in horizon.
8	low Cir. c.	Str	5	bc.			1	Cross W.S.W.	5	61.8	25	8	Swell crossed by lesser one from S.
NOON		Cum	9	c			0	W°o.	5	63.4	25	10.0	Clocks back 8 mins
4		Cum	9	c			0	W°S	5	64.2		4 PM.	Sun generally visible through clouds.
8		Cum	8	c			0	W°N	5	63.4		5.30	Sky ½ cleared light fine looking Cumulus prop.n 5
MIDT.			9	c			0	W.	4	62.5		6.0.	Cum C. detached light looking clouds. low dark cloud, low on W.
												8.0.	The Cum fairly light + ☽ showing 2 or <
												10.	Corona for short time round moon.
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.

14767—7500

Meteorological Log kept on board

Year 1910 Month June

DATE. Day. Civil Time.	Hour.	Latitude. Observed.	Latitude. Dead Reckoning.	Longitude. Observed.	Longitude. Dead Reckoning.	Course and Distance. Each four hours. True Course.	Distance by Log.	Total Compass Error. Of Compass used for Wind, being Variation and Deviation combined. Max. Therm.	Ship's Head. By same Compass as Wind.	Wind, at the time of observation. Direction. State if true, or subject to Compass Error, or only to Variation.	Force. 0 to 12.	Barometer.* No. Height of Cistern above Sea feet. Uncorrected Reading.	Att. Therm.	Thermometers. Dry Bulb. No.	Wet Bulb. No.
		° N.	′	°	W. ′			Therm							
19.	4	44	45	12	27					S.E.	3	30.29	64	60	58.2
	8	44	20	12	37			71		S.E.	1.2	.29	68	64.5	60.8
	NOON	43°	54′	12°	48′					N b W	3	.26	68	65.8	61.6
		Current in last hours			mls.			71							
	4	43	28	12	57			19°W.		N	3	.26	66	62.4	60.0
	8	43	03	13	07					N b E	3	.28	65	61.2	60.4
	MIDT.	42	37	13	16					N b W	1.2	.29	65.5	65	63
20	4	42	12	13	26					W g	3	30.28	65	65.2	63.2
	8	41	46	13	35			68		N	3	.33	67	68.0	64.5
	NOON	41°	20′	13°	45′			~~68~~		N	3	.34	69	68.8	64.2
		Current in last hours			mls.										
	4	40	52	13	53					N	3.4	.35	70	66.6	63.0
	8	40	23	14	1					N	3.4	.37	67	64.0	61.0
	MIDT.	39	55	14	12					N	4	.36	66	64	60
21.	4	39	27	14	24			~~68~~		N b E	3.4	30.32	66.5	63.1	60
	8	39	2	14	34			68		N b E	3.4	.35	68	64.6	60.1
	NOON	38°	37′	14°	43′					N b E.	4	.33	~~68~~ 70	65.0	60.4
		Current in last hours			mls.										
	4	38	07	14	52					N b E.	3.4	.32	70	65.5	61.4
	8	37	37	~~14~~ 15	1					N g	2.3	.33	68	65.1	61.1
	MIDT.	37	10	14	53					N g	3	.32	~~64~~ 66	66.2	63
22	4	36	42	14	46							30.27	66	66	63
	8	36	15	15	08			69				.31	68	68.7	65.3
	NOON	35°	47′	15°	31′							.32	68	68.8	64.3
		Current in last hours			mls.										
	4	35	19	15	44			18°W.				.31	70	67.0	63.0
	8	34	51	15	58							.34	69	66.5	63.0
	MIDT.	34	22	16	11							.40	69	64	63
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

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.

Before accepting the readings of the dry and wet bulb thermometers, the observer should satisfy himself that both are in working order; the dry bulb being free of moisture and the wet bulb being untainted by salt water.

* 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 ______ from ______ to ______

Hour.	Clouds. Names. Upper.	Clouds. Names. Lower.	Prop. of Sky Clouded. 0 to 10.	Weather. According to Beaufort Notation.	Fog Intensity. 0 to 5.	Waves. Direction from.	Waves. Disturbance. 0 to 10.	Swell. Direction from.	Swell. Disturbance. 0 to 10.	Temp. by No.	Spec. Grav. by No. 2078	Time of Remark.	Remarks.
4				Om		S.E. g	2	W g	5	62		4.0	Clocks 50′ slow on G.M.T.
8		Cum	8	Cm.			1	W b N	5	62.4	25	4 P.M.	Slight cross swell from N or N N W.
												7.0	Cum s. 10
												7.30	Appearance of fog to E.
NOON		Cum s.	5	Cm.		N b W	2	W N W	5	63.8	24.5	11.30	Long W swell & short N g Confused.
													Sky lowest clearing, slight drizzle Cl. 8.
4		Cum s	10	OC		N g	2	W N W	5	63.2		Midnt.	Wind light W. swell 5 N swell 4
8		Sbt / Cum	10	OCm		N g	3	W N W	5	63.1			
MIDT.		Sbt / Cum	8	OCd				Cross W g N g	5	63			
4		Cum / Cum s.	10	OC		~~W b N~~	~~4~~	W b N	4	63.2		2 A.M.	wind light Clear sky.
						N g	3					2.30	slight drizzle.
8		Cum	1	b		~~N W b N~~	~~4~~	N W b N	4	63.1	24.7	3.30	Cum s. 9.
												6.0	Wind N 3. sky clearing.
NOON		Cum	5	bc.		N g	3	Cross N b W / N W b W	4	64	24.5	9.30	Clock back. 10 mins.
												6.30 P.M.	Cum / Cir / (Cir s) 5 very windy cirrus
4	Low windy Cir s.		3.	bcz		N g	3	N W b N	4	64.1			
8	Faint cir / Cir s.	Sbt / Cum	10	cz.		N g	3	N N W	4	63.3		8.0	Slight corona round moon. a sort of high mist forming
MIDT.	Cir	—	4	b.c.		N g	4	N g	4	63.			
4		Cum / Cum s. / Sbt	5	bc		N g	3	N N W	4	64.0		9.30 A.M.	Clocks put to 1h. 2m slow on G.M.T.
												2. A.M.	wind veered to N b E. sky suddenly cleared from N.
8	Cir s.	Cum / Sbt	4	bc.		N g	3	N b W	3	63.5	25	8.0	nearly all cloud is detached Cum.
NOON	Cir.	Cum	2	bcz		N g	3	N	3.	64.0	24.7	Noon	Slight haze over all sky.
4		Cum	4	bcz		N g	3	N b W	4	64.0			
8		Cum / Cum s.	3.	bcz.		N g	2	N b W	3				
MIDT.		Cum	3.	bc.		N g	3	N g	3	63.8			
4		Sbt	10	o		N g	2	~~N~~ Confused.		64		1.45 A.M.	Sky becomes overcast.
												5.0	Cum 9.
8		Cum s.	10	oc.		N g	1	N N W	3.	63.8		6.40	F2 + light rain 15′
												11.0	Clouds breaking
NOON		Cum / Cum s / Sbt.	5	bc.		N g	2	N b W	3.	64.9		2 P.M.	Cum s / Cum 10.
												6.5.	Cum / Cum s / Cum n 9
4		Cum / Cum s	9	c		N N E.	3.	N b E	3	65.0		8.0	trace of phosphorescence in sea water in bucket.
8		Cum n / Cum s	10	o.c.		N N E.	3.	N N E.	4	65.5		11.30	Sharp showers of rain Nim 1a
MIDT.		Nim	10	o.c.p.		N N E.	4	N N E.	4	67			
2a	17		18	19	19a	20	21	20a	21a	22	23	24	25

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.

Sea Surface: Also record when Confused.

Remarks: 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.)

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.

14767—7500

Meteorological Log kept on board ______

Captain ______ from ______ to ______

Year 19*10* Month *June*

DATE. Day. Civil Time.	Hour.	Latitude *N.* Observed.	Latitude Dead Reckoning.	Longitude *W.* Observed.	Longitude Dead Reckoning.	Course and Distance, Each four hours. True Course.	Distance by Log.	Total Compass Error. Of Compass used for Wind, being Variation and Deviation combined. *Max. Ther*	Ship's Head. By same Compass as Wind.	Wind, at the time of observation. Direction. State if true, or subject to Variation only.	Force. 0 to 12.	Barometer.* No. Height of Cistern above Sea ___ feet. Uncorrected Reading.	Att. Therm.	Thermometers. Dry Bulb. No.	Wet Bulb. No.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
23	4	33	54	16	25			18°W.		NE.	5	30.34	68	66	63
	8	33	25	16	38			71		NE	4.5	30.37	72	67.5	61.4
	NOON	32°	56'.	16°	37'					NE.	4	30.40	76	70.3	63.5
	Current in last hours mls.														
	4									E by N	3.	30.33	70	68	61.5
	8									{under lee of Cape Garajao}					
	MIDT.			At Funchal 23rd to 26.											
26.	4														
	8														
	NOON	32°	25'	17°.	1'			not		N^ly	2.3	30.27	75	71.2	66.5
	Current in last hours mls.														
	4	32	4	17	13					E by N.	5	30.23	69	67.0	64.0
	8	31	44	17	26					ENE	4			67.5	64.0
	MIDT.	31	23.	17	38					ENE	4.5	30.27	67	67	64
27	4	31	03	17	50					NE by E	5	30.27	68	67	–
	8	30	42	18	02			75		ENE	5	.26	68	67.7	–
	NOON	30°21'		18°14'						ENE	4	.27	70	68.0	65.0
	Current in last hours mls.														
	4	30	0	18	28					ENE	5	.22	69	68.0	65.0
	8	29.38	38	18	42					ENE	5	.23	69	67.6	65.5
	MIDT.	29.17	17	18	56					ENE	4.5	.23	68	67	64
28	4	28.56	55	19	09					ENE	5	30.21	67	66	62.2
	8	28	34	19	23			68		ENE	4	.25	68	67.3	63.6
	NOON	28°	13'	19°.	37'					ENE	4	.27	72	68.0	63.2
	Current in last hours mls.														
	4	27	58	19	47					ENE	5	.22	73	68.6	65.8
	8	27	40	20	00					ENE	3	.25	71	68.0	64.9
	MIDT.	27	33	20	06.					Calm		.24	69	67	65

Margin notes: 40 k 30 N; 4/5 ...; X; Obs'd posn at 11.45.

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* 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.

Hour.	Clouds. Upper.	Clouds. Lower.	Prop. of Sky Clouded. 0 to 10.	Weather. According to Beaufort Notation.	Fog Intensity. 0 to 5.	Waves. Direction from.	Waves. Disturbance. 0 to 10.	Swell. Direction from.	Swell. Disturbance. 0 to 10.	Temp. by No.	Spec. Grav. by No. 2078	Time of Remark.	Remarks. 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.)
2a	17		18	19	19a	20	21	20a	21a	22	23	24	25
												Am	
4		Stc	10	opd		NNE	3	N^ly	4	67		4.0	Showers of rain passing rapidly across at intervals
8		Cum s	10	oc		NE	3	NNE.	4	66.5	25	Noon	Sun shining through clouds most of the time.
NOON		Cum s.	9	c		NE	3	NE	4	66.2	25	2.0	Pm. Rain squall from N.E.
4		Cum s.	3	bc.								5.0	Anchored off Funchal.
8						Changed Hydrometer to No. 2268.							
MIDT.													Clocks 1h.10' slow on G.M.T.
4											To 2268 ↓	10.0	Am. Start for Simon's Bay
												12.25	Pm. Cum s. 8 Wind eased to N^ly 1
8												2.0	Wind increased & veered to E.N.E.
												2.55	Cum s 4.
NOON		Cum s / Cum	5	~~Cum~~ (b.c)		N^ly	2	E by N	3	66.6	24	6.40	Sun behind Sto N. cloud; heavy bank of Cum s. to S.E.
4		Det-Cum / Cum s.	2	~~Det Cum~~ (b.c)		E by N	4	E by N	3	67.8		7.10	Cum s. 9.
												10.15	Slight phosphorescence in water
8		Cum s	7	c								Midnight.	~~Break in clouds to N.E. wind squally~~. Wind freshening
MIDT.		Cum s.	10	oc.		ENE^ly	4	NE^ly	4	67.8			
4		Cum s.	9.	oc		NE^ly	4.5	NE^ly.	4	67.8		7.0	Am. Slight drizzle for a few minutes
												9.30	Clocks put back 5' (1h.15' slow on G.M.T).
8		Cum s.	10	oc		ENE	4	EbNE.	5	67.8		Pm	
NOON		Cum s.	10	oc		ENE	4	E	4	68.2	26¼	4.0	Sun showing through from time to time
												6.0	Wind eased to 4 Cum s 10,
4		Cum s.	9	oc.		ENE.	4	EbNE.	4	68.5	26¼	8.0	A trace of phosphorescence in wash.
												Midt.	Break in clouds to NE. - wind squally
8		Cum s.	10	oc		ENE	4.5	EbNE.	4	68.0			
MIDT.		Cum s.	10	og		ENE	4	ENE.	4	68.2			
4		Cum s	8	c		ENE.	4	ENE	3	68		4.0	Sky at times clear, wind slightly unsteady in force.
												5.15	Sunrise Cum. s. 6.
8		Cum s.	7	c		EbNE.	4	ENE	4	68.2	27.	9.0	Put clocks back 6' to 1h.21m. slow on G.M.T.
												Noon	Clouds are light
NOON		Stc / Cum s.	6	c		ENE	3.	E by N	4	69.5	27.2	12.30	Wind force 3.
												3.30	Wind increased to 4.5 & back to N.E.
4		Cum s / Stc	5	b.c.z.		NE.	5	ENE	5	69.8		4.0	Clouds quite light - a sort of light haze over a good deal of the sky
8		Cum s.	8	c						69.4		4.50	Light Cum. s. above horizon - 1. b.z.
		Str. on										5.30	Wind veered ENE 5.
MIDT.		horizon	1							69.9		6.40	Clouding Cum. s. 6 wind eased to 3.
												11.0	Clouds gone. Flat Calm. Swell from N.E.
												Midt.	Cum appearing to E N.E.wd.

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. Also record when Confused.

Meteorological Log kept on board

Captain _____ from _____ to _____

DATE. Year 19 10 Month June Day, Civil Time	Hour	Latitude. N. Observed	Latitude. Dead Reckoning	Longitude. W. Observed	Longitude. Dead Reckoning	Course and Distance. Each four hours. True Course	Course and Distance. Distance by Log.	Total Compass Error. Of Compass used for Wind, being Variation and Deviation combined.	Ship's Head. By same Compass as Wind.	Wind, *at the time of observation.* Direction. ~~State if true, or subject to Compass Error, or only~~ to Variation.	Force. 0 to 12.	Barometer.* No. ____ Height of Cistern above Sea ____ feet. Uncorrected Reading	Barometer.* Att. Therm.	Thermometers. Dry Bulb. No.	Thermometers. Wet Bulb. 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.													
29	4	27	25	20	11			18°W. Max. Therm.	steered at	NE	1·2	30·23	69	68	64·2
	8	27	18	20	16			71	9 a.m.	NE	2·3	·29	75	71·0	65·7
	NOON	Current in last hours 27 10 mls.		20 21					12·30	E b N	2·3	·28	77	70·7	67·0
	4	27	0	20	27				5·0	ENE	1·2	·22	72	69·6	65·9
	8	26	50	20	33					ENE	2	·24	70	68·8	65·2
	MIDT.	26	41	20	37					NE	1	·25	72	70	66
30	4	26	32	20	45					NE	3	30·19	71	69	64·2
	8	26	27	20	48			73.		NE by E	1	·23	75	70·4	65·7
	NOON	Current in last hours 26 17 mls.		20 54						E by S	1·2	·24	73	73·0	66·6
	4	26	10	20	57					NE by E	0·1	·20	77	72·8	66·2
	8	26	3	21	01					NE by E	1	·20	74	70·3	64·9
	MIDT.	25	52	21	08					NE by E	3	·19	72	69	64
July 1	4	25	40	21	16			18°W.		NE	3.	30·14	72	70	64·3
	8	25	29	21	24			74	Obsd alg	ENE	3.	·19	75	71·3	65
	NOON	Current in last hours 25 18 mls.		21 32						E b N	3	·18	75	71·6	65·3
	4	25	07	21	38					NE	3	·16	76	71·5	66·2
	8	24	55	21	45					NE	3	·19	76	70·6	
	MIDT.	24	43	21	51					NE by E	3	·18	73	71	
2	4	24	31	21	58					NE	3-4	30·17	71	70	
	8	24	20	22	5			72.	Obsd at 8.30	NE	3.	·22	75	71·2	
	NOON	Current in last hours 24 8 mls.		22 13						NE	3-4	·22	77	71·6	66·4
	4	23	52	22	20					NE	3-4	·18	76	72·0	66·9
	8	23	35	22	28					NE	4	·19	77	71·0	67·2
	MIDT.	23	19	22	35					NE by E	5	19	73	70	67
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

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Hour.	Clouds. Names. Upper.	Clouds. Names. Lower.	Clouds. Prop. of Sky Clouded. 0 to 10.	Weather. According to Beaufort Notation.	Weather. Fog Intensity. 0 to 5.	Sea Surface. Waves. Direction *from.*	Waves. Distance. 0 to 10.	Swell. Direction *from.*	Swell. Distance. 0 to 10.	Temp. by No.	Spec. Grav. by No.	Time of Remark.	Remarks. 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.)
						Also record when Confused.				8342	2268		
4		Cum s.	8	c		NE by E	2	ENE	3	70			2 a.m. Light breeze from NE
8		Cum s	4	bc		NE	2	ENE	4	70·3	268		6·0 Cum/Cum s/Cum sf. showers in vicinity
		Cum											8·55 Wind increased to 2-3.
NOON		Cum s.	2	b		ENE	2	ENE	3	71·4			11·0 Clocks back 2 mins to 1h 23' slow on Gmt.
4		Cum s	8	c		ENE	2	ENE	3	70·7			12·30 Rain. Clouds round horizon only.
8		Cum s	9	c				ENE	3				1st watch Corona round moon.
MIDT.		Cum s Cum sf.	6	c		NE	2	ENE	3	71·8			10·30 Sky overcast
													11·45. Sky clearing - a few nimbus clouds to NE.
4		Cum s.	7	c		NE	2			70			a.m. 1·30 Gentle breeze from NNE
8		Cum Cum s.	8	c			1	E b N	3	70·6	272		10·30 wind force 2-3 11·45 W. force 1-2.
NOON		Cum Cum s.	2	b			1	E b N	3	71·2			11·30 Clocks back 3m. 1h 26m slow on Gmt.
4		Cum s.	8	c			1	E b N	3	72·1			7 Rain. sunset Cum s 10.
8		Cum s.	10	0·c			1	ENE	3	70·3			7·15-7·45 wind NNE 2-3.
MIDT.		Cum s.	10	0·c		NE	3	ENE	3	70·8			9·0 Sky cleared. Cum s 3.
													9·50 Sky clouded Cum s 6.
													8·30. Wind from NE. 1b2
													10·30 wind veered to NE. 1-2
													11·0 Wind increased to 3. Clouds 10.
4		Cum s.	8	c		NE	2	ENE	3	71			4·0 a.m. Wind unsteady in direction
8		Loose Cum s.	7	c		ENE	2	ENE	3	70·8	270		4·20 Slight Corona round moon.
													8· Wind 2-3 ENE.
NOON		Cum Cum/Ste.	2	b		ENE	2	E	3	71·0			9· Clocks back 3m.
4		Cum Ste.	2	bc.		NE	2	E	3	71·8			10 Sky cleared Cum s. 10. 10·30. Cum s. 7.
8		Cum s.	4	bc.		NE by E	2	E	3	71·6			11·45 Cum/Cum s. 7-2. 12·45 P.M. Cum s. 7
MIDT.		Cum	2.	bc.		NE	2	ENE	3	71·3			3·20 Cum s/Ste. 2. round horizon b.z.
													6·0 Cum / Ste 2. 15·30. Cum s. 5. The Cum. Ste forming rapidly & then moving from NE. wind NE 2.
													6·45 wind force 3. NE
													9·45 Cum s. 4. wind NE b E 3-4.
4		Cum s	3	bc		NE	2	ENE	3	71·1			4·30 a.m. Dark portion of moon faintly visible.
8		Cums. Cum s	6	c		NE	3	ENE	3	70·9	262		5·30 Sunrise Cum s. 6 from NE (1) above cir. c.
NOON		Cums Cum	1	b		NE	3	ENE	3		261		4 P.M. Haze over whole sky
4		Cum s	1/4	b.z.		NE	3	NE b E	3	72·1			5·0 Wind increased to 4
8			0	b		NE by E	3	NE by E	3	72·0			6·0 clocks back 4m to 1h 32m slow on Gmt.
MIDT.		Cum s	5	bcz		NE by E	4	NE by E	4	71·8			
2a	17		18	19	19a	20	21	20a	21a	22	23	24	25

Meteorological Log kept on board

DATE.		Latitude. N		Longitude. W.		Course and Distance.		Total Compass Error.	Ship's Head.	Wind, at the time of observation.		Barometer.* No.		Thermometers.	
Year 19 10 Month July		Observed.	Dead Reckoning.	Observed.	Dead Reckoning.	Each four hours.		Max. Therm. Of Compass used for Wind, being Variation and Deviation combined. No. 2059	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. Uncorrected Reading.	Att. Therm.	Dry Bulb. No. 8395	Wet Bulb. No. 8396
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.								
3rd	4	23	02	21	16			19°W.		NE	3	30.14	72	70	64.3
	8	22	45	21	24			74	obsd atq.	ENE	3	.19	75	71.3	65
	NOON	22°	28'	21°	32'					E b N	3	.18	75	71.6	65.3
	Current in last hours ... mls.														
	4	22	11	21	38					NE	3	.16	76	71.5	66.2
	8	21	54	21	45					NE	3	.19	76	70.6	
	MIDT.	21	37	21	51					NE b E	3	.18	73	71	
3rd	4	23	02	22	43			19°W.		NE	4	30.16	72	70.7	67
	8	22	45	22	54			72	obsd atq.	NE b E	4	.22	75	71.4	67.1
	NOON	22°	28'	23°	05'					ENE	4	.22	74	72.1	67.8
	Current in last hours ... mls.														
	4	22	11	23	15					ENE	4	.17.		71.1	67.1
	8	21	54	23	25					NE b E	4	.20		70.9	67.3
	MIDT.	21.	37	23	35					NE g	4	.20		70	67
4	20. 4	21.20		23	45			19°W.		NE	4	30.17	71	71 70.1	67
	8	21.03		23.	55			73.	obsd atq.	NE b E	4	.25	74	71.0	66.7
	NOON	20° 47'		24°.	06'					NE b E	4	.22	76	72.0	67.6
	Current in last hours ... mls.														
	4	20 39		24	14					NE b E	4.5	.16	74	71.2	67.2
	8	20 11		24	23.					NE b E	5	.17	74	70.9	67.5
	MIDT.	19 53		24	31					NE b E	4	.20	72	71	67.8
5	4	19. -	35	24	40					NE b E	4	30.15	72	70.8	67
	8	19	17	24	48			72.	obsd atq.	NE b E	5	.21	75	72.3	68.0
	NOON	18°	59'	24°.	56'					NE b E	5	.19	78	72.9	68.5
	Current in last hours ... mls.														
	4	18	40	25	5					NE b E ENE	4.5	.14	74	72.1	68.5
	8.	18	22	25	13					ENE g	3.4	.19	73	72.1	69.0
	MIDT.	18	03	25	22							.21	72	72.4	68.6
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Before accepting the readings of the dry and wet bulb thermometers, the observer should satisfy himself that both are in working order; the dry bulb being free of moisture and the wet bulb being untainted by salt water.

(Margin note: 30 to 20 N / O. / X)

* 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 ______ from ______ to ______

Hour.	Clouds. Upper.	Clouds. Lower.	Prop. of Sky Clouded 0 to 10.	Weather. According to Beaufort Notation.	Fog Intensity. 0 to 5.	Waves. Direction from.	Waves. Disturbance 0 to 10.	Swell. Direction from.	Swell. Disturbance 0 to 10.	Temp. by No.	Spec. Grav. by No.	Time of Remark.	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.					Also record when Confused.							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.)
4		Cum s.	8										
8		Loom.											
NOON													
4													
8													
MIDT.													
4		Cum s.	6	bc.		NE g	3	NE	4	71		AM. 4.30 4.50.	Darker portion of moon visible. Appearance of rain to ENE.
8		Cum s	10	c		NE	4	NE b E	4	71.4		9.30 Noon.	Clocks back 4m to 1h. 36m slow on G.M.T. Wind squally.
NOON		Cum s	6,	c.		ENE	4	ENE	4	71.0	26.1	6.0	Clouds forming, wind increased 4-5 Swell ENE 5.
4		Deh. Cum s.	1	bz.		ENE	4	ENE	4	71.0		6.30	Cum. s. 7.
8		Cum s	6	c.				ENE g	5	71.0			1st Watch slight phosphorescence.
MIDT.		Cum s	8	bc.		NE g	4	NE g	5	71.0			
4		Cum s.	10	oc		NE g	4	NE g	4	71		9.30 AM.	Renewed calico & wick of wet bulb & cleaned water container
8		Cum s.	10,	oc.		NE b E	4	NE b E	4	71.5	25.8	11.0 10.0	Clocks back 4m. to 1hr 40m slow on G.M.T. Sun beginning to show.
NOON		Cum s	10,	c		NE b E	4	NE b E	4	71.8		6.45 PM. 5.45	Cum s. 9
4		Cum s	9,	c		NE b E	4	NE b E	5	71.5	26.0	6.45	Cum s 10,
8		Cum s.	8	c		NE b E g	4	NE b E g	5	71.2			Midt. considerable phosphorescence in water.
MIDT.		Cum s.	10	oc.		NE b E g	4	NE b E g	5	71.4			
4		Cum s.	10	o		NE g	4	NE b E g	5	71.2		2.30 AM 4.0.	Wind inclined to veer to ENE Wind unsteady between NE & ENE
8		Cum/ Cum s.	5,	bcz.		NE b E	4	NE b E	5	71.8	25.7	4.30 5.10	Wind eased 3-4. Wind eased to 3
NOON		Cum/ Cum s.	6	cz.		NE b E	4	NE b E	6	72.1	25.5	6.0 8.0	Wind NE b E 4. Clocks back 4' to 1h. 44m slow on G.M.T.
4		Cum/ Cum s.	7	c		NE b E	4	NE b E	6	72.5		9.45 4.15	Cum s. 1. Wind eased to 4
8		Cum x/ Cum s.	6	c		ENE g	4	ENE g	5	72.2		6.45	Sunset. Cum s. 8. Dark with appearance of rain in every quarter.
MIDT.		Cum s	7	bcqz		ENE g	4	ENE g	5	72.4		7.0 1st watch. Midt.	A few drops of rain Inclination to rain from time to time wind squally
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 ______________ **Captain** ______________ **from** ______________ **to** ______________

DATE. Year 1910 Month July Day. Civil Time.	Hour.	Latitude. N Observed.	Latitude. Dead Reckoning.	Longitude. W. Observed.	Longitude. Dead Reckoning.	Course and Distance. Each four hours. True Course.	Distance by Log.	Total Compass Error. Of Compass used for Wind, being Variation and Deviation combined. (Max there)	Ship's Head. By same Compass as Wind.	Wind, at the time of observation. Direction. State if true, or subject to Compass Error, or only to Variation.	Force. 0 to 12.	Barometer.* No. Height of Cistern above Sea feet. Uncorrected Reading.	Att. Therm.	Thermometers. Dry Bulb. No.	Wet Bulb. No.
6th.	4	17	45	25	30			19°W.		ENE^{ly}	4	30.13	72	71.5	68.2
	8	17	27	25	38			73.		E^{b}N	3-4	.18	72	71.2	68.8
	NOON	17°	8′	25°	42′					NE^{b}E	4	.17	74	72.9	69.6
	Current in last hours ... mls.														
	4	16	53	25	39					NE	4	.12	74	73.0	69.9
	8	16	39	25	37					NE	2.3	.16	74	73.0	70.1
	MIDT.	16	25	25	34					E^{b}N	01	.16	74	73	70
7th.	4	16°	11′	25	32					E^{b}S	4	30.09	72	72.1	68.8
	8	15	54	25	28			73.	obsd avg.	NE^{b}N	3.4	.14	75	73.2	70.0
	NOON	15°	38′	25°	24′					NE	3	.13	77	74.1	68.5
	Current in last hours ... mls.														
	4	15	25	25	22					NE	2	.07	81	74.3	69.4
	8	15	12	25	20					NE^{b}E	3	.11	75	73.9	70.1
	MIDT.	15	4	25	18					ENE^{ly}	1.	.11	75	74	69
8.	4	14	56	25	16					E^{ly}	2.	30.05	74	73.7	69
	8	14	26	25	12			76.	obsd at 9	NE^{b}N	3.	.09	76	75.0	70.2
	NOON	13°	56′	25°	07′					NNE	3	.07	80	75.9	70.4
	Current in last hours ... mls.														
	4	13	30	25	02					NNE	2.3	.02	81	76.8	71.1
	8	13	04	24	57					N^{b}E	2.3	.05	79	76.0	70.2
	MIDT.	12	38	24	52					Calm	0	.05	77	76	69.8
9th.	4	12	12	24	47					Calm.		30.01		76.7	70.8
	8	11	46	24	42			78		N	3.4	.04		77.6	70.8
	NOON	11°	20′	24°	37′					N	3	.04		80.1	77.9
	Current in last hours ... mls.														
	4	10	56	24	34					NNE	3.4	.01		79.0	72.8
	8	10	33	24	30					S^{b}W	3.4	.06		78.0	74.5
	MIDT.	10	9	24	27					N^{ly}	1.	.02		75.8	73.2
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Before accepting the readings of the dry and wet bulb thermometers, the observer should satisfy himself that both are in working order; the dry bulb being free of moisture and the wet bulb being untainted by salt water.

20.6 N -6 3/5 X

Hour.	Clouds. Upper.	Clouds. Lower.	Prop. of Sky Clouded. 0 to 10.	Weather. According to Beaufort Notation.	Fog Intensity. 0 to 5.	Waves. Direction from.	Waves. Disturbance. 0 to 10.	Swell. Direction from.	Swell. Disturbance. 0 to 10.	Temp. by No.	Spec. Grav. by No.
4		Cum s/Str.	10	ocq		ENE^{ly}	3.	ENE^{ly}	4.	72.1	
8		Cum s/Str.	10.	ocqd.		ENE	3	ENE	4.	72.2	25.3
NOON		Cum s/Str.	10	oc.		NE^{b}E	4	ENE	4.	73.9	25.1
4		Cum s/Str.	10	oc		NE	3	NE^{b}E	4	72.9	
8		Cum s/Str.	10 (1.2)	oc.		NE	2	NE^{ly}	3.		
MIDT.		Cum s.	3	bcz.		ENE^{ly}	1	ENE^{ly}	3	73.	
4 (July 8.)		Str.	10	oc.		—	0	ENE^{ly}	3	76	
8		Str/Cum s	10	oc		NE^{ly}	3	NE	3	76.7	25.1
NOON	Cir. s.	Cum/Cum s	3,	bcz		NNE^{ly}	3	NE^{b}E	4	77.0	24.9
4		Cum s/Cum	8	c		NNE^{ly}	2	Cross NE^{b}E & S^{ly}	3	77.1	
8		Cum s	4.	bcz						76.5	
MIDT.		Cum s	9	cz						76.8	
4 (July 7.)	—	—	0	b		E	3.	ENE	5	73.8	
8	—	Cum s	9	c.		NE^{ly}	3.	NE	4	74.1	25.0
NOON		Cum/Cum s./Str.	8,	czq		NE	3	NE	4	74.6	25.0
4	Cir c.	Cum/Cum s.	5	bcz.		NE	2	Cross NNE & NE^{b}E	4	74.5	
8		Cum s.	3.	bc.		—	2	NE^{ly}	4	75.5	
MIDT.		Cum s	5	bc		ENE^{ly}	2	NE^{ly}	3	75.5	
4		Str.	10	o			1	NE^{ly} & S^{ly}	3	77	
8	Cir s.	Str.	1	b		N	2	NNE & S	3	78.0	24.4
NOON	Cir c/Cir s.	Cum/Cum s	4	bcz.		N	3	N & S	3	80.6	23.9
4		Cum s/Cum	10	c		NNE	3	NNE & S^{ly}	4	80.7	
8		Nim	10	oc 1 R.						80.0	
MIDT.		Str/Cum s/Nim	8	oc 3 R.						80.0	
2a	17		18	19	19a	20	21	20a	21a	22	23

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. Also record when Confused.

Remarks. (24 Time of Remark; 25) 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.)

4.AM. Inclined to rain at times.
4.30 Wind eased to 3 ENE^{ly}.
8.0 slight drizzle at times
10.30 Clouds breaking, sun showing Cum s. 10 ocz.
5PM. Wind eased to 3-4.
5.45 Wind eased to 3.
6.30. Wind puffy force to 3, mean dirn NE^{ly}.
Str/Cum s 10
8.0 Wind steadier in force & direction.

~~4 AM.~~ July 8.
1PM. A counter swell beginning from South.
4.0 Slight S^{ly} swell. as well as NE^{ly} one.
Appearance of rain to W.
8.0 Cum s ©
Midnt. Much phosphorescence. Wind light & variable during the first watch (8-12PM).

1.45AM. Wind veered to E by S. & increased 4-5
Sky cleared.
9.0 sky clears quickly, clouds over, & again clears
5.15PM. Wind increased to 3-4.
5.30 Cum/Cum s 8 with a suggestion of Cirrus above
8.30 Zodiacal light (fair).

1.30AM. Appearance of heavy rain.
6.30 sky clearing. 8.0 S^{ly} swell now >
10.0 Cum/Cum s 9.
~~4.0~~ Sunset Cum s/Cum n 10.
6.45 Commenced to rain. wind 0-2 various
8.0 Rain moderate - wind variable.
10.45 Rain eased to intermittent drizzle
1st watch. wind variable, principally from SW. quadrant & force 0 to 3.

* 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.

14767—7500

B

Meteorological Log kept on board

Year 1910 Month July

DATE. Day. Civil Time.	Hour.	Latitude. N. Observed.	Latitude. Dead Reckoning.	Longitude. W. Observed.	Longitude. Dead Reckoning.	Course and Distance. Each four hours. True Course.	Distance by Log.	Total Compass Error. Of Compass used for Wind, being Variation and Deviation combined.	Ship's Head. By same Compass as Wind.	Wind, at the time of observation. Direction. ~~State if true, or subject to Compass Error, or only~~ to Variation.	Force. 0 to 12.	Barometer.* No. Height of Cistern above Sea feet. Uncorrected Reading.	Att. Therm.	Thermometers. Dry Bulb. No.	Wet Bulb. 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.						Max Therm.							
10	4	9	46	24	24			19° W.		Var Sly.	1 to 3	30.02	79	Posn of air from	
	8	9	23	24	21			82	obsd at 9	Sly	1 to 3	·09	86	Engine room	
	NOON	9°	6′	24°	17′ (Current in last hours mls.)					SbW.	3·4	·07	88	having effected	
	4	8	39	24	15					SSW.	2·3	·03	81	therms	
	8	8	17	24	13					SSW	1·2	·06	81	when not recorded.	
	MIDT.	7	55	24	11					SSW	3·4	·06	83		
11th.	4	7	33	24	9					SSW	2·4	30·05	83		
	8	7	16	23.	56				obsd at 9.0	SWbS.	2·3	·09	85		
	NOON	7°	0′	23°	43′ (Current in last hours mls.)					SSW	2·3	·09	86		
	4	6	37	23	20					SSW	1·2	·04	85		
	8	6	15	22	57					Sly	1·2	·07	83		
	MIDT.	5	53	22	35					SbWly	1·2	·08	81		
12.	4	5·~~31~~	31	22	13			Varn. 20 W.		Calm.		30·01	80		
	8	5	9	21	51				obsd at 9.	S.E.	5	·09	80	75·0	74·5
	NOON	4°	57′	22°	4′ (Current in last hours mls.)					SSEly	4	·04	77	76·0	73·3.
	4	4	37	22	15					SSW	2·3	·02	79		
	8	4	19	22	0					SWbS.	2·3	·08	82		
	MIDT.	4	02	21	44					SWly	2·3	·08	78		
13.	4	3	45	21	29					SSW	4	30·02	78		
	8	3	28	21	14					SWbW	4	·08	78		
	NOON	3°	14′	20°	47′ (Current in last hours mls.)					SW	5	·04 (at 12.30)	81		
	4	3	14	20	25					S	5	29·99	82		
	8	3	15	20	35					SbW	3·4	30·07	81	79·9	74·8
	MIDT.	3	14	20	53.					Sly	3·4	·08	80	79·6	75
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

(Printed vertically beside the thermometer columns:) Before accepting the readings of the dry and wet bulb thermometers, the observer should satisfy himself that both are in working order; the dry bulb being free of moisture and the wet bulb being untainted by salt water.

* 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 from to

Hour.	Clouds. Names. Upper.	Clouds. Names. Lower.	Prop. of Sky Clouded. 0 to 10.	Weather. According to Beaufort Notation.	Fog Intensity. 0 to 5.	Sea Surface. Waves. Direction from.	Waves. Disturbance. 0 to 10.	Swell. Direction from.	Swell. Disturbance. 0 to 10.	Temp. by No.	Spec. Grav. by No.	Time of Remark.	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.					Also record when Confused.							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.)
4		Str/Nim	10	o.p.				NEly & Sly	3	79·9		Morn. watch. 9.0 am.	occasl showers. - slight to mod.te till 7.45 NEly swell now very slight.
8		Cum/Cum n/Str.	9	c		Sly	2	Sly & NEly	3	80·4	23·5	A.M. 2 PM.	(forenoon) wind variable in dirn. force 1 to 4 Rain slight to mod.te
NOON		Cum/Cum s/Cum n	9	c		Sly	3	Confused Sly	3	80·0	23·5	5.0 6 + after.	Rain ceased. Wind Sly 0 to 1. swell incrd to SSW 4 (Conf.)
4		Cum s/Str/Nim	10	o.c. 2 R.		Sly	2	slightly confused SSW	3.	79·9		10.30 Midt	Heavy rain squall. much phosphorescence weather
8		Cum s	9	o.c. 1 R.			1	SSW	5	79·2			clearing
MIDT.		Cum s/Nim	8	b.c.p.		Sly	3	Sly	3	80			
4		Str/Nim	10	ocp		SWly	2	Sly	4	79·4		Middle Noon.	Occasional heavy rain. SSWly swell long. Sly swell smaller & shorter.
8	Cir c/Alt c.	Cum	4	bc.		SW	2	SbW	3	80·2	23.	4 PM.	Two swells from same dirn one very long & heavy other short & small.
NOON	Cir/Cir s/Alt s	Cum	4	bc.		SSW	2	Cross S SSW	5	80·6		6.0 7-8.	Cum/Cum s/Nim/Alt s. propn 9 Drizzle S.E. 3-4. A well marked
4	Cir s.	Str/Cum s/Cum	8	c			1	SSW	5	81·1			"Thunder bow" to S.
8		Cum s	10 (1 or 2)	c 1 D			1	SSWly	5	80·5		8.0	Moon & some bright stars showing through.
MIDT.		Cum/Nim	7	bc.		SbWly	2	SbWly	4	80·9			
4			8	cz.						80·8		~~AM~~ AM. 5.30 8.0	Gentle breezes from N. Rain moderate to heavy.
~~8~~ 9		Nim	10	o.r.								8.15 9.0	Wind springs up S.E. 5 Wind increased 7-8 Rain heavy.
NOON		Str/Nim	10	o4r		S.Ely.	3.	Confused about Sly	4			10.0 11.30	Wind eased to 5, rain eased mod. rain easing.
4		Cum s/Cum n	10	o c 2 R. q		Sly	3.	rather confused SbW	4	80·9		Noon. 2 PM.	Rain almost stopped wind veered to SSEly. Rain stopped, wind veered S.S.W 2-3.
8		Str/Cum s.	5	bc.			2	SSWly	4	80·8		7.0 7.55	Sky clearing Halo round moon rad. 22¾°. Also. Corona
MIDT.		Str/Cum s	3.	bc.		SWly	2						when clouds pass below.
4		Str/Nim	8	cqp.		SWly	2.	Sly	3.	80·2		AM. 3.30.	Squall with heavy rain, coming from S.E. Lightning to Eward
8		Cum s/Cum	9	cp.		SWly	4	SSWly	3.			8.0	Much rain about, though only an occasional drizzle has come to ship.
NOON		Cum s/Str/Cum/Nim	10	ocp.		Confused S + SW	4	SW.	4	80·2		Noon.	Sun occasionally showing, slight showers in AM.
4	Alt c/Alt s/Cir s	Cum s/Cum/Str	7	c		Sly	5	Confused S.	4			5.0. 9.0	Lower clouds clearing away. Alt c, Alt. s + Cir s. Wind dying down.
8	Alt s.	Cum s/Str.	9 (1 or 2)	c		Sly	3.	SbEly	4	80·5		10.40.	Wind freshened again.
MIDT.			7	bcq		Sly	3.	Sly	4	80·5			
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 ______ Captain ______ from ______ to ______

Year 19 10 — Month July

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.	Latitude (N. S.) Observed.	Latitude Dead Reckoning.	Longitude (W.) Observed.	Longitude Dead Reckoning.	Course and Distance: True Course.	Distance by Log.	Total Compass Error. Of Compass used for Wind, being Variation and Deviation combined (Var^n & Dev^n, Therm^r)	Ship's Head. By same Compass as Wind.	Wind, at the time of observation. Direction. State if true, or subject to Compass Error, or only to Variation.	Force. 0 to 12.	Barometer.* No. Height of Cistern above Sea feet. Uncorrected Reading.	Att. Therm.	Thermometers. Dry Bulb. No.	Wet Bulb. No.
14	4	3	14	21	11			20 W.		S^b W	4	30.04	81	81	74.2
	8	2	56	21	15			86.	obsd at 9.	S	3.4	30.13	88	81.5	
	NOON	2° 37′		21° 20′						S^b W	4	30.13	91	81.5	73.0
		Current in last hours			mls.										
	4	2	16	21	33					S^b W	3.4	30.11	92	80.6	73.8
13/5 = 2.6 To Noon	8	1	55	21	43.					SSW.	2	.14	85	–	–
	MIDT.	1	34	21	53.					S^b W.	2.3	.14	83	–	–
15	4	1	12	22	3					S.S.W.	2	30.09	82		
	8	0	54	22	6					Mag^c obs^ns going on.					
	NOON	0° 40′		21° 56′						S.S.W.	2.3	.13	86		
		Current in last hours			mls.										
	4	0	27	21	49					S^b E	2.3	.08	87		
	8	0	9 S	21	41					S^b E	1	.13	83		
	MIDT.	0	9	21	33.					SE^b S.	1.2	.15	82	76.5	76.0
16	4	0	S. 27	21	24			20° W.		SE^b S.	2	30.10	80	76.3	72
	8	0	49	21	18					SE	2	.18	84	76.8	71.9
	NOON	1° 7′		21° 16′						E^b S.	2	.13	81	78.2	72.5
		Current in last hours			mls.										
	4	1	37	21	23.					E^g	2	.10	84	76.2	72.3
	8	2	07	21	30					E	2.3.	.14	79	77.0	73.0
	MIDT.	2	37	21	27					E^b N.	3.	.14	79	77	73.5
17	4	3	8	21	24					E^g	3.	30.08.	78	77.5	73.0
	8	3	38	21	25				obsd at 9.	E^b N.	3	.17	77	74.8	73.6
	NOON	4° 7′		21° 26′						E	5	.13	79	74.9	72.6
		Current in last hours			mls.										
	4	4	32	21	16					E^b S.	3.	.11	84	78.8	74.5
	8	4	58	21	30					ESE	3.4	.17	80	79.0	74.9
	MIDT.	5.	23	21	43					SE^b E	4.5	.17	78	77.9	74
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Before accepting the readings of the dry and wet bulb thermometers, the observer should satisfy himself that both are in working order; the dry bulb being free of moisture and the wet bulb being untainted by salt water.

* 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.

Hour.	Clouds. Upper.	Clouds. Lower.	Prop. of Sky Clouded. 0 to 10.	Weather. According to Beaufort Notation.	Fog Intensity. 0 to 5.	Waves. Direction from.	Waves. Disturbance. 0 to 10.	Swell. Direction from.	Swell. Disturbance. 0 to 10.	Sea Temp. by No.	Spec. Grav. by No.	Time of Remark.	Remarks.
4			5	bcp		S^g	3.	S^g	4	80.5		4.	A.M. Slight showers. Det Cums/Albs/Cirs/Cir/Str
												10.0.	New muslin & wick on wet bulb.
8		Cum	4	bcz		S	4	S^g	3	80.8		6.	P.M. Wind eased to S.S.W 2.
NOON	Alts	Cum	6.	bc.		S^b W	4	S^g	3	81.2			
4	Alts	Cum	6.	bc.		S^b W	3	Conf. SW^g	3	81.1			
8		Det. Cum/Cums.	4	bc.			1	S^g	3	80.0			
MIDT.		Stc/Cums.	3.	bc.		S^g	3	S^g	3	79.5			
4		Cums	2	bc.			2	S^g	3	78.0		3	P.M. Wind SSE 2.3
												4.0	Swell long & crossed by slight SSE one
8			2					S^g	3.				Sunset. To NW over sun & to E^wd. Albc/Alts/Cirs/Cir. propn. 2. Wind S^g 1.
NOON	Alts.		1	bc.		S^g	2	S	4	77.8	23.5	10.45.	Curious light Cirro-strat. Cloud of no breadth stretching in an ESE^g dirn. across SE quadrant.
4	Alts/Altc/Cir 1.			b		S^g	2	S	4	77.9			140° length; 40°; 23½°; N^b W.
8	Alts	Cums		b.			1	S^g	5	77.2			
MIDT.				bc.			2	S^g	4	77.4			
4			3.	bcz.				S^g	4	76.		5.30	A.M. sunrise. Cum/Det Cums/Alts/ also Cirs & Cir.
												5.30	P.M. Sunset. on clear horizon. Green flash very distinct
8	Cirs.	Cum	1.	b			1	long S.	4	76.7		6.45.	Det Cum s 3. from. SE^b S. (3)
												7.0	Wind increased 2-3.
NOON	Cirs	–	1/4	b.			1	long S.	4	76.7		10.30	Short sharp shower.
4	–	–		b.			1	long S	4	76.2			
8		Cum/Cums.	7.	c.			2	long S.	4	78.0			
MIDT.		Cums	4	b.c.			1	S^g	4	77.8			
4			0	bq.		E^g	2	S^g	4	78.2		A.M. 1.0	Squalls 3.4. dirn. (general). ESE.
												2.45	Cloudless.
8	Alts.	Cum/Cums/Cum^n	10	ocqp.		E^g	2.	SSE	4	78.0		4.0	Squalls frequent 3-4.
												6.30	clouded over rapidly Cums & Cum 8.
NOON	Alts	Str/Nim/Cum	9	ocqp		E	4	Conf.		79.1		8.50	Heavy rain squall for 10 mins.
												10.25.	Wind veered to E^b S & incd to. 5 Forenoon squally. 5 in squalls. 3.4 between.
4	Alts.	Cums/Cum.	4	bc.		E^g	3.	S^b E/SE	5	79.5		4.30	P.M. showers about.
8		Det Cums/Cum	3	bc.		E^g	3	SE^g	5	79.7			
MIDT.			5	bcq		ESE^g	4	SE^g	5	79.4			
2a	17		18	19	19a	20	21	20a	21a	22	23	24	25

Clouds: 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. Sea Surface: Also record when Confused.

Remarks: 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.)

Meteorological Log kept on board

Captain ______ from ______ to ______

Year 19 10 · Month July · Latitude S. · Longitude W. · Total Compass Error: Var^n + max / Therm^1. · Barometer No. ___ · Height of Cistern above Sea ___ feet.

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.	Latitude Observed.	Latitude Dead Reckoning.	Longitude Observed.	Longitude Dead Reckoning.	Course and Distance (Each four hours) True Course.	Distance by Log.	Total Compass Error. Of Compass used for Wind, being Variation and Deviation combined.	Ship's Head. By same Compass as Wind.	Wind, at the time of observation. Direction. ~~State if true, or subject to Compass Error, or~~ only to Variation.	Force. 0 to 12.	Barometer.* Uncorrected Reading.	Att. Therm.	Thermometers. Dry Bulb. No.	Wet Bulb. No.	
18	4	5	49	21	56			20 W.		SE till 3.30 P.M. SE^b S.	4	30.14	78	77.8	73.2	
	8	6	14	22	09			84 1/2	obsd at 9.	SE^b S.	4.5	.21	81	79.8	73.9	
	NOON	6°	40'	22°	22'					SE^b S	5	.18	82	80.1	74.2	
		Current in last hours			mls.											
	4	7	0	22	~~40~~ 40					SE^b S.	5	.13	83	79.9	73.8	
	8	7	17	22	50					SE^b S.	3-4	.19	79	78.6	72.2	
	MIDT.	7	35	23	01					ESE	3.4	.20	78	78.5	72	
19	4	7	52.	23	12					SE	3			78	71.6	
	8	8	10	23	23			81		SE^b S.	3.4	30.23	80	78.8	70.5	
	NOON	8°	10'	23°	23'					SE	3.	.20	79	79	71	
		Current in last hours			mls.											
	4	8	23	23	31					SE	4	.15	81	78.6	71.9	
	8	8	35	23	40			1 obsd	8.30	SE	3.4	.20	79	77.8	72.0	
	MIDT.	8	48	23	49					SE	2-4	.22	79	76	72.5	
20	4	9	00	23	58					SE	4	30.18	78	77.1	71.9	
	8	9	21	24	13			80		SE^b S	5	.21	79	78.9	70.4	
	NOON	9°	42'	24°	28'					SE	5	.21	79	77.1	71.1	
		Current in last hours			mls.											
	4	9	59	24	44					SE	3.4	.15	79	76.8	71.0	
	8	10	15	25	0					SE	3.4	.22	77	76.0	71.1	
	MIDT.	10	28	25	11					SE	2 to 4	.21	77	75.8	70.2	39.6
21.	4	10	41	25	23			20 W.		SE	4	30.18	75	75.0	68.2	68
	8	10	54	25	35			79	obsd at 9.	SSE	3.	.23.	77	76.5	67.0	59
	NOON	11°	7'	25°	47'					SSE	3	.22	78	75.8	67.2	62
		Current in last hours			mls.											
	4	11	15	26	2					SSE	3	.15	77	76.5	67.5	60
	8	11	23	26	18					SE^b E	3	.21	76	75.6	68.9	70
	MIDT.	11	38	26	28					SE^b S	2.4	.22	75	74.4	68.6	77
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	

Before accepting the readings of the dry and wet bulb thermometers, the observer should satisfy himself that both are in working order; the dry bulb being free of moisture and the wet bulb being untainted by salt water.

Margin notes: 0 to 10 S · 3/6 · .5 · X · 66

* 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.

Clouds. 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.

Hour.	Clouds Upper.	Clouds Lower.	Prop. of Sky Clouded. 0 to 10.	Weather. According to Beaufort Notation.	Fog Intensity. 0 to 5.	Waves Direction from.	Waves Disturbance. 0 to 10.	Swell Direction from.	Swell Disturbance. 0 to 10.	Temp. by No.	Spec. Grav. by No.
4			4	bc		E^g	4	SE^g	4	78	
8	Alto / Alt-c.	Cum s. / Cum	6.	bc.		SE^g	4	S^b E	4	79.3	
NOON		Det Cum / Cum s	3.	bc.		SE^b S.	4	SSE^g	5	79.5	
4		Cum / Cum s.	6.	bc.		SE	4	Conf. S^b E	5	79.7	
8	Faint Cir.	Cum	2.	bc.		SE^g	4	SSE^g	5	79.5	
MIDT.		Cum s.	2	bc.		SE^g	3	SSE^g	5	79	
4	Cir s	Cum	5	bc.		SE	3	SE	4	78	
8	Alts	Cum / Cum s	7.	c		SE^b S.	4	Slightly Conf. SE^b S.	4	79.2	
NOON				bc.						79.6	
4	Alt s	Cum / Cum s.	4	bc.		SE	4	SE^b S.	4	79.3	245
8		High Cum s.	3	bcq		SE	3.	SE^b S.	4	79.1	
MIDT.		Cum / Nim	7	bcqp.		SE	3.	SE^g	4	78.8	
4	Cir c.	Cum	6.	bc.		SE	3.	SE	4	78.2	
8	Cir s / Alt s.	Cum	1	b.		SE^b S.	4	SE^b S	5	78.4	
NOON	Alt s.	Cum s / Cum	4	bc.		SE	4	SE	4	78.2	
4	Alt s.	Cum s & Cum	2	bcq		SE	3.	Cross S & SE	5	78.3	
8	Alt s	Cum	2.	bc		SE^g	3.	SE^g	4	78.0	
MIDT.				bcq.		SE^g	4	SE^g	4	78.2	
4		Cum s	9	qpc.		SE	4	SE^g	4	75.1	
8		Cum s / Cum	6	c		SSE	3	SW^b S	7	77.1	25
NOON	Cir s.	Cum	1.	b.		SSE	3.	SW^b S	6	76.2	
4	Cir s	Cum	1	b		SSE	3.	SW^b S	6	77.2	
8		Cum s	9	c.q.		SE^g	3.	Conf. S^b E	4	77.0	
MIDT.	Alt c.	Cum / Nim	8	bcqp		SE^g	3	SE^g	4	76.9	
2a	17		18	19	19a	20	21	20a	21a	22	23

Waves / Swell: Also record when Confused.

Time of Remark (24). Remarks (25). 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.)

18:
- A.M. 2.30 Slight shower.
- 5.15. Almost completely clouded over. Str/Nim/Cum s/Alt s / 9. Shower about
- 5.45 Clearing fast.
- P.M.
- 4.45 Wind easing.
- 5.30. Wind SE. 4
- 6.30 Wind eased 3.4.

19:
- 2 A.M. Drizzle
- 7.0 Wind incr'd 3.4.
- 6 P.M. Cum s/Cum n/ + Cum & Str round horizon 7. wind eased to 2. squalls 3.4 about SSE
- 7.0 Low Alt c. 6.
- 8.0 Since sunset occasional short slight rain or drizzle.
- Midnight. Sharp showers & many Nim Cl. about. wind 2. squalls 4.

20:
- 1.0 A.M. After a slight shower, wind increased. from force 2 to force 4
- 11.15 Wind eased to 3.4 & became unsteady in dirn.
- 11.30 Wind increased to 5
- 4 P.M. Wind in squalls up to 4 & 4.5
- 4.10 A few spots of rain.
- Green flash at sunset.

21:
- A.M. 4.0 Squalls (some rain) up to force 6
- 8.0 besides heavy swell from SW^b S. was a smaller one from SSE & one from E^d
- 11.30 clocks back 5^m 1^h 49^m slow on G.M.T.
- Noon slight cross swell from SSE
- 7 P.M. Cum s. 7. wind backed to SE 3. swell coming in from SE^wd.
- 7.50 Wind backed to SE^b E
- 8.00 In squalls wind force up to 4. few spots rain
- 10.30 slight rain squall.
- 11.30 Wind freshened from 2 to 4, squally.
- 8.0 sheet lightning to SE. SE.

Meteorological Log kept on board

Captain _____ from _____ to _____

DATE. Year 1910 Month July Day, Civil Time.	Hour.	Latitude. Observed.	Latitude. Dead Reckoning.	Longitude. Observed.	Longitude. Dead Reckoning.	Course and Distance. Each four hours. True Course.	Course and Distance. Each four hours. Distance by Log.	Total Compass Error. Of Compass used for Wind, being Variation and Deviation combined.	Ship's Head. By same Compass as Wind.	Wind, at the time of observation. Direction. State if *true*, or subject to Compass Error, or only to Variation.	Wind, at the time of observation. Force. 0 to 12.	Barometer.* No. Height of Cistern above Sea feet. Uncorrected Reading.	Barometer.* Att. Therm.	Thermometers. Dry Bulb. No.	Thermometers. Wet Bulb. 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.													
22.	4	11	54	26	38					SE	4	30.20	75	74.3	68.8
	8	12	11	26	50			78	Aboard at 8.30	SE^{b}S.	4	.25	77	75.9	68.2
	NOON	° 12 ′	° 29 ′	° 27.	° 02 ′					SE	4	.27	82	76.0	68.3
		Current in last hours			mls.										
	4	12	43	27	12					SE	4	.25	87	75.8	68.0
	8	12	57	27	23					SE	3.4.	.26	78	75.0	69.2
	MIDT.	13	10.	27	31					SE^{b}E	2.3	.28	76	74.5	70
23.	4	13	24	27	39										
	8	13	42	27	46			77							
	NOON	° 14 ′	° 01 ′	° 27.	° 53 ′										
		Current in last hours			mls.										
	4	14	18	27	54										
	8	14	35	27	55										
	MIDT.	15	00	28	60										
23	4	13	24	27	39					SE	4	30.27	75	74.2	69
	8	13	42	27	46			77	Aboard at 9.0	SE^{b}E	3.4	.30	76	73.8	69.9
	NOON	° 14 ′	° 01 ′	° 27.	° 53 ′					E	4	.28	.78	76.6	71.0
		Current in last hours			mls.										
	4	14	18	27	54					E^{b}S	4	.23	78	75.0	69.5
	8	14.	35	27	55					ESE	3.4.	.27	75	74.4	69.0
	MIDT.	15	00	28	00					E^{b}S	3.4	.27	75	74.4	69
	4														
	8														
	NOON	° ′	° ′	° ′	° ′										
		Current in last hours			mls.										
	4														
	8														
	MIDT.														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Before accepting the readings of the dry and wet bulb thermometers, the observer should satisfy himself that both are in working order; the dry bulb being free of moisture and the wet bulb being untainted by salt water.

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

Hour.	Clouds. Names. Upper.	Clouds. Names. Lower.	Clouds. Prop. of Sky Clouded. 0 to 10.	Weather. According to Beaufort Notation.	Weather. Fog Intensity. 0 to 5.	Sea Surface. Waves. Direction *from*.	Waves. Disturbance. 0 to 10.	Swell. Direction *from*.	Swell. Disturbance. 0 to 10.	Temp. by No.	Spec. Grav. by No.	Time of Remark.	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.					Also record when Confused.							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.)
4		Cum	2	bc.		SE	4	SE^{b}	4				
8	Alt.s	Cum	2.	c		SSE	3.	SW^{b}S.	7				
NOON	Air / Cir.s.	Del Cum	1	b		SSE	3.						
4	Air / Cir.s.		8	b		SSE	3.						
8		Cum / Cum.s.	3	cg		SE^{g}	3.						
MIDT.			4	bcgb		SE^{g}	3						
4	July 22nd.			bc.		SE	3.	SE^{b}S.	5	75.1		4.0 PM. A little Del Cum around horizon	
8				bc.		SE^{b}S.	4	SSE	5	76.4		5.30. In the ENE & NNW. The cirrus is	
NOON				b.		SE	4	SE^{b}S / S^{b}W.	5	76.9		lying in streaks that appear to converge	
4				c		SE	4	SE^{g} / SSW	4 / 5	76.4		on ENE point of horizon.	
8				bc.		SE	4	SE^{g} / SW	4 / 5	76.3			
MIDT.				bc.		SE	4	SE^{g} / SW^{g}	5 / 6	75.5		No hydrom^{r} readings on a/c of motion.	
4		Cum	5	bc		SE	4	SW^{g}	5	76.1		4 AM. passing showers on horizon	
8	Alts	Cum / Cum / Cum	7	cp.		SE	4	Comp. / SSE^{g}	5	76.1		8.0 Showers about a few drops on ship.	
NOON		Cum / Cum / Cum	8	c		SE	4	Comp / SE	5	76.0		11.0 Clocks back 8^{m}. To 1^{h} 57^{m} slow on Gmt.	
4	Cir.s.	Cum / Cum.s	4.	bc.		ESE^{g}	4	Comp / SE^{g}	5	75.5		4.0 PM. Chiefly Cum s. clouds	
8	Cir.s	Dtd Cum.s.	4	bc.		ESE	3	Comp / S^{b}E^{g}	5	75.4		7.0 Zodiacal light fairly plain ~~from~~ extending towards Jupiter & to an altitude 32°.	
MIDT.			4	bc.		E^{g}	3	Comp / S^{b}E^{g}	5	75.4			
4		Cum.s	5										
8	Alt.s	Cum / Cum / Nim	7										
NOON		Cum / Cum / Cum.s	8										
4	Cir.s	Cum / Cum.s	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

DATE. Year 1910 Month July Day. Civil Time.	Hour.	Latitude. Observed.	Latitude. Dead Reckoning.	Longitude. Observed.	Longitude. Dead Reckoning.	Course and Distance. True Course.	Distance by Log.	Total Compass Error. Varn (Max. therm)	Ship's Head. By same Compass as Wind.	Wind. Direction.	Wind. Force. 0 to 12.	Barometer.* Uncorrected Reading.	Att. Therm.	Dry Bulb.	Wet Bulb.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
24.	4	15	24	28	6					ESE	4	30.25	74	74.5	69.1	74
	8	15	49	28	10			77	obsd at 9.	SE^bE	4.5	.28	75	74.2	70.6	83
	NOON	16	14	28	15				obsd at 1.	SE^bE	5.6	* .23	76	74.8	69.3	74
		Current in last hours			mls.											
	4	16	48	28	24					ESE	5	.21	78	73.8	68.2	74
	8	17	23	28	33					ESE	4	.24	74	73.2	68.0	76
	MIDT.	17	54	28	45					E^bS	4	.27	73	72.8	67.4	74 M=76
25	4	18	25	28	57					E^bS.	4	30.25	72	72.5	67.1	74
	8	18	56	29	05			76.		E^bS.	3.4	.31	76	74.0	67.9	72
	NOON	19	27	29	14					E	3.4	.30	77	73.9	67.5	70
		Current in last hours			mls.											
10h 20 S	4	19	55	29	15					E	2.3.	.28	76	72.8	66.9	72
3/5	8	20	10	29	21					E^bS.						
.6	MIDT.	Off. S. Trinidad								E^bS.	2	.33	75	72.6	67	74 M=72
26th	4	Anchored on W. side of S. Trinidad								E^g	1.2	30.28	73	71.9	65.6	69
	8									Under		.34	73	73.2		
	NOON									Lee		.33	81	74		
		Current in last hours			mls.											
	4									of						
	8									Island						
	MIDT.											.36	74	74.0	66.8	68 M=68
27th	4	—do—										30.34	74	73.5	65.8	65
	8											.35	75	73.9	67.4	70
	NOON											.39	78	75.1	67.8	67
		Current in last hours			mls.											
	4															
	8											.39	76	Air from Engine room		
	MIDT.											.39	76	73.0	66.0	67

Before accepting the readings of the dry and wet bulb thermometers, the observer should satisfy himself that both are in working order; the dry bulb being free of moisture and the wet bulb being untainted by salt water.

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.

* 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 from to

Hour.	Clouds. Upper.	Clouds. Lower.	Prop. of Sky Clouded. 0 to 10.	Weather. According to Beaufort Notation.	Fog Intensity. 0 to 5.	Waves. Direction from.	Waves. Disturbance. 0 to 10.	Swell. Direction from.	Swell. Disturbance. 0 to 10.	Temp. by No.	Spec. Grav. by No.	Time of Remark.	Remarks.
2a		17	18	19	19a	20	21	20a	21a	22	23	24	25
4		Str Cum n / Cum s	3	bc.		SE^g	4	S^g & SE^g	5	74.0		2.0 am.	Sky almost covered with fine cirrus lasting till 3 am.
8		Str Cum n / Cum s	9	oc		SE^g	4	SSE	4	74.5		10.30	squall with rain (mod & small drops) lasted ½ hr. force 7 then eased to 5.6
NOON	–	Det Cum s.	2	bcz		SE^g	~~4~~5	SE	4	74.5		7.0	Zodiacal light as on 23rd but more distinct.
4	–	Cum Cum s	2	bc.		ESE	5	SE	5	74		*.	From noon for rest of day motion was too great for accurate reading of barometer.
8	–	—	0	b		ESE	4	SE	5	74.0			
MIDT.		Cum s	2	bc		E	4	ESE	4	73.6			
4			4	bc.		ESE	4	ESE	5	73.1		pm.	Wind gradually decreasing all the afternoon.
8		Cum / Cum s	4	bcz.		E^bS	4	ESE	5	73.8	26.2	7.0	Zod. light.
NOON		Detached Cum / Cum s.	3	bcz		E	3	ESE	5	74.0			
4	Alt-c / Alt-s	Det Cum s.	2	bcz		E	2	E^s SE^bE	4	73.4			
8													
MIDT.	Alt c.	Cum s.	2	bc.		E	2	E^g.	3	72.6			
4		Det Cum s.	1	b.		Under				72.2		7.0 am	Anchored.
8		Cum / Cum s.	4	bc.								7.30 pm.	Zod. light.
NOON				bc.		Lee						10.30	shower of rain.
4													
8													
MIDT.		Cum n	4	bc.						73.2			
4		Cum s.	4	bc.						72.9		4.0 am.	Cum s. from E^bS. (3) forenoon occasional showers (mod.
8		Cum / Cum s	9	c		—do—				73.1			
NOON		Cum / Cum s	4	bc.						73.0			
4										73.0			
8		Cum s	1	b						73.0			
MIDT.		Cum s	4	bc						73.0			

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. Waves and Swell: Also record when Confused.

Remarks: 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.)

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.

14767—7500 B

Meteorological Log kept on board

Captain _____ from _____ to _____

DATE. Year 19 10 Month July Day. Civil Time.	Hour.	Latitude. Observed.	Latitude. Dead Reckoning.	Longitude. Observed.	Longitude. Dead Reckoning.	Course and Distance. Each four hours. True Course.	Course and Distance. Each four hours. Distance by Log.	Total Compass Error. Of Compass used for Wind, being Variation and Deviation combined.	Ship's Head. By same Compass as Wind.	Wind, *at the time of observation.* Direction. State if *true*, or subject to Compass Error, or only to Variation.	Wind, *at the time of observation.* Force. 0 to 12.	Barometer.* No. ..... Height of Cistern above Sea ..... feet. Uncorrected Reading.	Barometer.* Att. Therm.	Thermometers. Dry Bulb. No.	Thermometers. Wet Bulb. No.	Before accepting the readings of the dry and wet bulb thermometers, the observer should satisfy himself that both are in working order; the dry bulb being free of moisture and the wet bulb being untainted by salt water.
		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.														
28th	4		Anchored									30·35	74	72·1	66·5	73
	8	abt S. Trinidad						77	Obsd at 8.30			·40	75	71·5	65·6	71
	NOON	° '	° '	° '	° '							·40	79	74·6	66·6	64
		Current in last ° ' hours ° mls.														
	4	20	48 S	29	13					SE⅝E	4	·34	78	71·9	65·8	71
	8	21	05 S	29	01					SE⅝E	4·5	·36	74	71·6	66·6	76
	MIDT.	21	22	29	50					E⅝S	4	·31	73	71·5	66·	73
29th	4	21	39	28	39					SE	3·5	30·32	71	71·0	64	66
	8	21	56	28	28							Unshipped				
	NOON	° '	° '	° '	° '							while		72·1	65·6	69
		Current 22 ' in last 16 ' hours ° mls.		28 °	16 '											
	4	22	42	28	06					E⅝S	4	caulking		70·8	64·5	71
	8	23	09	27	56					E⅝N	3·5	deck above		70·2	64·8	73
	MIDT.	23	33	27	39					E⅝N	2·3			68·3	64·8	82
30th	4	23	58	27	22					E	3·5			70·2	64	70
	8	24	20	27	05			72		ENE	2·3			69·8	65·5	77
	NOON	° '	° '	° '	° '				Obsd at 1.0	NNE	3·4	— do —		71·3	66·3	75
		Current 24 ' in last 42 ' hours ° 26 ' mls. 49 '														
	4	25	01	26	29					NNE	3			69·8	66·3	82
	8	25	20	26	08					NNE½E	3			69·0	66·4	87
	MIDT.	25	39	25	49					NNE⅝E	3·4	—		66·8	66·5	97
31st	4	25	58	25	29			Therm^r no. 2059		NNE	4			68·7	67	92
	8	26	17	25	07				Obsd at 9.0	SSW	3·4			65·5	64·5	94
	NOON	° '	° '	° '	° '			73		SW	3·4	— do —		65·9	62·9	84
		Current 26 ' in last 36 ' hours ° 24 ° mls. 49 '														
	4	26	36	24	24					SSW	3			Engine		
	8	26	36	23	59					SW⅝S	3·4			Room		
	MIDT.	26	36	23	34					S⅝W	3			Ave		
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.

Hour.	Clouds. 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. Upper.	Names. Lower.	Prop. of Sky Clouded. 0 to 10.	Weather. According to Beaufort Notation.	Fog Intensity. 0 to 5.	Sea Surface. Waves. Direction *from*.	Waves. Disturbance. 0 to 10.	Swell. Direction *from*.	Swell. Disturbance. 0 to 10. Also record when Confused.	Temp. by No.	Spec. Grav. by No.	Time of Remark.	Remarks. 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.)
4		Cum	3.	bcp.						73·4			12·30 PM. Proceeded for Simon's Bay.
8	Alt c.	Cum Cum s	3.	bc.						72·9			11·40. PM. Wind shifts to E⅝S.
NOON	Cir s.	Det. Cum Cum s	3.	bc7									
4		Cum Cum s	3.	bc.		SE⅝E	3	SE⅝E	4	72·8			
8		Cum s	2	bcq.				ESE½	5	72·2			
MIDT.	Cir.	Cum s	5	bcq		SE½	4	SE½	4	72			
4			7	q½Rbc.		SE½	4			71·2			AM 0·30 to 1·00 Heavy rain squall force 5
8													1-3 Clear sky
NOON		Det Cum / Cum s	1	bc.		ESE	3	ESE WSW	3 6	72·0			10·0 Wind E⅝S 4-5 Noon. WSW swell very long ESE swell short.
4		small Cum	1	b		ESE	4	ESE WSW	3 6	71·8			4·0 swells as at noon 6·0 Wind backed to E⅝N 4 8.15 shower of rain
8		Cum s	2.	bcq						71·8			10·45 - 11.30 showers, sea getting calmer wind falling
MIDT.			3	bcp		E½	3			70·2			
4			9	qcp.		E½	3			68·8			1 PM. - 30 clear sky with Cirrus Clouds.
8	Alt c. Alt s	Cum Cum s Cum s	8	cp		E½	2.	ESE SW	3 6	69·5			30 Squall work'd up from ENE spread ahead 6·0 Cl 10. Cum s / Min / + Considerable Alt c. 11·0 Clocks put on 4m to 1h 53m slow on Gmt.
NOON	Cir s.	Cum / Cum s	3	bc.		NNE½	3	ENE SW½	5	69·0			forenoon - wind gradually backing 1 PM. ENE swell now masks NNE one.
4	Cir / Cir / Alt	Cum Cum s	3	bc.		NNE	3	ENE	5	69·0			Cumuli - green flash visible 7·0 Zod^c light. very clear - pointing to Jupiter to Alt of 34°.
8	-	-	0	b						68·0			
MIDT.	-	-	0	b.		NNE½	4	NE½	4 6	68·7			
4	Cir s		1	bcw		NE½	4	ENE	4	68			PM. Middle - sky cloudless. 7·30 Rain mod - drizzle
8		Nim	10	oc½R.		Conf	4	E½	4	67·0			8·0 wind NNE 8·45 wind to SSW. - rain eased. Alt c stopped
NOON		Str	10	oc. 1 R.		Conf	3	E	4	67·0			11·0 clocks on 3m to 1h 50m slow on Gmt. Noon wind variable. - tile of PM.
4		Str / Nim	10	oc 2 D		Conf SSW½	3	ENE S½	4	67·1			1·30 - 5·0 intermittent drizzle 4·30 wind eased to 2-3.
8		Str	10	o 1 D									6·45 wind 3-4 around SSW. 8·0 wind steady in dirn.
MIDT.		Str	10	o Z			4			67			8·15 Occasional spots of drizzle.
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.

14767—7500

B

Meteorological Log kept on board

Captain from to

DATE. Year 1910, Month Aug. Day. Civil Time.	Hour.	Latitude. S. Observed.	Latitude. Dead Reckoning.	Longitude. W. Observed.	Longitude. Dead Reckoning.	Course and Distance. Each four hours. True Course.	Distance by Log.	Total Compass Error. Of Compass used for Wind, being Variation and Deviation combined. (Max. error a Varn.)	Ship's Head. By same Compass as Wind.	Wind, at the time of observation. Direction. State if true, or subject to Compass Error, or only to Variation.	Wind. Force. 0 to 12.	Barometer.* No. Height of Cistern above Sea feet. Uncorrected Reading.	Att. Therm.	Thermometers. Dry Bulb. No.	Thermometers. Wet Bulb. No.	
1st	4	26	36	23	09					SW.	4 3.	Unshipped		67.5	61	67
	8	26	38	22	43.			70	obsd at 9.0	SSE	2.3.	while		66.9	60	64
	NOON	26	48	22	24				obsd at 1.0	Sg	1	Caulking		69.1	62.5	67
	Current in last hours				mls.											
	4	27	02	22	12					Sg	1	deck		unreliable		
	8	27	17	21	59					SSEg	1	above.		64.8	61.0	78
	MIDT.	27	36	21	43.					Calm				66	63	84
2nd	4	27	55	21	27					Eg	0-1					M= 72
	8	28	14	21	11			69	obsd at 9.0	Wg	1			63.0	58.0	72
	NOON	28	32	20	55				at 12.30	Wg	1	—do—		65.2	58.8	66.
	Current in last hours				mls.											
	4	28	50	20	42					Wg	1			64.0	58.2	67
	8	29	08	20	27					Sg	0-1					M= 68
	MIDT.	29	25	20	12					SEg	2.3	30.38	67			
	4															
	8															
	NOON															
	Current in last hours				mls.											
	4															
	8															
	MIDT.															
Aug 3	4	29	42	19	57					SEg	1.2	30.324	64			
	8	30	00	19	42			68	obsd at 8.30	S	2.3.	.42	65	63.3	54.6	55
	NOON	30	18	19	28					SE	1.2	.43	70	60.7	53.0	57.
	Current in last hours				mls.											
	4	30	25	19	05					SSEg	1.2	.42	71	(57.8)	(51.6)	*63
	8	30	31	18	43					SEg	1	.47	69			M= 55
	MIDT.	30	37	18	13					Calm	0	.45	66			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	

(Margin, left: W 5° S; 10/6 = 1.6)

(Vertical note: Before accepting the readings of the dry and wet bulb thermometers, the observer should satisfy himself that both are in working order; the dry bulb being free of moisture and the wet bulb being untainted by salt water.)

Hour.	Clouds. Names. Upper.	Clouds. Names. Lower.	Prop. of Sky Clouded. 0 to 10.	Weather. According to Beaufort Notation.	Fog Intensity. 0 to 5.	Waves. Direction from.	Waves. Disturbance. 0 to 10.	Swell. Direction from.	Swell. Disturbance. 0 to 10.	Temp. by No.	Spec. Grav. by No.
4		Stc	3.	b		Sg	3.			67	
8	Cir./Cir s.	—	3.	bc.		SSEg	3.	W S g	7.8	67.5	
NOON	Cir	Cum s.	8	c			1	WSW (Sg)	7 (3.)	67.8	
4	Cir/Cir.c.	Cum/Stc.	7.	bc.			1	SWW (Sg)	6 (2)	66.0	
8		Cum s/Stc	2.	bc						66.1	
MIDT.		Stc	2.	bcm ½F	1			WSW	7	66.6	
4	Cir s.	Stc	3.	bc.				SWg	6-7	65.3	
8	Alt s.	Cum s/Cum	8	c.			1	SWW	7.8	65.5	
NOON	Alt c	Cum/Cum s	3.	bc.			1	SWW	7	66.2	
4	Cir/Alt s/Alt c	Cum	3.	bc			1	SW	6.	63.2	
8		Cum s	3.	bcm			1	SWg	5	64.2	
MIDT.		Nim	3.	bcqp			1	SbSg	6	62.9 / 62.8	
4											
8											
NOON											
4											
8											
MIDT.											
2 / 4	Cir s	Stc	3	bc				SW	6	62.5 / 62.1	
8		Cum/Cum s.	3	bc		S	3.	SW	7	62.3	
10 / NOON		Det Cum/Cum s	2	bc		S	2	SbW	6	61.3 / 62.0	Too
4		Det Cum	½	b		SSEg	2	WSW	5.6	61.9	much
8		Cum s	2.	bc						60.7	motion
MIDT.	—	—	0	b			0	SWg	6	61.2	
2a	17		18	19	19a	20	21	20a	21a	22	23

Remarks. (24 Time of Remark; 25)

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.)

Am. Sky overcast till 3.15 clear then to end of watch.
1.0 Pm. Cloud nearly all Cir. but a little Cum. s.
4.0 Swell lessening fast.
5.45 Alt c/ Stc/ Cum s/ propn = 8 mostly Alt c.
11.0 Ran into slight fog. 11.30 Clearer but horizon still indistinct.

First – many shooting stars.
Am. middle. Clocks on 20m to 1h.30m slow on GMT.
4.0 Stc. moving slowly up from. SbS.
6.0 Dark part of moon very distinctly seen.
8.0 Showers about.
9.25 Shower of 'slight' rain
Pm. 4.0 Swell slightly confused. apparently by a slight Sg swell.
5.0 Running towards a heavy Cum n. bank of clouds with much rain SSE (mag) from. ship
5.45 bank of rain clouds passed to std swell easing.
7.0 Wind backed towards S.
8.0 Put clocks on 5m to 1h 25m slow on GMT.
10.30 Nim. to SWd clouds gradually spreading to S+Ewd.
11.30 Short rain squall.

~~1.0 Am.~~
Pm.
7.0 Zodl light very bright extending to an alt of 37° beyond Jupiter – almost masks 3rd magde stars.
11.0 Clocks on 5m to 1h.20m slow on GMT.

* readings in brackets by therms aft the "forth" on starboard side & used when air from engine room affected the other

* 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

DATE. Day. Civil Time.	Hour.	Latitude. S Observed.	Latitude. Dead Reckoning.	Longitude. W. Observed.	Longitude. Dead Reckoning.	Course and Distance. True Course.	Distance by Log.	Total Compass Error. Of Compass used for Wind, being Variation and Deviation combined. (Max Var & Var)	Ship's Head. By same Compass as Wind.	Wind, at the time of observation. Direction.	Force. 0 to 12.	Barometer.* Uncorrected Reading.	Att. Therm.	Thermometers. Dry Bulb.	Wet Bulb.	
Year 19 10 Month Aug. 4th	4	30	43	17	43					SE^g airs	0.1	30.40	64			
	8	30	49	17	13				Obsd at 9.0	variable	0.1	.45	67	61.1	55.6	69
	NOON	30°	56'	16°	48'					SE^g	1	.44	71	64.5	58.2	65
	Current in last hours … mls.															
	4	31	04	16	21				at 4.30	E	2	.37	64	61.0	57.3	77
	8	31	13	15	54					NE	2	.38	67		M=	70
	MIDT.	31	21	15	27					NE^g	2	.38	67			
5th	4	31	30	15	00					NE	3.	30.30	66			
	8	31	38	14	33			68								
	NOON	31°	47'	14°	06'					N^bE	4.5	.18	72	66.1	61.9	79
	Current in last hours … mls.															
	4	31	57	13	30					N^bE	5.6	.08	69	65.0	61.9	84
	8	32	8	12	55					N	6	.02	69	(64.5)	(61.8)	84
	MIDT.	32	19	12	19					N^bE	4.6	29.98	68	(64)	(61.8)	89
6th	4	32	30	11	44					NNE	6.7	29.89	66	63.1	M= 61.7	84 91
	8	32	41	11	08			67	obsd at 9.30	N^bW	7	.81	68	63.0	61.2	89
	NOON	32°	52'	10°	33'					NNW	7	.71	67	62.0	60.5	91
	Current in last hours … mls.															
	4	33	03	9	58					NNW	7	.65	67	62.3	6.0	86.
	8	33	06	9	35					WSW	8	Barometer broke		53.2		
	MIDT.	33	10	9	11					WSW	7.6.5			(53.8)	(49.0)	67
7th	4	33	13	8	48					WSW	7.6.4	Owing to motion of Ship?		(54.2)	M= (48.5)	85 64
	8	33	17	8	25				obsd at 9.	NW^bW	4			54.8 (54.2)	(49.0)	67
	NOON	33°	20'	8°	02'			64	obsd at 1.0	WNW	4.5			(51.0)	(48.2)	79
	Current in last hours … mls.															
	4	33	21	7	28					SW	7			(49.0)	(47.5)	89
	8	33	22	7	05					SW	4.6.7			50.0 (50.0)	(46.0)	72
	MIDT.	33	28	6	42					SW^bW	6.6.8			(49)	(43)	57
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	M=71

Before accepting the readings of the dry and wet bulb thermometers, the observer should satisfy himself that both are in working order; the dry bulb being free of moisture and the wet bulb being untainted by salt water.

* 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 ______ from ______ to ______

Hour.	Clouds. Upper.	Clouds. Lower.	Prop. of Sky Clouded. 0 to 10.	Weather. According to Beaufort Notation.	Fog Intensity. 0 to 5.	Waves. Direction from.	Waves. Disturbance 0 to 10.	Swell. Direction from.	Swell. Disturbance 0 to 10.	Temp. by No.	Spec. Grav. by No.
4	—	—	0	b.		—	0	SW^g	5	61.0	
8		Cum s/Cum	8	c		—	1	SSW	5	61.6	
NOON	Alt s	Cum	3.	bc.		—	1	SW^bS	5.6.	62.2	26
4	Cir s/Alt s.	Cum/Cum s/Cum & Nim	8	c		E^g	2	SSW	5	61.9	
8		Cum s	6	cz.						62.2	
MIDT.		Cum n	10	cz/d		NE^g	2.	SW^g	5	63.2	
4		Str	10	o		NE^g	2	SW^g	4	64.7	
Noon 8	Cir/Cir s.	Cum/Cum s	7								
4 NOON	Cir	Cum/Cum s/Nim	8	c		NNE	4	NE	4	63.8	
4 8		Str/Nim	1	c		NNE	5	NNE	4	63.8	26.0
8				ocq/p.						62.5	
MIDT.			8	cqp.		NNE	5	NNE	5	61.8	
4	Cir s.	Str	8	qc		NNE	5			61.8	
8		Str/Cum s/Nim	10	ocq		N	5	NNW	4	61.6	
NOON		Str/Cum s/Nim	9	ocqp.		NNW	7	NNW	4	61.4	
4		Str/Nim	9	ocqp							
8		Str/Nim	7	cqp							
MIDT.		Str/Nim	6	cqp		WSW^g	6	W^g	4	60.9	
4		Str	4	bcqp.		SW^g	7			59.1	
8 9	Alt s.	Cum/Nim	5	bcq		WNW	6	W^g	4	61.3	
1.0 NOON		Str/Cum s/Nim	10	cqp.		WNW	6	WNW^g	4	60.0	
4	Alt c.	Cum s/Cum/Nim	6	cqp.		SW^g	7	W^g	4	58.0	
8		Cum s/Nim	3	bcqp.		SW^g	6			58.0	
MIDT.		Str/Nim	3	bcqp		SW^g	7	W^g	5	57.8	
2a	17		18	19	19a	20	21	20a	21a	22	23

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. Also record when Confused.

Remarks. (24 Time of Remark. / 25) 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.)

4th:
- 1.30 AM. Very bright meteor out of Argus, 3 times as bright as Venus. (see P.D. notes).
- 5.30 Slight fog. (1). but clear to E^ward.
- 6.30 Sunrise. A little Cum & Alt s. also considerable high Cum s.
- Forenoon. occas^l showers about.
- 2.30 P.M. Heavy rain cloud to NW^d.
- 3.0 shifted Barograph nib.
- 4.0. Cum s: rain cloud to NW.
- Sunsets under heavy Cum n cloud.
- 11.0 slight drizzle - overcast
- Clocks on 10^m to 1^h 10^m slow on G.M.T.

5th:
- 1.0 AM. Wind incrd. NE 3
- 5.30 Cum s/Str/Nim/ 10
- 6.0 Cum s (low & ragged). Str/Nim/ Alt s 5 wind inc^d to 4 NNE^g
- 10.45. fixed nib of barograph
- 1.0 P.M. Wind NNE 5-6.
- Sunset. Cum s/Nim/ & considerable low Cir & Cir s. — 9
- 6.0 P.M. Cleared to Cum s 3.
- 7.0 shower of rain & squall & to end of watch
- 11.55. very bright meteorites bearing NW^bW.
- 11.0 clocks on 20^m to 50^m slow on G.M.T.
- Mid^t strength of squalls dying & intervals between longer

6th:
- Middle one flash of lightning to SW^d
- 6.30 AM. Squall. 7-8 - A.M. squally with slight to mod. showers
- Noon Dines hand anem^r gave 30-35 miles per hr.
- 1.40 P.M. Clouds broken sun occasionally out.
- 4.15 Heavy squall & mod. rain wind backed to NW.
- 5.0 Wind backed to WNW & at 7 was WSW. frequent squalls with drizzle to mod.
- 10.30 wind easing.
- Clocks on 10^m to 40m. slow on G.M.T.

7th:
- 3.0 A.M. Squalls less frequent & wind falling generally
- Middle Moderate rain in the squalls.
- 6.0 wind W^bN 3.4 Cum/Cum s/Nim 3. showers ab^t
- Afternoon - Rain in squalls, mod. to slight - wind gradually backing in squalls up to force 8.
- Dogs. After 4.30 wind eased to 4 between less frequent squalls. squalls force up to 7 - little rain.

424 ½ 428

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

Year 1910 · Month Aug.

Latitude: S. · Longitude: W & E.

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.

Total Compass Error: Max. Therm. — Of Compass used for Wind, being Variation and Deviation combined. + var[n].

Day. Civil Time.	Hour.	Latitude Observed.	Latitude Dead Reckoning.	Longitude Observed.	Longitude Dead Reckoning.	Course and Distance: True Course. (Each four hours)	Distance by Log.	Total Compass Error	Ship's Head. By same Compass as Wind.	Wind, at the time of observation: Direction. State if true, or subject to Compass Error, or only to Variation.	Force. 0 to 12.	Barometer.* No. — Height of Cistern above Sea — feet. Uncorrected Reading.	Att. Therm.	Thermometers: Dry Bulb. No.	Wet Bulb. No.	%
8th	4	33	24	6	19W					SWbW	6 to 8			(49.2)	(45.2)	71
	8	33	25	5	56			56	⌀	WSW	5			(50.8)	(45.0)	59
	NOON	33°	26'	5°	34'					WSW	6			54.5 (52.0)	47.5 (47.0)	55 66
	Current in last hours				mls.											
	4	33	36	5	04					WbN	5			53.9 (53.1)	47.9 (47.1)	61 60
	8	33	47	4	~~38~~ 33				obsd at 8.30	NWbW	4			55.5	50.3	68
	MIDT.	33	57	4	03					WbN	5-6			57.2	48.1	46
9th	4	34	8	3	33W					WbN	6-7			57		M=67
	8	34	19	3	03			58	obsd at 9.0	W	5-7			57.6	53.5	75
	NOON	34°	30'	2°	33'					W	5-7			59	54.2	70
	Current in last hours				mls.											
	4	34	39	1	55					WbN	4-5			57.2	53.8	78
	8	34	49	1	25					WbN	4-5			56.2	53.5	84
	MIDT.	34	58	0	54 W.					(variable) NWbW	3-4			57.1	52.4	72
10	4	35	08	0	23W					NWbW	5			57.1	53.0	M=76 75
	8	35	17	0	8E				obsd at 9.0	NWbW	4.5			57.5	53.9	78
	NOON	35°	27'	0°	39' E					WbN	5			58.0	53.3	72
	Current in last hours				mls.											
	4	35	37	1	10E					NWbW	~~4.5~~ 5.6			57.6	53.2	72
	8	35	38	1	43E					NWbW	4.5			56.5	54.7	87
	MIDT.	35	40	2	15E					WNW	5.6			57.3	55.6	91
11	4	35	42	2	E 48					NWbW	5			56.1	55.2	M=79 93
	8	35	44	3	20			58	obsd at 9.0	NWbW	4			57.2	55.9	91
	NOON	35°	46'	3°	52'					NWbW	4			57.9	55.8	88
	Current in last hours				mls.											
	4	35	45	4	18					NWbW	4			58.0	56.0	88
	8	35	44	4	44					NWbW	3			58.0	56.0	88
	MIDT.	35	43	5	10					NWbW	4			58.6	56.5	88 M=89
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	

Before accepting the readings of the dry and wet bulb thermometers, the observer should satisfy himself that both are in working order; the dry bulb being free of moisture and the wet bulb being untainted by salt water.

* 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 from to

Hour.	Clouds. Upper.	Clouds. Lower.	Prop. of Sky Clouded. 0 to 10.	Weather. According to Beaufort Notation.	Fog Intensity. 0 to 5.	Waves. Direction from.	Waves. Disturbance. 0 to 10.	Swell. Direction from.	Swell. Disturbance. 0 to 10.	Sea Surface Temp. by No.	Spec. Grav. by No.
4		Cum N / Cum	5	cqp		SWbW	6				
8		Cum / Cum N	5	bcq		WSW	6.	WSW	6		
NOON		Cum / Cums / Cum n/Str	5	bcq		WSW	6.	SW	7.		
4		Cum / Cum s / Str	6	bc		WbS	5	WbS.	7		
8		Cum s	5	bc.							
MIDT.		Cum n	3	bcqp		WbS	6.	WbS	6		
4		Cum	5	qpc.		WbS	7	~~W~~	~~6~~		
8 9		Cums / Nim	8	qpco		W	7	W	~~7~~ 6	57.6	
NOON		Cum / Cums / Str	5	q bc.		W	6	WbS	7	59.3	
4		Cums / Nim Str	6	bcq		WbS	4	WbS	6	57.8	
8		Cums / Nim	4	bc.						57.4	
MIDT.		Cums / Str	9	c.						57.4	
4		Str	10	o		NWbS	6			56.6	
8		Str / Cum s.	10	oc		NWbS	6	WNW	7.8	57.8	
NOON		Str / Cum s	10	oc		WbN Conf.	6	WbN	6.	57.8	
4	Alt s / Alt c.	Cum s / Nim / Str	8	c		NWbW	7	WNW S	5	57.6	
8		Cums / Nim	8	c / R.		NWbW	6	WNWbS	6	57.6	
MIDT.		Cum n	8	ocq½D		WNW	7	WbS	6	57.3	
4	Cir s.	Str	9	opd		NWbS	6.	WbN	7.8	56.5	
8		Str / Cums / Nim	6	c 2 D.		NWbW	5	WbN	8		
NOON		Str / Cum s.	10 1 to 2	oc.		NWbW	5	WbN	8	58.3	
4		Cum s	10	oc.		NWbW	4	WbN	8	58.4	
8		Cums	8	c.				WbN	7.8	58.2	
MIDT.		Cum S.	3	bc.		WNWbS	4	WbS	7	59.8	
2a		17	18	19	19a	20	21	20a	21a	22	23

Remarks. 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.)

Time of Remark. (24)	Remarks. (25)
AM.	Clocks on 10m to 30m slow on GMT.
2.30	very bright meteor out of Aries - Colour blue.
	middle up to sunrise - very heavy squalls & slight rain
9.30.	Shifted wich &c & cleaned therm[rs] in Stevensons screen
	Forenoon wind in squalls not more than 7 - a little rain in squalls in early part of forenoon.
	Afternoon - no squalls - wind steady
	Dog watches - no squalls or rain - moon with dark portion very distinct.
8.30	Rain squall, rain slight not much wind in squall.
AM.	Clocks on 10m to 30 slow on GMT.
3.0	squalls heavier & more frequent 4.0 wind inc[d] to 7.
	Morning watch very squally - rain in squall slight to mod.
	Afternoon - squalls less & less frequent - shower early in watch
4.0	Wind variable - rain squalls about.
dogs.	Two showers - drizzle - slight - no squalls.
9.30 PM.	Str 10. occasional drizzle, wind steady in force but not in dir[n]
11.15	Wind backed to NWbW. & eased to 3.
Mid[t]	wind variable in dir[n] & puffy.
4.0 AM.	Clocks on 20m to GMT. - wind steady NWbW.
Mor[n]	slight N[ly] Cross in swell
5.20	Sunset - green ray seen after wave had extinguished sun several seconds. Str/Alt s 3; around horizon.
8.0	Corona round moon ~~situated~~ br. ring 3 times moon diam. Rain slight to drizzle from 7 to 8.
11.30	- midnight - drizzle
	Clocks on 10m to 10m fast on GMT.
4.0	Wind steady in dir[n] - passing showers of drizzle
	Morning - drizzle all watch till 6. AM.
	Noon sky clears & clouds rapidly
6.0 PM.	Aureole round moon diam 1°40m by sextant.

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 __________ Captain __________ from __________ to __________

Year 19 10 — Month Aug — Latitude S. — Longitude E.

(Compass Error column annotated: Max / Therm. Last column annotated: rel. hum. %)

Day (Civil Time)	Hour	Latitude Observed	Latitude Dead Reckoning	Longitude Observed	Longitude Dead Reckoning	True Course	Distance by Log	Total Compass Error	Ship's Head	Wind Direction	Wind Force 0 to 12	Barometer Uncorrected Reading	Att. Therm.	Dry Bulb	Wet Bulb	rel. hum. %
12th	4	35	42	5	36.					NWbW	4			58.5	55.5	81
	8	35	41	6	02			59	obsd at 9	NWbW	3-4			59.1	56.3	82.
	NOON	35°	41'	6°	28'					SWbW	3			(55.0)	(54.5)	97
	4	35	39	7	03					SbW	2-3			(53.2)	(52.9)	97
	8	35	36	7	38					SSEg.	1-2			(55.0)	(53.0)	87
	MIDT.	35	34	8	13					Eg	1-2			56.8	52.0	69
13th	4	35	31	8	48					variable Eg	0-1	Broken.		56.2	51.3	M=85 69
	8	35	29	8	23				obsd at 9.	EbN.	2			57	52	69.
	NOON	35°	27'	9°	58'					NEg	1-2			58.2	52.9	67
	4	35	25	10	34			61		Eg	0-1			58.0	52.3	67.
	8	35	24	11	11					Ng	1			56.0	51.6	72.
	MIDT.	35	22	11	47					NNEg	0-1			55.6	50.4	68
14	4	35	21	12	24					NbE	0.2			54.6	49.8	M=69 68
	8	35	19	13	01			58	9.0	NWbN.	4			56.1	52.2	75
	NOON	35°	17'	13°	38'					NWbN	5			56.1	53.2	81.
	4	35	13.	14	25				3.30	NW	6			56.8	54.9	87
	8	35	08.	15	11					NW to WNW	4-5			56.2	53.6	84
	MIDT.	35	03	15	58					var. NW to WbN	6-7			52.4	50.0	83.
15 (21/12, 1.6 ✓)	4	34	58	16	45					NWbW.	8-9			53.9	49	M 80 67.
	8	34	53.	17	31											
	NOON	34°	38'	18°	9.'			58.		NW	6.			56.8	52.1	72
	4															
	8															
	MIDT.															

Noon rows: Current in last __ hours __ mls.

Hour	Clouds Upper	Clouds Lower	Prop. of Sky Clouded 0 to 10	Weather (Beaufort Notation)	Fog Intensity 0 to 5	Waves Direction from	Waves Disturbance 0 to 10	Swell Direction from	Swell Disturbance 0 to 10	Temp. by No.	Spec. Grav. by No.
4			0	b		WNWg	4			59.4	
8 (9)		Cums	9	c		NWbW	4	Wg	6	58.9	
NOON	Cirs/Alts.	Cums/Str.	8,	c			3.	W	6	57.8	
4	Cir.	Cum s	10	c		Sg	2	WSW	5	55.2	
8		Cum s.	3	bc.						56.5	
MIDT.		Cums/Str/Nim	7	c.			1	WSWg	5	58.3	
4		Str/Cum s.	9	cm						58.0 57.5	
8	Cir s.	Cum s.	1	bc			1	WSW	4	55.5	
NOON		Cum s.	9	c			1	WNW + SSW	6	57.5	
4	Alt s.	Cum s.	6	c			1	Conf. SSW Wg	6	60.3	
8		Cum s	9	c			1	Conf SWg	5	59.0	
MIDT.	Cir.	Cum s.	8	c			1	WSWg	5	59.7	
4		Str.	3.	bc.			1	SWg	4	59.1	
8	Alts	Cum s.	6,	bc		NWg	3.	Conf. WSWg	4	59.1	
NOON		Cums/Str	9	c		NWbN	4	Conf. Wg	4	59.1	
4		Cums/Nim	9	oc.		NW	5	NW	3.	58	
8		Cum s/Nim	6.	c		NWg	4	NWg	3	58.2	
MIDT.	Cirs.	Cum n.	8	c		NWg	6	NWbW	4		
4		Cums/Nim	8.	cqlr		NWg	7.			57.0	
8											
NOON	Alts.	Cum/Cums/Nim		c		NW	7	NW	6	58.2	
4											
8											
MIDT.											

Remarks (Time of Remark — Remarks)

12th:
- Clocks on 10m to 20m fast on G.M.T.
- 0.30 Sky cleared.
- 6.10. Cl. 8. Cir in striae Cums & Str round horizon.
- 6.30 sunrise – cirrus & cir s.
- 11.0 Wind backed to SWbW – shower – slight.
- 2 P.M. wind backed to SbW 3.
- 4.0 patches of fog about.
- 4.45 Wind backed to SbE & eased to 1.2
- 5.15 fog 1 – patchy. Cross swell coming up from SW.
- 6.0 Corona round moon.
- 9.0 No fog
- Midnight Rain falling to Westd; clouding & clearing

13th:
- 1 A.M. Clocks on 10m to 30 fast on G.M.T.
- completely clouded over Cums/Str & remained so till 3.30
- 7.0 P.M. Corona round moon – aureole only
- 8.0 No Corona.

14th:
- Clocks on 10m to 40m fast on G.M.T.
- 6 A.M. dawn. light Cir 5. Cum s 2. around horizon
- 6.30 Wind freshened N 2-3.
- 7.30 Cum. s. 9. wind freshened 3.
- Afternoon. short slight showers. wind increasing
- 3.45 P.M. wind incr. 7-8 Rain ½ hr. mod – heavy.
- 5.0 Wind backed to W. & force 4 – barometer up
- 6.30 Cums/Str/Nim 6. Corona round moon when Cum. s. Clouds pass. rad. to brown = 1°30'
- 8.0 Sheet lightning to NNW; wind var. in dirn.
- Mod. rain 6.50; – very heavy + hail at 8.30 – 8.35; –
- Heavy squall & rain at 10.30 & 11.55

15th:
- Clocks on 20m to 1h.0 fast on G.M.T.
- Middle – heavy squalls 9-10, – occasl heavy rain white lunar rainbow seen thrice Alt 40°
- Morning before sunrise, heavy squall occasional mod. rain, squalls 8-9 Sea 8. wave height 24'
- Forenoon. Cl. 5-6. wind moderating
- 10.15 squall force 7 with mod. rain. later wind steadied to 6
- Noon sea & swell together 24'
- 2 P.M. Entering False Bay.
- 5.30 At Buoy in Simon's Bay!

Before accepting the readings of the dry and wet bulb thermometers, the observer should satisfy himself that both are in working order; the dry bulb being free of moisture and the wet bulb being untainted by salt water.

* 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.* Captain from *Simons' Bay* to *Melbourne.*

Year 19*10* Month *Sept*

Barometer.* No. *1163*. Height of Cistern above Sea *9½* feet. Thermometers *No 2*.

Day. Civil Time.	Hour.	Latitude. Observed.	Latitude. Dead Reckoning.	Longitude. Observed.	Longitude. Dead Reckoning.	Course and Distance (each four hours). True Course.	Distance by Log.	Total Compass Error. Of Compass used for Wind, being Variation and Deviation combined.	Ship's Head. By same Compass as Wind.	Wind, at the time of observation. Direction. State if *true*, or subject to Compass Error, or only to Variation.	Force. 0 to 12.	Barometer. Uncorrected Reading.	Att. Therm.	Dry Bulb. No.	Wet Bulb. No.
								Max temp 9 Vart. 2059				New barometer orig. one		8395 (8393)	8396 (8394)
2.	4	Simons Town													
	8														
	NOON	° ′ Current in last hours		° ′ … mls.											
	4														
	8									SSW	2.3.	30.58	60	(56.1)	(47.9)
	MIDT.									S^E	1.	30.60	59	(57)	(49)
3rd	4									S^E	1.2	30.55	57	57.2	49.1
	8									W	2	30.57	60	(57.4)	(50.3)
	NOON	° ′ Current in last hours		° ′ … mls.						N^EW.	2	30.56	63	(61)	(52.6)
	4									NNW^E	2.3.	30.47	63	61.6	–
	8									SW^E	1.2	30.45	63	(60.0)	(52.2)
	MIDT.									Calm	0	30.38	61	(60.08)	(53)
4th	4									E^E	2	30.23	60	58.0	52.1
	8 9.									NE	3.	·10	62	59.9	53.8
	NOON	° ′ Current in last hours		° ′ … mls.						N^EW	3.4	29.97	64	60.9	54.9
	4									NW	4.5	·79	64	60.6	54.1
	8									NW	5	·65	61	57.0	52.0
	MIDT.									WNW	6.8	·50	58	56.5	52.5
5	4									W^bN.	8	29.53.	54	(52.0)	(48.2)
	8							63	obrd at 9	WNW	8	·67	66	47.2	44.2
	NOON 1.30	° ′ Current in last hours		° ′ … mls.						WNW	9	–	–	47.3	43.0
												29.67	58		
	4									W^bS.	8	29.76.	56.	43.0	41.5
	8									W	8-10			43.1	41.0
	MIDT.									W^bS.	7-10	29.93	53		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

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.

Before accepting the readings of the dry and wet bulb thermometers, the observer should satisfy himself that both are in working order; the dry bulb being free of moisture and the wet bulb being untainted by salt water.

* 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.

Hour.	Clouds. Upper.	Clouds. Lower.	Prop. of Sky Clouded. 0 to 10.	Weather. According to Beaufort Notation.	Fog Intensity. 0 to 5.	Waves. Direction *from*.	Waves. Disturbance. 0 to 10.	Swell. Direction *from*.	Swell. Disturbance. 0 to 10.	Sea Surface Temp. by No.	Spec. Grav. by No.	Time of Remark.	Remarks.
4													Time 2 hrs fast on G.M.T. fresh muslin & wick on wet bulb.
8													
NOON												2 P.M.	Proceeded to Melbourne.
4													
8		Str.	1	b						58.5			
MIDT.		Str	2	bc.				W^E.	6	59.8			
4		Str	2	bcm						580		4.0 A.M.	Slight haze on horizon. Bank of stratus rising very slowly to SW.
8		Cum of 7		c			2	W & NNW	6	58.1		4.15 P.M.	Wind backed to SW^E & eased to light
NOON		Str	2	bc.		N	2	WSW.	7	58.5			
4				c		NNW^E	3	Cross W^bS / N^E	7 / 3				
8		Str	1	bm						64.3			
MIDT.		Cum s	4	bcm		Calm	0			62			
4	Cir s.	Str	4	bcm				W^E	7	63.1		P.M.	Wind gradually increasing & backing all afternoon.
8 9	Alt s	Cum / Cum s.	4	bc.		N^E	3.	Cross SW / W	8	64.9		5.15.	Cum s. 7 also. Cir s + Cir c.
NOON	slight Cir s.	Cum / Cum s	5	bc.		N^EW	4	Conf. W^bS / N^E	8 / 4	63.9		10.30	squalls increasing in strength wind + sea increasing
4	Cir s / Alt s	Cum / Cum s.	7	c		NW	4	Cross W slight. by N	8	63.1			
8		Cum s	3	bc.						62.8			
MIDT.		Cum / Cum n	8	cgr		WNW	8	W^E	8	61			
4		Cum s	6.	qp.		WNW	8	~~WNW~~		55		Middle.	Squalls + hail sleet + rain
												4.0	Wind unsteady squalls very heavy
8 9		Cum / Nim	10	qp.		WNW	7	WNW	8			9.0.	In squalls with heavy rain force = 8-9
												9.30	wind incr^d to 9.
NOON		Cum s.	3.	qpz		WNW	8	WNW	8	55.4		2 P.M.	Wind force 40-50 miles by anem^r (ships speed allowed).
												2.30	Very heavy squall - rain mod. sudden rise of barom.
4		Nim	10	qpoc		W^E	8	W^E	8	54.2		4.0	In latter part of aft. - more + heavy rain in squalls.
												8.0	Very heavy squalls in dogs. + sleet + hail at times squalls of force 10.
8		Str / Nim	2	qbc.p		W^E	8	W^E	8				1st watch frequent heavy squalls with hail + distant lightning.
MIDT.		Str / Nim		bcqphl.		W^E	8	W^E	8	55.6			
2a	17		18	19	19a	20	21	20a	21a	22	23	24	25

Clouds: 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. Sea Surface: Also record when Confused.

Remarks: 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.)

Meteorological Log kept on board

Captain ______ from ______ to ______

Year 1910. Month Sept

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.	Latitude. Observed.	Latitude. Dead Reckoning.	Longitude. Observed.	Longitude. Dead Reckoning.	Course and Distance (Each four hours). True Course.	Distance by Log.	Total Compass Error. Of Compass used for Wind, being Variation and Deviation combined.	Ship's Head. By same Compass as Wind.	Wind, at the time of observation. Direction. State if true, or subject to Compass Error, or only to Variation.	Force. 0 to 12.	Barometer.* No. ___ Height of Cistern above Sea ___ feet. Uncorrected Reading.	Att. Therm.	Thermometers. Dry Bulb. No.	Wet Bulb. No.
6	4	38	48	24	44			28° W.		WbS.	8	30.03	51	43.8	39.7
	8	38	47	25	13			48	Obs'd at 9.0	WSW	7.8	·15	53	47.2	39.8
	NOON	38°	46′	25°	42′ (Current in last hours ... mls.)				1.0	WbS	7	·26	55	49.0	44.3
	4	38	46	26	10					WbS	7	·32	55	49.9	43.9
	8	38	46	26	37					WSW	6	·41	58	47.2	44.0
	MIDT.	38	46	27	05					SlyWly	2-5	·46	53	47	46.2
7	4	38	46	27	32					SSW to SWbW	3-5	30.49	50	(46.6)	
	8	38	46	27	59.			51		WSW	3	·52	53	50.8	45.3
	NOON	38°	46′.	28°	26′ (Current in last hours ... mls.)					SWbW	3-4	·52	57	53.5	47.5
	4	38	57	29	03					ESE	1.2	·49	51	53.0	47.5
	8	39	9	29	41					NEly	1.2	·50	55	52.8	47.0
	MIDT.	39	20	30	18					NEbN	1.2	·49	55	53.8	48
8	4	39	32	30	56			28° W.		NNE	4	30.45	56	53.8	48.1
	8	39	44	31	34			55		NEbN	3-4	·42	56	53.5	49.2
	NOON	39°	56′	32°	12′ (Current in last hours ... mls.)					NNW	4	·40	58	56.2	52.0
	4	39	55	32	40					NbW	3.	·35	62	(55.0)	
	~~8~~ 9	39	54	33	9					Sly	1.2	·40	59	(54.0)	
	MIDT.	39	53	33	27					SE	2	·41	58	(52.5)	
9	4	39	51	33	56					SSE.	6	30.45	56	(50.0)	
	8	39	48	34	25					SSE	6	·52	57	49.5	46.5
	NOON	39°	38′	34°	52′ (Current in last hours ... mls.)					SEbS	7	·48	59		
	4	39	29	34	59					SEbS	7	·44	60	55.1	52.0
	8	39	20	35	06					SE	7	·44	64	56.6	55.0
	MIDT.	39	10	35	12					SEbS	8.9	·33	64	(57.8)	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Before accepting the readings of the dry and wet bulb thermometers, the observer should satisfy himself that both are in working order; the dry bulb being free of moisture and the wet bulb being untainted by salt water.

Hour.	Clouds. Upper.	Clouds. Lower.	Prop. of Sky Clouded. 0 to 10.	Weather. According to Beaufort Notation.	Fog Intensity. 0 to 5.	Waves. Direction from.	Waves. Disturbance. 0 to 10.	Swell. Direction from.	Swell. Disturbance. 0 to 10.	Temp. by No.	Spec. Grav. by No.
4		Cum.s	7	cqph				Wly	8	52.2	
8		Cu / Cu St	3	bc.		WSW	8	WSW	8	55.8	
NOON		Cu St / Cu/Ni	5	bc		WbS	8	WbS	8 to	58.2	
4		Cu / Cu-Ni	5	bc		Conf WbS	7	WbS	8	59.0	
8		Stv / Nim	8	cp		WSWly		WSWly			
MIDT.		Stv / Nim		bcqp						55.7	
4		Stv	7	cqp						57.0	
8		Cu / Cu St / Cu Ni	3	bc.		Conf. WSWly	4	SWbW	8	56.5	
NOON	A.St	Cu / Cu St	8	c		SWly	4	SW	8	62.9	
4	Ci St / A St	Cu / Cu Ni	3	bc			2	WSW SWbS.	8	62.6	
8		Cu St	2	bc			2	Wly	7	63.0	
MIDT.		Cu St	4	bc						62	
4		St	4	bc.						60	
8	A St	Cu St / Cu	10	c.		NNEly	3.	WSW	7	55.8	
NOON	A St	St / Cu St	10	oc.		NNW	4	SSW	5	57.4	
4	A St	St / Cu St / Ni	10	oc.		Nly	3	SSW	4	55.1	
~~8~~ 9		St / Ni	10	oc 4½ R.						55.0	
MIDT.		St / Ni	10	o						55.8	
4		St	10	op.		SEly				54.8	
8		Cu St	10	oc.		SSEly	5.6	Sly	5	57.2	
NOON		St / Cu St	10	oc		SEbS	6	Sly	5	60.0	
4		St / Cu St	10	oc.		SEbS	6.	Sly	5	61.0	
8		St / Ni	10	oc ½ R						60.8	
MIDT.		St / Ni	10	o 2½ Rq		SEly	7			61.0	
2a	17		18	19	19a	20	21	20a	21a	22	23

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. Waves and Swell: Also record when Confused.

Remarks (24 Time of Remark, 25 Remarks). 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.)

6th:
- Middle squalls less frequent.
- Morning occasional squalls at 5.45 with hail & sleet
- Afternoon few squalls and rain.
- 4.0 showers about. swell with app^t cross from S^wd
- dog light squalls with wind SWbW.
- 8.0 squall & mod. rain wind SSWly 4. & veered to SWbW (unsteady) & increased to 5
- Midnight general wind dir^n SbW with frequent rain squalls force 5 from SbE to SSW. Much phosphorescence

7th:
- AM. 3.30 wind SSW squall & rain came from WSW
- 3.40 wind shifted to WbS then SWbW & fell light with showers
- 6.0 light airs
- 7.30 wind increased WSW 3.
- 8.0 swell 20 feet showers about clouds only on Hor.
- Noon swell over 20'
- 1.30 PM. wind backed ESEly 1.
- 4.0 Showers to S.W^ard.
- 5.30 Wind backed to NEly 1.2. var^ble in dir^n & puffy.
- 7.0 dark part of moon very distinct
- 8.0 clouds round horizon only.

8th:
- AM 0.30 slight shower wind incr^d to 5
- ~~4.55~~ 6.30 Cu.St / St / Cu Ni 10. showers about
- During ~~Forenoon~~ showers of slight rain
- 8 AM. Forenoon occasional showers of slight
- Afternoon wind variable in dir^n occas^l drizzle & slight
- 4.0 wind varying in dir^n through 2 points
- 4.20 dog. rain dr. to slight & occasionally moderate
- 5.30 wind eased to 2. 7.0. wind backed gradually to WSW & incr^d to 2.3. puffy & variable.
- 8.30 wind to SSly 1.2
- Clocks on. 20^m to 2^h 20^m fast on G.M.T.
- Mid^t occasional drop of rain during middle

9th:
- Middle slight passing showers
- 2.30 wind incr^d rapidly to 5 & inclined to veer
- PM.
- 6.0 wind incr^d to 8 during 1^st dog. sea increasing
- 7.30 Commenced to rain - drizzle wind eased to 7
- 8.0 Clocks on 5^m to 2^h 35^m fast on G.M.T.
- first frequent squalls
- 2½ hrs rain

* 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.

14767—7500

B

Meteorological Log kept on board ______ Captain ______ from ______ to ______

Year 19 10 Month Sept

DATE: Day, Civil Time. Hour. — Latitude: Observed. Dead Reckoning. — Longitude: Observed. Dead Reckoning. 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. — Course and Distance: Each four hours. True Course. Distance by Log. — Total Compass Error: Of Compass used for Wind, being Variation and Deviation combined. — Ship's Head: By same Compass as Wind. — Wind, at the time of observation: Direction. State if true, or subject to Compass Error, or only to Variation. Force. 0 to 12. — Barometer.* No. ______ Height of Cistern above Sea ______ feet. Uncorrected Reading. Att. Therm. — Thermometers: Dry Bulb. No. Wet Bulb. No.

Before accepting the readings of the dry and wet bulb thermometers, the observer should satisfy himself that both are in working order; the dry bulb being free of moisture and the wet bulb being untainted by salt water.

Day (1)	Hour (2)	Latitude (3)	Latitude (4)	Longitude (5)	Longitude (6)	True Course (7)	Distance by Log (8)	Total Compass Error (9)	Ship's Head (10)	Wind Direction (11)	Force (12)	Barometer Uncorrected Reading (13)	Att. Therm. (14)	Dry Bulb (15)	Wet Bulb (16)
								Max Hov & Var							
10	4	39	0	35	15					ESE	8.9	30.19	65	(59)	
	8	38	50	35	24			59		SE^bE	8.9	.09	64	58.9	58.2
	NOON	38	58	35	24					E^bN	4	.06	63	59.5	59.0
	Current in last hours				mls.										
	4	39	14	35	41					E^bS	4	29.97	63	59.0	59.6
	8	39	30	35	58					E^g	1.2	.97	68	59.0	58.5
	MIDT.	39	35	36	28					SE^g	1	.94	65	60.2	58.9
11	4	39	40	36	57			26°W.		SW	5	29.96	60	53.2	
	8 9	39	45	37	26			62		W^bS	5	.96	58	58.5	57.1
	NOON	39	50	37	56					W^bN	4.5	.97	56	54.1	50.6
	Current in last hours				mls.										
	4	39	52	38	18					W^bS.	3.4	.97	58	55.0	52.2
	8	39	55	38	41					WNW	2.3	30.03	62	54.2	52.9
	MIDT.	39	57	39	03					WSW	2	.07	60	53.4	51
12	4	39	57	39	27					N^g	1	30.04	57	52.0	50.5
	8	39	57.	40	00				Obsd at 9.0	W^g	3	.13	58	56.4	52.6
	NOON	39	57	40	34			59		WNW	3.	.12	60	57.7	52.4
	Current in last hours				mls.										
	4	39	58	41	22					W^g	1	.08	62	54.2	50.0
	8	39	59	42	10					N	2.3	.04	59	54.0	50.7
	MIDT.	40	00	42	57					N	4.5	29.93	58	55.2	51.8
13	4	40	00	43	47					N^bE	5	29.77	59	55.8	54
	8 9	40	00	44	17			53		WSW	7	.77	51	46.8	45.0
	NOON	40	00	45	5					WSW	6	.86	60	48.1	43.4
	Current in last hours				mls.										
	4	39	55	45	50					SW^bW	6.8	.83	56	45.5	43.4
	8	39	49	46	35					SW^bW	7.9				
	MIDT.	39	44	47	20					SW^bW	8-10	30.16	53	42.6	40.3

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Hour. — Clouds: 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: Upper. Lower. Prop. of Sky Clouded. 0 to 10. — Weather: According to Beaufort Notation. Fog Intensity. 0 to 5. — Sea Surface: Waves: Direction *from*. Disturbance 0 to 10. Swell: Direction *from*. Disturbance 0 to 10. Also record when Confused. Temp. by No. Spec. Grav. by No. — Time of Remark. — Remarks: 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.)

Hour (2a)	Clouds Upper (17)	Clouds Lower (17)	Prop. of Sky Clouded (18)	Weather (19)	Fog (19a)	Waves Direction (20)	Waves Disturbance (21)	Swell Direction (20a)	Swell Disturbance (21a)	Temp. (22)	Spec. Grav. (23)
4		Sty/Nim	10	o4RQ		SE^g	7			60.2	
8		Nim	10	o4D		SE	7	E^g, SE^g	7		
NOON		Nim	10	o2R.		Conf. E^g	4	E^g	7	62.1	
4		Nim	10	o2½R.		Conf. E^g	4	cross NE E^bN	7.8	61.8	
8		Nim	10	o2R.			2	E^g	8	61.8	
MIDT.		Nim	10	o1R.			1	E^g	7	60.4	
4		St/Ni	10	o1½D						56	
8 9		Cu St/St	10	oc.3½D		WSW	6	NE & WSW	6	56.2	
NOON		Cu St.	6,	bc.		W^g	5	W^g	7	55.8	
4		Cu St.	1	b.		W^bS	4	W^bS	6	54	
8		Cu St	8,	c		W^g	2	W^g	6	54.0	
MIDT.		Cu St	8	c			2	W^g	5	53.2	
4			0	bmw			1	W^g	5	51.5	
8	Cir S.		3.	bc.		W^g	2	W^g	5	54.5	
NOON	Ci/Ci st/a.st		6,	bc.		WNW	3	W^bN	5	54.2	
4	Alt s.	Cum s.	8	c.		—	1	W^bS	5	53.8	26.2
8	Alt s	Cum s.	8	c						54.9	
MIDT.	Alt s	Cum s	6.	bc.		N^g	2	W^g	5	56.	
4	Cir s.	Sto.	10	ocpl.		N^g	3	W^g	5	55.1	
8 9		Ni/St/Cu St	10	ocpq		WSW	6	WSW	6	54.6	
NOON	some Alt s.	Cu/Cu St	6	bc.		WSW	7	WSW	7	53.8	
4		Cu St/Cu/Nim	6	cq.p.		WSW	7	WSW	8	54.5	
8		Nim	10	oqp		WSW	7	WSW	8		
MIDT.			5	bcqph		SW^bW	8	SW^g	8		

Remarks (24, 25)

10th:
- Middle slight rain all watch
- Morning drizzle all watch
- 8.30 wind incr'd to 9 & began to back
- forenoon wind easing to E^bS. rain eased to slight.
- 11.0 wind E^bN. 4.5
- 11.40–12.30 moderate rain
- 2–4.30 P.M. rain mod to heavy. wind veering
- 4.30–5. rain dr. to slight. wind backed to NE^bE 3.4
- 6.0 St/Cu St/Ni g wind NE^g 2 occasional puff.
- 7.15 Rain dr. slight. 11.0 wind veered to SE
- Clocks on 5^m to 2^h 30^m fast on G.M.T.

11th:
- A.M. 3.0 breeze from S^wd veered to SW^wd incr'd 3.5
- 3.0–7.30 drizzle
- 3 P.M. clear sky. 4.0 wind puffy.
- 4.30 wind dropped to 2.3.
- 5.20 Cum s. 8, wind W^bN 3. puffy
- 6–6.30 drizzle
- 6.45 fog 1. in NNW quarter only.
- night Corona round moon.

12th:
- Clocks on 15^m to 2^h 45^m fast on G.M.T.
- 1.15 A.M. A.St/Cu St/1–b. 2.0 slight mist
- 3.0 wind dropped – calm.
- 3.40 light N^g breeze backing at 5 to W^g 3.
- 8.20 light shower.
- 4.30 P.M. wind calm.
- 5.30 wind N^g 1.2.
- 6.30 overcast thin Ci St. halo 22° 40^m also Corona
- 8.30 slight mist to NW^wd
- 10.40 wind freshened from N.
- midnight wind freshening

13th:
- Middle sheet lightning overhead & to S^wd
- 4.0 wind unsteady in dir'n in middle 1 hr's rain
- 5.0 rain squall (see barograph) mod. to heavy wind jumped from NW to WSW, after rain eased to drizzle. wind WSW. 6.7.
- 5.45 rain ceased.
- Clocks on 20^m to 3^h 5^m fast on G.M.T.
- 9. Passing showers. slight to drizzle
- 4.0 P.M. frequent squalls force 8 rain mod to slight or occasionally sleet.
- 8.0. squalls more frequent force 9. rain & sleet
- Mid^t. squalls & rain & hail lasting 15^m. force up to 10

Meteorological Log kept on board

Day. Civil Time.	Hour.	Latitude (S) Observed.	Latitude Dead Reckoning.	Longitude (E) Observed.	Longitude Dead Reckoning.	Course and Distance: True Course.	Distance by Log.	Total Compass Error (Of Compass used for Wind, being Variation and Deviation combined.) Max Temp & Var. no 2059	Ship's Head (By same Compass as Wind.)	Wind Direction	Wind Force (0 to 12)	Barometer Uncorrected Reading.	Barometer Att. Therm.	Thermometers (N & Z) Dry Bulb.	Thermometers Wet Bulb.
14	4	39	38	47	50			~~28 W.~~		SW b W	8-9	30.27	53	(44.0)	
	8	39	33	48	34			49	Obsd at 9.0	SW b W	5	.39	48	45.6	41.1
	NOON	39°	27′	49°	18′					WSW	4	.42	54	46.9	42.2
	4	39	31	49	55					W	3.	.41	53	48.1	44.0
	8	39	31	50	32					Wly	2	.49	58	48.3	44.1
	MIDT.	39	38	51	09					WSW	2	.49	53	49.1	45
15	4	39	40	51	36					N b E	3.4	30.46	51	47.8	44.6
	8	39	44	52	13			51	Obsd at 9.0	NNW	4	.45	53	50.8	47.1
	NOON	39°	48′	52°	50′			28° W.		NNW	4	.40	58	54.0	50.8
	4	39	51	53	39					NNW	4.5	.31	58	55.3	52.1
	8	39	53	54	28					NNW	4	.31	59	56.0	53.2
	MIDT.	39	56	55	17					NNW	5	.27	60	56.6	54.1
16	4	39	58	55	58			28 W.		NW b N.	4-6	30.23	58	56.5	54.1
	8	40	0	56	47			57	Obsd at 9.	NW b N	4-5	.19	60.	57.2	55.8
	NOON	40°	3′	57°	35′					NW b N	4.5	.19	64	57.1	55.2
	4	40	0	58	23					NNW	4.5	.12	64	58.5	56.8
	8	39	57	59	11					NNW	4.5	.11	65	58.8	57.3
	MIDT.	39	54	59	59					NW b N	5	.09	64	57.8	57.3.
17	4	39	52	60	30					NW b N	5.6	30.07	62	57.1	56.7
	8	39	49	61	17			59	Obsd at 9	NNW	4.5	.08	62	57.2	56.8
	NOON	39°	45′	62°	04′					NNW	2	.06	61	56.6	56.2
	4	39	42	62	34					SWly	1.2	.05	62	(55.2)	–
	8	39	38	63	13					NNW	4	.03	64	56.5	54.8
	MIDT.	39	33	64	01					N b W	5	.00	62	56.3	54.5
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

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. (Noon rows: Current in last ... hours ... mls.)

Barometer.* No. ... Height of Cistern above Sea ... feet.

Before accepting the readings of the dry and wet bulb thermometers, the observer should satisfy himself that both are in working order; the dry bulb being free of moisture and the wet bulb being untainted by salt water.

* 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 ... from ... to ...

Hour.	Clouds Upper.	Clouds Lower.	Prop. of Sky Clouded. 0 to 10.	Weather: According to Beaufort Notation.	Fog Intensity. 0 to 5.	Waves Direction from.	Waves Disturbance 0 to 10.	Swell Direction from.	Swell Disturbance 0 to 10.	Temp. by No. 8392	Spec. Grav. by No. 2268
4		Cum s.	5	bcgph				SWly	8	53.3	
8 9.		Cum s	8	c		SW b W	6	SW b W	8	55.5	
NOON		Cum s.	10	oc		SW b W	5	WSW	8	54.0	
4		Str/Cum s	10	oc.		WSWly	4	W b N	8	54.8	
8.30		Cum s	7	c			2	Wly	7	55.8	
MIDT.		Cums	8	bc.			2	SSWly / Wly	8	50.4	
4		Str	6.	bc			1	WSWly	6	49.0	
8 9		Cum s.	7	c		NNW	4	W b S / NW	8	55.2	26.5
NOON		Cum s	10	c		NNW	5	W b S / NW b N	8	57.1	
4		Cum s	8	c		NNW	4	~~W b S~~ ~~NWly~~ NW b N / ~~Wly~~	8	57.0	
8		Cum s/Str	10	oc		NNW	4	NWly / Wly	7	56.9	
MIDT.		Cum s	10	oc		NNW	5	NWly	7	57.1	
4		St.	10	oc.		NNW	5	Wly	6	57.2	
8 9	A-St.	St-Cu/Cu	4	bc.		NW b N	6	W / NW b N	7	56.9	
NOON	Ci-St/A-St		2	bc.		NW b N	5	NW b N	7	55.4	
4	Ci-St/A-Cu/A-St		6	bc.		NNW	4	W b S / NW b N	8	59.5	
8		St/Nb.	10	oc.		NNW	4	Wly / NNWly	6	58.3	
MIDT.		St/Nb.	10	oc 3 D		NNWly	4	Wly	6	58.1	
4		St/Nb.	10	op 2 D		NWly	4	Wly	6	56	
8 9.0		St/Nb	10	o 4 D		NNW	4	NNW / W	8	55.9	
NOON		Nb	10	o 4 R.		NNW	2	NW b N / W	8	56.0	
4		Nb	10	o/4R/4F		Conf	3.	W	8	55.1	
8	A-Cu	–	7	c.		NNW	3	W	8	55.4	
MIDT.	Ci	Cu	8	c.		Nly	4.			55.8	
2a	17	17	18	19	19a	20	21	20a	21a	22	23

Remarks (24 Time of Remark, 25). 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.)

14th:
- Clocks on 20m to 3h.25m fast on GMT.
- 4.0 Squalls less frequent at times wind dropping to 7.
- Morning no rain, squalls less frequent & of less force
- noon swell 18 feet. 3. Pm. wind eased to 3.
- 4.0 Pm. swell up to 20′; 4.45 wind eased to 2.3.
- 6.0 Cum s 9 clouds overhead light. wind Wly 2.3 light
- 6.50 Corona. rad. of brown ring 1°.45m.
- 8.0 Cums. clouds light & high from SW b S. ②
- 10.0 SSWly swell forming
- Midt cross swell.

15th:
- Aut. Clocks on 15m to 3h.25m fast on GMT.
- 1.30 After flat-calm light breeze from Nwd
- 4.0 breeze freshening clouds moving slowly from N. over 1 hr before breeze came away.
- 6.15 wind NNW 3. Swell WNW. 8 (20′ high) & incrg.
- 8.0 Combined swell about 24′ W b S part much ?
- 4.0 Pm. swell combined 20′
- 10.0 Slight drizzle for 10m wind inclined to decrease
- Midt wind increasing

16th:
- Clocks on 10m to 3h.50m fast on GMT.
- 4.0. middle. wind steady in dirn. & force 4-6 overcast all watch & drizzle at 3.50.
- 10.50 Short drizzle
- Noon swell up to 13′
- 4.0 Pm. The W b S. swell much the greater again
- 5.15 Clouded over St-Cu 10 wind increased to 5
- 7.0 drizzle
- 8.0 drizzle off & on.
- 9.15-12.00 drizzle.

17th:
- Clocks on 20m to 4h.10m fast on GMT.
- 4.0 Drizzle on & off. wind steady.
- 9.0 Drizzle on & off all am. swell from Wly ht. 15-17 feet
- 11.50 wind falling rapidly - rain all watch.
- 12.15 wind force 1. 12.45 wind backed to SWly 1.
- 4.0 Pm. rain dr. to slight all watch. swell 24′
- 4.15 Drizzle stopped, St-Cu clouds. 4.30 wind NNW & increasing
- 5.30 wind NNW 4
- 8.10. Ci-St 3. faint corona in a clear sky. renewed cambric wick on wet bulb.
- 10.50. Clouded over. Ci & St-Cu. clouds. - Corona
- 11.30 Sky clearing.

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. Year 1910 Month Sept. Day. Civil Time.	Hour.	Latitude. S Observed.	Latitude. Dead Reckoning.	Longitude. E Observed.	Longitude. Dead Reckoning.	Course and Distance. Each four hours. True Course.	Distance by Log.	Total Compass Error. Of Compass used for Wind, being Variation and Deviation combined.	Ship's Head. By same Compass as Wind.	Wind, at the time of observation. Direction. ~~State if true, or subject to Compass Error, or only~~ to Variation.	Force. 0 to 12.	Barometer.* No. Height of Cistern above Sea feet. Uncorrected Reading.	Att. Therm.	Thermometers. Dry Bulb. No.	Wet Bulb. No.
18	4	39	29	64	33			27°W.		N.	5.6	29.955	61.5	55.3	54.1
	8	39	24	64	21			58.		NNW.	5	·93	61	57.0	54.8
	NOON	39°	20′	66°	9′					NW by N	5.6	·91	62	55.8	55.0
		Current in last hours			mls.										
	4	39	15	66	54					WNW	4	·91	59	55.1	53.0
	8	39	10	67	39					W	5	30.01	60	54.0	47.3
	MIDT.	39	7	68	9					SW by W	5	·04	57	53.3	49
19	4	39	2	68	55					SW	5	30.08	53	52.8	47.2
	8	38	57	69	40			58		SW by W	4	·15	52	51.5	44
	NOON	38°	53′	70°	25′					W	3.4	·21	57	52.8	45.8
		Current in last hours			mls.										
	4	38	52	71	06.					W by S.	3.4	·16	55	53.6	47.2
	8	38	51	71	47					WNW	3	·16	56	51.0	45.0
	MIDT.	38	50	72	17					W by S.	3.4	·16	53.	51.9	46
20.	4	38	49	72	58					WNW	5	30.095	54.2	52.5	48.9
	8	38	48	73	39			54		WNW	5	·06	56.	53.9	49.2
	NOON	38°	46′	74°	19′					W by N	5	·05	57	54.2	50.6
		Current in last hours			mls.										
	4	38	45	75	04			27°W.		WNW	4.5	29.98	60	52.9	49.7
	8	38	44	75	49					WNW	3.4	·96	61	53.8	48.1
	MIDT.	38	43	76	34					W	4	·92	58	49.9	47
21.	4	38	42	77	19				wind vel. by gauge	SW.	6.7	29.85	51		
	~~8~~ 9	38	43	77	49			55	35-46	SW	8-9	·95	58	47	43.3.
	NOON	38°	44′	78°	10′					SW by W	8	30.04	60	49.3	43.6
		Current in last hours			mls.										
	4	38	46	78	35					SW	5.6	·10	58	48.9	43.6
	8	38	49	79	01					SW	3.4	·18	56	49.0	
	MIDT.	38	51	79	21					SW by W	3.4	·20	58	49.2	43.2
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

(Printed vertically between columns 14 and 15:) Before accepting the readings of the dry and wet bulb thermometers, the observer should satisfy himself that both are in working order; the dry bulb being free of moisture and the wet bulb being untainted by salt water.

* 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 ______ from ______ to ______

Hour.	Clouds. Names. Upper.	Lower.	Prop. of Sky Clouded. 0 to 10.	Weather. According to Beaufort Notation.	Fog Intensity. 0 to 5.	Waves. Direction from.	Waves. Disturbance. 0 to 10.	Swell. Direction from.	Swell. Disturbance. 0 to 10.	Temp. by No.	Spec. Grav. by No.
4	Ci St	St Cu	7	cb		N by E	4	W by E	7	56.1	
								NW by N	✱		
8	A St	St Cu	5	bc.		NNW	5	W	8	56.2	
								NW by N	5		
NOON		Nb.	10	o ½R	1	NW by N	6	W	8	55.8	
								NW by N	7		
4	A St	Cu. Nb	10	o c ½R		NW by N	6	W	7	55.0	26.5
8	A St / A Cu		8	c ½R		W by E	6	W by E	7.8	54.9	
MIDT.	Ci St	Cu / Cu Nb	7	bc.		SW by W	6	WNW	7	55	
4	Ci St	St Cu	3	bc.		SW by E	6	W by E	7	55.1	
8		Cu/St. Cu	2	bc		SW by W	5	SW by W	7	53.8	26.3
NOON	A Cu/A St.	Cu/St Cu	3	bc.		W	5	W by S	7	54.3	
4	A St/A Cu	Cu/St Cu	3.	bc.		W by S	4	W by S	7.8	55.0	
8		Cu/Nb/ St Cu	8.	c		W by E	3	W by E	7.8	55.8	
MIDT.		St Cu / Cu/Nb.		bc.		W by E	3	W by E	67	54.1	
4	Ci St	St Cu	5	bcqp.		W by E	6.			55	
8		Cu/Cu Nb / St Cu	5	bc.		WNW	6.	WNW	7.	55	
NOON	A. St.	Cu/ St Cu.	3.	bc		W by NW	6.	WNW	7	54.9	
4	A St.	Nb/ St Cu.	6.	bc.		WNW	6.	W by N	7	54.1	
8		St Cu	2.	bc		WNW	4	WNW	7	53.9	
MIDT.	Ci. St.	Cu St/ Nb.	4	bcp.		W by E	5	W.	7		
4	A. St	St-Cu	10	oqp.		W by E	7			53.	
8	A. Cu	Cu	6	bcq sp.		SW	7	SW	8		
NOON		Cu/St. Cu / Nim	6.	bcq		SW	7	SW	8	53.0	
4				bcq		SW	6	SW	8 / 17 ft.	52.6	
8		St-Cu	8	c						53	
MIDT.		Cu	10	ocq		SW by W	4	WSW	7	52.1	
2a	17		18	19	19a	20	21	20a	21a	22	23

Remarks. (24 Time of Remark. — 25) 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.)

Clocks on 15m to 4h. 25m fast on G.M.T.
4.0 steady increase in wind. Ci Cu from NNW slowly
8.0 W by E swell ^higher over 20′ 10.0 Drizzle
10.30 fog 1. Dr. to slight rain.
noon. Rain mod. W by E swell very long. 12.30 rain stopped
12.30 Cl from NW by N (4) 3.30. Wind NW by N 4.
4. P.M. dense Ci St. clouds, swells 14′ each.
4.50 Wind backed to W by N & incrd to force 5
5.30 Wind 27 miles by gauge 9.45-10.15. rain.
Clocks on 20m 10.50. wind shifted from W by S to SW by W.
Midt. Slight shower accompanied by wind backing to SW.

4.0 Wind steady in force but inclined to go S by E sea rising. Clouds from SW. moderately fast
1.50 P.M. Rain squall with wind WNW while it lasted
4.30. Showers about.
5.45. Wind eased to 2.3 puffy & varying two points in dir.
6.45 Wind veered. to WNW. 3 & became steadier. in 1st dog - passing showers.
8.0 Showers about
11.0 clocks on 15m to 5h. 0m fast on G.M.T.
11.50 - 11.55 light rain.

2.0 Two squalls. force 6. with passing showers of 20m
4.0 Squall heavy Cu with Ci. St. above.
9.0 Shower.
noon light Ci haze over most of sky.
2.45 Rain squall. R. mod. from WSW. (wind unchanged)
4.0 Rain to NE.
6.30 Wind eased 3.4. occasl showers in dogs.
9.50 3 mins mod. rain & squall.
11.15 20m. mod. rain.
Clocks on 15m to 5h. 15m. fast. on G.M.T.

4. a.m. from 2. squalls from SW. Rain 2 hrs. Thick weather
4.15 Lunar rainbow. white arc. 10° & aureole.
Morning - wind steadied into fresh SW by E gale heavy rain & sleet squalls (9 force)
Forenoon no rain at ship till noon - squall force 8
4.45 p.m. rain squalls all round.
Dogs. Occasional spots of rain, occasional squalls up to force 5 little or no rain in them.
11.00 Clocks on 10m to 5h. 25m fast on G.M.T.

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. Day. Civil Time.	Hour.	Latitude. Observed. (S)	Latitude. Dead Reckoning.	Longitude. Observed. (E)	Longitude. Dead Reckoning.	Course and Distance. True Course.	Distance by Log.	Total Compass Error. Of Compass used for Wind, being Variation and Deviation combined. (No 2059)	Ship's Head. By same Compass as Wind.	Wind, at the time of observation. Direction. State if true, or subject to Compass Error, or only to Variation.	Force. 0 to 12.	Barometer.* No. 1163. Height of Cistern above Sea 9½ feet. Uncorrected Reading.	Att. Therm.	Thermometers. Dry Bulb. No. 8395	Wet Bulb. No. 8396
22nd	4	38	54	79	47					WNW	4	30·16	52·5	48·8	45
	8 9	38	56	80	12			51		W by N	4	·18	57	51·3	47·6
	NOON	38	58	80	37					WNW	4	·145	58·2	52·0	48·5
	Current in last hours				mls.										
	4	39	01	81	07					W by N	4	·06	57	53·0	49·5
	8	39	04	81	38					W by N	4	·10	60	52·8	49·3
	MIDT.	39	06	82	02					W	3·4	·10	58·5	51·4	48·4
23	4	39	09	82	33			28°W.		WSW	4	30·13	52	50·1	46·6
	8 9	39	12	83	03			5		WSW	3	·20	51·2	50·5	45·1
	NOON	39	15	83	33					W	3	·20	52	51·8	46·0
	Current in last hours				mls.										
	4	39	16	83	47					W	2·3	·21	53	50·5	44·9
	8	39	17	84	01					WNW	1·2	·27	55	50·2	45·7
	MIDT.	39	18	84	15					Calm	0	·25	51·8	49·2	46·3
24	4	39	19	84	30					WNW	2	30·21	50	47·0	45·5
	8 9	39	20	84	44			53.		W by N	1·2	·20	54	50·5	46·8
	NOON	39	21	84	58			32°W.		W by S	3	·23	56	52·6	48·0
	Current in last hours				mls.										
	4									NW	3	·20	57	52·3	49·0
	8									NW by N	3·4	·16	55	51·0	49·2
	MIDT.									NNW	3	·13	57·2	57·2	50·4
25	4	39	43	86	50					NNW	4	30·065	57	51·3	48·2
	8 9	39	49	87	19			53.	wind 20°	NNW	4·5	·01	58	52·2	51·0
	1·0 NOON	39	54	87	48					NNW	5	29·91	60	52·6	51·4
	Current in last hours				mls.										
	4									NNW	6	·85	58	52·7	51·1
	8									NNW	5·6	·78	61	53·0	51·9
	MIDT.									NW to NNW	6·7	·74	58	52·6	52
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Year 19 · Month Sept

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.

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Captain from to

Hour.	Clouds. Upper.	Clouds. Lower.	Prop. of Sky Clouded. 0 to 10.	Weather. According to Beaufort Notation.	Fog Intensity. 0 to 5.	Waves. Direction from.	Waves. Disturbance. 0 to 10.	Swell. Direction from.	Swell. Disturbance. 0 to 10.	Temp. by No.	Spec. Grav. by No.
4	Ci.St.	St.Cu	5	bcp.		W by N	3.	WSW	7	53·9	
8	A·St	St·Cu / Cu Nb	8	cp.		W	5	W	7	52.	627
NOON	Ci St	Cu. St.	7	bc.		WNW	5	W	7	53·9	
4	A St	Cu / St	2.	bc.		W	7	SW W by S	7	53·5	
8		St / Nim	3.	bcp.				W by N	7	52·9	
MIDT.		St / Cu-Nim	3	bcq		W	7	W	7	53	
4	Ci St. A St.	St. Cu	5	cb.		WSW	4	W	7.	52	
8		Cu	9	oc.		WSW	4	Conf W + WSW	7		
NOON	A·Cu		8	c		W	4	W	8		
4	A.Cu		9	c.		W	3.	SW by W / W S	7 (18 ft)	52	27·0
8			10	oc		.	.	.	.	52	
MIDT.		Nb/Cu. St / Str.	6.	bc.		.	.	SW by S	5	52·1	
4	Ci St	Cu	4	bcp.				SW by S	5	53·1	
8	A. St.	Cu / St·Cu	.	bcp		W	2.	W by S.	7 (14 ft)	52·5	
NOON	A·St·	St Cu / Cu	7	bc.		W	3.	W	6·7 (11 ft.)	53	27·0
4	A·St·	St Cu / Cu	1.	b.		NW by S	3.	W	7	53	
8		St·Cu	3.	bc.				.	.	52·8	
MIDT.		St·Cu / Nim	5	bc.		NW by S	3	.	.	51·9	
4	A. St·	St·	6.	cb.				W by S	6.	51	
8	A·St·	St·	10	oc.		NNW	4	Cross NNW by S W by S	5	51·4	
NOON	..	St / St Cu	10.	ocm.		NNW	5	Cross NNW by S WSW by S	5	51·7	
4		St / St·Cu	10.	oc		NNW	5	Cross NNW by S WNW	6.	51·4	
8		St·.	10	oc						51·8	
MIDT.		Nim	10	oc.		NNW	6	NNW to WNW by S	7	51·9	
2a	17		18	19	19a	20	21	20a	21a	22	23

Also record when Confused.

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.

Remarks. 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.)

Time of Remark. (24)	Remarks. (25)
4·0	Cl. moving mod. from Westward
4·0	About 1 am. Breeze backed to NSW & W & WNW passing showers (d) breeze unsteady in force falling light under a rain cloud.
	Morning Passing showers (d) Clouds & Clears rapidly
	10.25–11.55 mod. rain squall.
	Afternoon occasional showers.
4·0	Wind W by N varying in dirn. 1 point.
	Dog occasional showers of rain (slight lodz)
	First rain squalls about.
11·0	Clocks on 10m to 5h. 35m fast on G.M.T.
4·0	Cl. moving mod. from W. wind never freed beyond. WSW. Breeze falling toward 4 am
4·30	Corona – Aureole only.
12·0	Corona round sun.
6·0.	Pm. Wind eased 1·2. St·Cu 10.
9–9.15	Suggestion of drizzle.
11·25	Wind dropped to Calm.
12·25	Lunar Rainbow to W by N. – complete arc.
12·40	Drizzle (slight) for 15m.
2·0	Two lunar rainbows. Breeze came away from WNW light.
4·0	Banks of Cu. with rain moving slowly from W.
	Morning – very occasional showers.
3·0	Wind NW. 3. 4·0. Cl. round horizon only.
5·0.	Wind to NW by N. inclined to freshen. – Cross swell commenced to show from S.wd
9·50	Stratus clouds coming up astern, wind force incr.?
	Clocks on 10m to 5h. 45m fast on G.M.T.
10·20	Slight drizzle begins – squall lasts 5 mins
	Midt. Occasl showers – Nimbus clouds.
4·0.	Cl. moving mod with wind, wind freshening & backing very slight d. at 3·30 clear sky at intervals
4–5.30	slight drizzle.
9·54	15m slight drizzle, occasional bunches of kelp.
	6 Pm to 8. inclined to drizzle.
	1st watch Squalls & rain frequently during watch.
11·55	Wind shifted in squall to W by S. but resumed. NNW by direction before midnight.

Meteorological Log kept on board

Day (Civil Time)	Hour	Latitude Observed	Latitude Dead Reckoning	Longitude Observed	Longitude Dead Reckoning	True Course	Distance by Log	Total Compass Error	Ship's Head	Wind Direction	Wind Force (0 to 12)	Barometer Uncorrected Reading	Att. Therm.	Dry Bulb No. 8395	Wet Bulb No. 8396
26d	4	40	14	90	08.					NW. / SW^bW.	5	29.80	54	48.5	47.0
	8	40	20	90	46			53.	22	W	4.5	.91	51	49.9	43.9
	NOON	40	26	91	24					W^bS.	4.5	.95	51	44.1	43.0
	4									W	3.4	.99	51	49.0	43.8
	8									W	3.	30.06	50	48.0	43.9
	MIDT.									WSW.	2-4	.10	48	46.8	43.3
27	4									SW^bW.	3.5	30.17	46.5	45.3	42.3
	8 9							50	13	WSW	4	.29	49	45.9	42.6
	NOON									WSW	3.4	.32	50	48.2	43.0
	4									WSW	3.4	.37	49	47.1	42.2
	8									WSW	3.4	.43	48	46.9	42.2
	MIDT.									SW^bS.	3.4	.45	46.6	45	40
28.	4									SW^bS.	4	30.47	45.7	44.1	39.8
	8 9							49		S^g	2	.50	49	48.8	42.3
	NOON									S^g	2.	.50	53.		
	4									S^g	1.	.48	53.	(46.8)	(40.0)
	8									Calm	0	.46	52	(47.5) 47.2	(40.0) 39.4
	MIDT.									Calm	0	.45	56.5	(46.5)	(38.5)
29.	4							29°W.		S^g	2	30.40	55	48.4	42.0
	8 9 (100)							4		E	2.3.	.37	54	46.4	40.7
	NOON	41	24	99	57			48		ENE	2.	.33	57	46.8	40.05
	4									E	2	.32	56.6	46.9	40.2
	8									NE^g	1.	.32	54	46.9	41.1
	MIDT.									E^bN-E^bS.	3.4	.41	52	46.2	42.6
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Year 19 Month Sept

Current in last hours mls.

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.

Before accepting the readings of the dry and wet bulb thermometers, the observer should satisfy himself that both are in working order; the dry bulb being free of moisture and the wet bulb being untainted by salt water.

* 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 from to

Hour	Clouds Upper	Clouds Lower	Prop. of Sky Clouded 0 to 10	Weather (Beaufort Notation)	Fog Intensity 0 to 5	Waves Direction from	Waves Disturbance 0 to 10	Swell Direction from	Swell Disturbance 0 to 10	Temp. by No.	Spec. Grav. by No.
4		St.	10	ogd.		NW	6.			52.	
8	Ci/St-Cu / A-St	St.	8	bc.		W	5	Conf W.	7 (12')	51.1	27
NOON		Cu/St Cu / Nim	5	bcp.		W	5	W	7	51.4	
4		Cu/St Cu / Nim	6.	bc.		W	4	W	7	50.6	
8		St Cu	1.	b.				W^g	7	50.9	
MIDT.		St Cu / Nim	4	bcq		WSW	3	W	7	48.2	
4	Ci St.	St.	3.	bcqh.		SW^g	3.	W^g	6.	49.8	
8	A. St.	St/St Cu / Nim	6	bc.		WSW	4	Conf. WSW	7.	51.0	27.2
NOON	A. St.	Cu/St Cu.	6	bc.		WSW	4	W	8	51.2	
4	A. St.	Cu/St Cu	4	bc.		WSW	4	Conf WSW	7 (22')	51.0	
8		St Cu	5	bc						50.9	
MIDT.		St/Nim	3	bc.		SW^g	4	Westly	6	48.8	
4	A. St.	St.	3	bcq.		SW^g	4	W^g	6.	48.8	
8	A St/A. Cu	Cu/Cu-Nim	4	bc.			3	W^bS. slight NW.	6.		
NOON	A St.	Cu/St-Cu	7	c			2	or W SW	7.8	50.4	27
4		Cu/St Cu	7	c.			2	WSW	8 (18')	50.1	
8		St Cu	5	bc.						50	
MIDT.		St Cu / Nim	10.	oc.				W^g	7	50.	
4		St Nim	10	oc				W^g	6.	50.	
8	A St.	St-Cu/Cu	9	c.		E^g	3.	WSW	6.		
NOON	Cu St/A. Cu	St Cu/Cu/Nim	3.	bc.		ENE	2	WSW	6	50.4	27.2
4	Ci/Ci St/Ci Cu	St-Cu	4	bc		E^g	2.	WSW	5	51	
8		St/St Cu	10	oc						50.7	
MIDT.		St Cu/Nim	9	oc.		E^g	3.			49.8	
2a		17	18	19	19a	20	21	20a	21a	22	23

Remarks (24 Time of Remark, 25):

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.)

- 2.0. Clocks on 20m to 6h.5m fast on GMT.
- 1.0. Wind steadied at NW. (4). At 3. heavy squall from NW. When overhead wind flew suddenly to SW. (6) later (5). Bar. started to rise at once.
- Morning till 7. Showers. dr - mod. 8.0 Breaking
- 12.30-4.5. wind eased 2.3 & later increased, few showers after noon
- 4.15-4.25 Rain squall with rain & sleet (heavy) force 5. After wind fell to 2.3. in puffs. 3.4.
- 5.40. similar squall in every way.
- 7.30 Zod. light. apex 35°. brightness at best = 4th mag star.
- 9.25 Rain squall from Wd. 17 mins rain mod.
- 10.30 Wind dropped to 2, & headed ship for about 5 mins.
- Midt. Wind falling light between squalls.
- Midt-2am. Wind unsteady 3.4 & dirn. SW^bW.-W^bS. squalls 5
- 3.0. Heavy hail in squall, force 5 - later wind steady at SW^bW force 4 sky cleared at 3.30.
- Clocks on 20m. to 6h.25m fast on GMT.
- 9.0 Showers about.
- 4.Pm. chiefly. Cum. Swell conf. & of very unequal heights averaging about 14'.
- 9.0 20m sleet ~~wind~~ mod. wind backed to SSW with force of 5 squall. lasting 23m.
- 10.0 Wind SW^bS. wind steady force 3.
- 11.0 force 4
- Midt. Sky clearing wind 3.4.
- Clocks on 10m to 6h 35m fast on GMT.
- Midt-3.am - Squalls with rain. force 5 on edge of squall
- 4.0 am. Sky cleared & wind after unsteadiness settled down to SW^bS. force 4.
- 8.0 Wind backed to Sd. very occasl showers during morning
- 9.0. Swell increased & by 10.30 from W^bS was 18-20 feet.
- Noon The alterations in swell this day very marked. Afternoon - light S^g & SE^g airs. 5.30 rain to Nwd.
- 8.30 Calm. - wind. Heavy Nim & St-Cu. forming from S.E. Then W to N. Sky above clear.
- 9.0 Cl. 5
- 11.15 Clouded over 10.
- Clocks on 15m to 6h.50m fast on GMT.
- 4.0 Am. Nimbus & rain on horizon, overcast with wind from SE to S. 1.2.
- 7.0 Wind backed to SE^g 2 & at 8.30 to E^g 2.
- Noon Swell very long. - showers to N & NW.
- 4.0 Ci Cu & Ci forming to Wwd - from NW to SW.
- 4.30 Bank of St Cu slowly approaching from NW. Light cirrus over most of sky {Ci Cu/Ci St/A.Cu/St Cu} propn 4 not counting light cirrus Wind NE 1.
- 9.30 Squall 12m + rain & wind force 5. sky clouding
- 11.10 Aurora Aust.
- Mid. Shower of drizzle.

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.

14767—7500

B

Meteorological Log kept on board

Year 19 10 — Month Sept — Latitude S — Longitude E

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	Latitude Observed	Latitude Dead Reckoning	Longitude Observed	Longitude Dead Reckoning	True Course	Distance by Log	Total Compass Error	Ship's Head	Wind Direction	Wind Force (0 to 12)	Barometer Uncorrected Reading	Att. Therm.	Dry Bulb	Wet Bulb
30.	4							29°W		S^{g}	2.				
	8 9							50		E	2·3.				
	NOON (Current in last hours ... mls.)									ENE	2.				
	4									East	2.				
	8									NE^{g}	1.				
	MIDT.														
30	4							29°W.		$E^{b}S$	3·4	30·295	51·5	46·0	42·5
	8 9							50.		$E^{b}N$	3·4	30·36	52	47·1	42·0
	NOON (Current in last hours ... mls.)									$E^{b}N$	3·4	·37	56	48·8	43·3
	4									E	3·4	·38	57	48·6	44·1
	8									$E^{b}S$	3.	·43	54	47·3	42·3
	MIDT.									E^{g}	3	·44	54	47·4	41·9
Oct. 1	4									$E^{b}S$	3.	30·435	53	48·0	44·7
	8 9							28°W.		$E^{b}N$.	3·4	·45	54	48·0	44·1
	NOON (Current in last hours ... mls.)	42	14	104	49			27°W.		$E^{b}N$.	3.	·44	57	48·9	44·0
	4							49.		ENE	2.	·40	56	48·2	43·8
	8							26°W.		ENE	2	·34	55	47·0	42·8
	MIDT.									ENE	2	·35	54·6	46·8	43
2.	4							26°W.		NE to $NE^{b}N$.	3 to 4	30·28	51	46	42·5
	8 9							48		NNE	3	·25	53	46·1	42·2
	10 NOON (Current in last hours ... mls.)	42	9	107	48					$N^{b}E$	3.	·23	55	47·1	43·7
	4									$N^{b}W$	3	·21	54	47·5	44·3
	8									$N^{b}W$	3	·22	54	47·1	45·8
	MIDT.									N	3	·22	55	47·8	46.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Before accepting the readings of the dry and wet bulb thermometers, the observer should satisfy himself that both are in working order; the dry bulb being free of moisture and the wet bulb being untainted by salt water.

* 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 ______ from ______ to ______

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.

Hour	Clouds Upper	Clouds Lower	Prop. of Sky Clouded 0 to 10	Weather according to Beaufort Notation	Fog Intensity 0 to 5	Waves Direction from	Waves Disturbance 0 to 10	Swell Direction from	Swell Disturbance 0 to 10	Sea Temp. by No.	Spec. Grav. by No.
4											
8											
NOON											
4											
8											
MIDT.											
4	Ci St.	St	7.	cb.		E^{g}	3.			50	
8	A. St	Cu	8	c		E^{g}	4	E^{g}.	3.	50	
NOON	Ci/Ci St / A St.	Cu.	3.	bc.		E^{g}	4	E	3.	50	
4	Ci/Ci St / A Cu/A St.	Cu/St Cu.	4	bc.		E	4	E	4	50·1	
8		St	2.	see remarks				E	4	50·2	
MIDT.		misty Stratus	4	bcm		E^{g}	3			49·2	
4		St.	10	oc.		E	3.	W^{g} / E^{g}	7/12' / 6	50	
8		Cu St/Ni	9	c.		$E^{b}N$	3	W^{g} / $E^{b}N$	7 / 5	50	
NOON	Ci/Ci St / A Cu/A St. (struck)	St/Cu (struck)	9 (struck)	bcm				E / W	4 / 7	50·5	
4	Ci/Ci St / A Cu/A St	St/Cu	9.	c.			2			50	27·1
8		St Cu/St.	10	oc.						50·1	
MIDT.			4	bc.		ENE	3	W^{g}	7	49·7	
4	A. St.	St	8	cbl.		NE^{g}	3	W^{g}	6		
8		St/Cu	10	oc.		NNE	3.	SE	7·8	50·3	26·8
NOON	A St.		10,	oc.		N	3	SE	7 (11 ft.)	50·0	
4	A St.	St/St Cu	10₂	oc.		N	3.	W^{g} SE	8 (18 ft.)	49·6	
8		St/Nim	9	oc 2 D						49·8	
MIDT.		St/Nim	10	o d.		N	3			49·5	
2a	17		18	19	19a	20	21	20a	21a	22	23

Also record when Confused.

Remarks. (24: Time of Remark; 25: Remarks)

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.)

2·0 am. Clocks on. 10m to 7h·00m fast on G.M.T.
4·0 Clouds slowly working over from E after 2hrs very filmy. St from same dirn.
3·45 Aurora Aust. b.g. $SW^{b}W$. a perp bar of light for 2m. Sky to 5d bright all watch
6·0 Wind backed to $E^{b}N$.
4 Pm. Slight showers about.
4·30 Bank of St. clouds. approaching from NE (1) other lower clouds from E (1)
5·15. This cloud passed over ship. Wind to NE^{g} 4

slight rain, Wind veering again to E^{g} after.
5·45. Dark. Cu-Ni clouds. to NW, W & SW. above these A St. & overhead a great deal of cirrus stripes appearing to converge on N.W. point. The stripes soon broke up & were replaced by irregular masses of cirrus
8·0 A sort of mist over whole sky through which the stars shine dimly.
Midt No change in sky.

4·0 Breeze steady. slight mist over sky.
5·30. Wind $E^{b}S$. 1·2. Slight E^{g} swell & long W^{g} one 20' high
Forenoon, A. St over much of sky sun shining through
4·0 Pm. W^{ly} swell. very long. E^{g} much shorter. to NW. dark Alt. St. & fracto Cum. above. low cirrus through which sun dimly shines
5·0 Sky over lower clouds now. Ci Cu & Ci St. - a very pretty line of streaks radiating from NW of long...
Lower clouds detached masses of St Cu from NE (1).
no change to NW.
Midt. wind inclined to be free

2·0 Clocks on 10m to 7h·10m fast on G.M.T.
1·0 Lightning S-SW, wind unsteady & inclined to haul to N
4·0 Wind unsteady. cloud moving mod. from NNE
Forenoon. - inclined to drizzle.
1 Pm. Sun shining through dimly.
Afternoon Wind very gradually backing.
4·0 a westerly swell coming up. much smaller than SE^{g}.
6·10 Commenced to rain Drizzle wind eased 2·3.
8·0. Stars showing overhead.
8·35. Sky overcast completely - inclined to drizzle
Midt. Slight drizzle all watch.

* ... 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

Year 19 10 Month Oct.

DATE. Day. Civil Time.	Hour.	Latitude. Observed.	Latitude. Dead Reckoning.	Longitude. Observed.	Longitude. Dead Reckoning.	Course and Distance. Each four hours. True Course.	Distance by Log.	Total Compass Error. Of Compass used for Wind, being Variation and Deviation combined.	Ship's Head. By same Compass as Wind.	Wind, at the time of observation. Direction. ~~State if true, or~~ subject to Compass Error, ~~or only to Variation.~~	Force. 0 to 12.	Barometer.* No. Height of Cistern above Sea feet. Uncorrected Reading.	Att. Therm.	Thermometers. Dry Bulb. No.	Wet Bulb. No.
3.	4							49		N	4	30.205	53.6	47.2	46.9
	8 9.							24W		N	3.	.23	55	48.9	
	NOON	42°	17'	111°	18'					NW^bN	3.	.25	53.	49.1	46.3
		Current in last hours			mls.										
	4							22W		NW^bN	3.	.25	55	48.4	46.2
	8									NW^bN	3.	.28	56	49.0	46.0
	MIDT.									NNW	3.	.28	56	49.0	45.8
4th	4							19W		NNW.	3.4.	30.285	55	49.2	46
	8							50.		NW^bW.	3	.33	51	49.2	46.8
	NOON	42°	5'	114°	41'					NW	3.	.35	57	50.0	47.9
		Current in last hours			mls.										
	4							18W		WNW	3.	.37	58	50.2	47.9
	8									W	2.	.44	60	48.3	47.0
	MIDT.									SW^bS.	3.	.43	54.6	48.0	44.3
5th	4							17W		WSW	3.	30.42	52	46.2	43
	8 9							50		W	3.	.46	55	48.2	44.1
	NOON	41°	49'	118°	1'					WNW	2.3.	.46	56	49	45.8
		Current in last hours			mls.										
	4							15W		WNW	3.4	.41	55	49.1	46.6
	8									W^bN	3.4	.41	57	49.4	46.8
	MIDT.									NW^bW	4	.37	56.2	50	48
6th.	4							13W		NW^bW	5	30.32	54	49.0	48.1
	8.45	4						50		WNW	4	.32	53.	50.0	47.3
	NOON	41°	46'	121°	42'					NW^bW	4	.295	54.2	50	48.3
		Current in last hours			mls.										
	4							11W	21	NW^bW	4.5	.24	56	49.8	47.0
	8									NW	4.5	.21	58	49.0	47.1
	MIDT.									NW^bW	5.6	.13	56.8	49.8	47.8
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

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Captain ________ from ________ to ________

Hour.	Clouds. Upper.	Clouds. Lower.	Prop. of Sky Clouded. 0 to 10.	Weather. According to Beaufort Notation.	Fog Intensity. 0 to 5.	Waves. Direction from.	Waves. Disturbance. 0 to 10.	Swell. Direction from.	Swell. Disturbance. 0 to 10.	Temp. by No.	Spec. Grav. by No.	Time of Remark.	Remarks.
												4.0.	dr. on & off for about 1 hr. in all. Sky overcast.
4	St	St.	10	ocpd.		N^ly	3.	SE^ly	6.	49.1			Dark banks of St. moving over. wind slightly veering
												9.0	Drizzle part of A.M.
8		St Cu	10	oc.		N^ly	3.	SW WSW	6.	49.6		12.0	Sun shining through drizzle.
												Afternoon	Rain (dr) through 1st part of watch
NOON		St/St Cu	10,	oc.		NNW	3.	SE W	6.	49.6			for 1 hr.
												9.0	Wind eased 2.3.
4	A.St.	St Cu.	8,	c/R.		NNW	3.	SE W	67	49.4		11.30	to Mid^t. Inclined to drizzle.
												11.30	Wind NNW.
8		St Cu	6.	bc.						50			
													Clocks on 20^m to 7^h 50^m fast on G.M.T.
MIDT.		St/Nim	10	bc.						49.8			Clocks on 15^m to 8^h 5^m fast on G.M.T.
												4.0 A.M.	Showers of slight dr. - Breeze unsteady
4		St	10	ocpd.		NNW	3.	SE^ly	5	49.8			from W^bW to NW^bN. Sky slightly clearing at times
												9.0	The wind swell the S^r. 10.30 passed kelp, inclined to dr.
8	A.St.	St-Cu	10	oc.		NW	3.	WNW SE.	5	49.3	27.2	11. A.M.	32 min. drizzle. 11.45 clearing
												3.0	Wind backed to WNW.
NOON	A.Cu	St Cu	9	bcm		NW	3.	W	5	49.8		4.0.	SE^ly swell just noticeable under the W^d.
												5.0	Rain (mod) wind backed to W & dropped to 2.
4	A.Cu	St/St Cu	5	bc.		WNW	3.	W WNW SE^ly	5	49.4		5.50.	Rain stopped 6.0. Rain to NW storm passed to E^rd
												9.38	6^m light rain. Wind W^ly during rain squall
8		St	2	bc.			2	W	4	48.3			after squall sky clearing.
												10.5.	Sky illum^d by partial aurora wind incr^d to 3.
MIDT.		St	2	bc.		W^bS.	2	W^ly	4	49.9		Mid^t	Sky to S^wd. still illuminated.
												1.0-2.0	Aurora Aust. from SE to S to WSW. Arc
4		St.	9	oc		WSW	3	W^ly	4	48			rising about 20° & rays at times to 35°.
													colour jade green.
8		St. Cu	10	oc		W	3	W^ly	6	49.8		4.0.	Wind inclined to veer to SW. sky partially clear till 3.20
												9.0	Swell long. rain gauge last 24 hrs. .05 ins.
NOON		St Cu	9	oc		W	3.	W^ly WSW	6	49.9		Noon.	Wind working from W^bS to SW during forenoon
												0.20 P.M.	Inclined to drizzle.
4		St/St Cu	10	oc		W	3	W^ly WSW	7.8	50.0		4.0	Appearance of rain to N N^wd
												9.57	Commenced to drizzle - 13^m.
8		St/St Cu	10	oc						50.0			Clocks on 10^m to 8^h 15^m fast on G.M.T.
MIDT.		St Cu/Nim	10	oc.						50			
												4.0 A.M.	Sea getting up. - Breeze puffy & unsteady, slight
4		St.	10	ocpd.		WNW	5	W^ly	6,	49.5			increase with d. at 3.30 sky cleared for 10m.
												4.50	Rain (slight) for 1/2 hr.
8		Nim/St-Cu/Cu	7.	bc 1/2 R.		WNW	5	W WSW	6.	48.8	27.1	8.45	Showers about.
												11.0	Fog & dr. for 5 mins 4.0 P.M. inclined to drizzle
NOON	A/Ci St	St/St-Cu	4	bc.		NW	5	W WSW	6.	49.3		Dog.	Passing showers of dr. to slight only few
													passed over ship.
4		St/St-Cu	9	c.		WNW	5	WSW W	7.	49.5		10.10	Ten mins dr. - In squalls wind backing
													from NW to W^bN.
8		St/St-Cu/Nb.	9	ocp D.						49.4		Mid^t	Frequent squalls force 6. accompanied
													by dr. during watch. Wind backing in squall.
MIDT.		St-Cu/Nb.	6.	bcqptd		NW^ly	5			49.7			Clocks on 15^m to 8^h 30^m fast on G.M.T.
2a	17		18	19	19a	20	21	20a	21a	22	23	24	25

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.)

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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.

B

14767—7500

Meteorological Log kept on board

Captain from to

DATE. Day, Civil Time. (Year 19 10, Month Oct.)	Hour.	Latitude. S Observed.	Latitude. Dead Reckoning.	Longitude. E Observed.	Longitude. Dead Reckoning.	Course and Distance. Each four hours. True Course.	Distance by Log.	Total Compass Error. Of Compass used for Wind, being Variation and Deviation combined.	Ship's Head. By same Compass as Wind.	Wind, at the time of observation. Direction. ~~State if true, or~~ subject to Compass Error, ~~or only to Variation.~~	Force. 0 to 12.	Barometer.* No. Height of Cistern above Sea feet. Uncorrected Reading.	Att. Therm.	Thermometers. Dry Bulb. No.	Wet Bulb. No.
7.	4							9 W		W^bN	7.	30.04	54.5	49	48
	8 9.							50	32.	WNW	6.	·01	57	49.2	47.8
	NOON	41	38	126	27					WNW	6.7	29.97	56.2	49.8	48.3
		Current in last hours		mls.											
	4									W^bN	5.6	·92	57	50.2	49.5
	8									W^bS	3.	·92	58	48.8	46.2
	MIDT.									WSW	3.	·99	54.1	48	45
8	4							8 W		WSW	4	29.80	48.4	45.4	43.6
	8 9							50.		SW^bW	4.5	·84	48	47.0	42.3
	NOON	41	08	128	43.			6 W		SW^bW	5.6.	·84	49.7	43.7	40.6
		Current in last hours		mls.											
	4									SW^bW	6.7	·83.	49	46.7	42.3
	8							2 W		SW^bW	5.6.	·88	51	46.5	40.3
	MIDT.									SW^bW	6.7	·86	50	45.1	40.2
9.	4							2 W		SW^bW.	7.	29.84	48	42.7	39.3
	8									SW.	7.8.	·87.	47	42.5	39.8
	NOON	40	28	133	35			2^h 25^m for 36m between squalls		SW^bS.	8	·95	48.5	44.0	41.0
		Current in last hours		mls.											
	4									SSW	7-9	·99.	49	45.5	40.8
	8									SSW	6	30.09	52	46.0	41.7
	MIDT.									S^bE.	6-9	·15	51.6	46	42
9^th	4							2 W							
	8														
	NOON														
		Current in last hours		mls.											
	4														
	8														
	MIDT.														
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

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.

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Hour.	Clouds. Upper.	Clouds. Lower.	Prop. of Sky Clouded. 0 to 10.	Weather. According to Beaufort Notation.	Fog Intensity. 0 to 5.	Waves. Direction from.	Waves. Disturbance. 0 to 10.	Swell. Direction from.	Swell. Disturbance. 0 to 10.	Temp. by No.	Spec. Grav. by No.	Time of Remark.	Remarks.
4		St	7	bcqpd.		WNW	7.			49		4.0 a.m.	Gradual increase in wind, strong gusts before & after patches of St passing over. Aurora Aust (not bright)
8	Ci Cu / Ci St / a.st	St Cu	6.	bcqp.		WNW	6.	WNW	7.	49.9		Morning.	passing showers dr - slight. generally with an increase of wind, wind unsteady in dirn. Dr. off & on all forenoon: Slight increase in wind force. Sea getting up. fog 2.
NOON		St/St Cu / Nb.	10	ocqpd. F2		WNW	7.	W^bS & WNW	7	50.7			
4		St/ Nb.	10	oc 3D. 3F2.		WNW	6.	WSW / WNW	7.	50.8		4.0 p.m.	3 hrs dr. & fog 2. Wind taking off & dr. ceased about 3.15
8		St/ Nim	10	oc 2 D F1						50.4		Dog.	Showers of dr. all watch always overcast.
												7.0	Wind gradually easing 10.20 unsteady between W & WSW.
MIDT.		St/ Nim	10	ocdm						49.8			About 2½ hrs dr.
4		St	10	ocpdq		W^bS	6.	WSW	6.	48.8		4.0 a.m.	About 2½ hrs. dr. wind unsteady force 3 & 4 SW^bW - west. At 2.45 squall worked over from SW^bS. force 6. Wind shifted to ~~SW~~ SW for 15 m.
8		Cu/St-Cu / Cu. Nim	4	bc.		SW^bW	5	SW^bW	8 18'	49.0	27.2	Morning till 6.0	Squall with mod. rain, Twice in these squalls wind shifted to S of SW. at start & flew to W of W. towards end.
NOON		Cu St / Nim	6.	bcqp.		SW^bW	6.	S & SW^bW	8	49.8			
4		Cu / Cu. Nim	5	bcqp.		SW^bW	7	SW^bW	8	49.9			Afterwards gradually returning to normal dirn.
8		Cu/St. Cu / Cu Nim	6	bcp.		SW^bW	6.	SW^bW	8	51.0		9.0	Showers about. by gauge ·08" in last 4 hrs.
												10.05.	Squalls of force 6 with 12m hail. & rain wind veered to W. during squall.
MIDT.		St Cu / Cu Nb	7	bcp		SW^bW	7	SW^bW	8	50		Noon	Wind working between SW^bW. & west.
8^th 4	1.0 After this squalls came over at about 10m p3. for squall force 7 - strong gusts.												occasional squalls accompanied by light rain: intervals each increasing in force. with
8	4.0-5.0 Frequent showers of hail but little												increase of wind with them which was blowing a steady 7.
NOON	5.0 Wind inclined to ease											6.0	Swell & waves combined 24'
4	7.0 Dark portion of moon showing clearly,												slight corona when clouds pass over moon
8	8.0 Many showers about - none at ship from												6.0 - 7.55
	Mid^t Many squalls during watch force												7. No rain in squall.
MIDT.													See Barographs on 8th & 9th for jumps when squalls struck ship.
9^th 4		Cu. Nb	5	bcqph		WSW	7.					4.0	Frequent squalls force up to nearly 8 in gusts, wind unsteady. greatest force before & after clouds pass over
8		Cu / Cu. Nb.	3.	bcqph		SW	7.	SW	8			Morning.	passing squalls with sleet.
												6.30	Heavy squall (9) no rain, after more squalls with hail
NOON		Cu / Cu Nb.		bcqph		SW	7.	SW	8			Forenoon	Heavy & frequent squalls up to force 9. with hail
												11.45	Hail with stones up to ¼" diam.
4		Cu / Cu Nim	5	bcqph.		SSW	7	SSW	8			4.0	Squalls frequent up to (9-10) - sometimes hail
												Dog.	wind easing between squalls, wind in squalls unsteady (2 pts var^n). waves & swell up to 25'
8		Cu / Cu Nb	3.	bcqph.		SSW	7	SSW	8			Mid^t	Frequent squalls & hail & rain force 9. between squalls force 6. Wind inclined to ease.
MIDT.	Ci St.	Cu / Cu. Nb	4	bcqph		S^bW	7	SSW	8			4.0	hail & rain in watch, Ci St. visible 10.30 - 11.30
2a	17		18	19	19a	20	21	20a	21a	22	23	24	25

Clouds: 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. Sea Surface: Also record when Confused.

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Meteorological Log kept on board ______ Captain ______ from ______ to ______

Year 19 10 · Month Oct.

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	Latitude Observed	Latitude Dead Reckoning	Longitude Observed	Longitude Dead Reckoning	True Course	Distance by Log	Total Compass Error	Ship's Head	Wind Direction	Wind Force	Barometer Uncorrected Reading	Att. Therm.	Dry Bulb	Wet Bulb
10	4							N: 1		S b W.	7-9.	30.15	47	46.0 ~~46.8~~	~~42.8~~
	8 (9)							48		SE.	5	.25	48	46.8	42.8
	NOON	39° 34′		136° 52′						S b W	5.6.	.26	50.5	49.6	43.
	Current in last hours mls.														
	4									S	4.5	.28	49	48.5	44.1
	8									S.	4	.32	54	49.5	44.7
	MIDT.									S	3.4	.29	58.3	49.8	45.2
11.	4							1E		S. to SW.	4	30.24	53.8	—	—
	8 (9)									SW b S	3.4	.26	56	51.1	46.8
	NOON	° ′	′	° ′	′			2E		WSW	3.	.25	56.9	51.8	46.2
	Current in last hours mls.														
	4									W b S	3.4	.20	58	51.9	46.2
	8.30							4E		W b S	3.	.17	58	52.1	47.3
	MIDT.									W	3.4	.12	57.1	52.7	49
	4														
	8														
	NOON	° ′	′	° ′	′										
	Current in last hours mls.														
	4														
	8														
	MIDT.														
12.	4									WNW	4.5	30.05	49	52.9	49.
	8														
	NOON	° ′	′	° ′	′										
	Current in last hours mls.														
	4														
	8														
	MIDT.														
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Before accepting the readings of the dry and wet bulb thermometers, the observer should satisfy himself that both are in working order; the dry bulb being free of moisture and the wet bulb being untainted by salt water.

Column headings: Course and Distance — Each four hours. Total Compass Error — Of Compass used for Wind, being Variation and Deviation combined. Ship's Head — By same Compass as Wind. Wind, at the time of observation — Direction. State if *true*, or subject to Compass Error, ~~or only to Variation~~. Force. 0 to 12. Barometer.* No. Height of Cistern above Sea feet.

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

Hour	Clouds Upper	Clouds Lower	Prop. of Sky Clouded 0 to 10	Weather (Beaufort Notation)	Fog Intensity 0 to 5	Waves Direction from	Waves Disturbance 0 to 10	Swell Direction from	Swell Disturbance 0 to 10	Sea Surface Temp. by No.	Spec. Grav. by No.
4		Cu Nb	5	bcqph		S b E	8	—		52	
8	~~A Cu~~ A. St	Cu/St Cu Cu Nb	5 ~~6~~	bc		S b E	6.	Conf S b E	8	53.9	
NOON	A. Cu / A St.	Cu	6.	bcq.		S	6	Conf S b E	8	54	
4	A. Cu	St. Cu / Cu Nb.	7	cqp.		S	6.	Conf S b E	7	54.4	
8	A. Cu	Cu / St. Cu	8	c		S	5	S b E	8	55.2	
MIDT.		St. Cu / Nb.	9	cqp.		S	4	SSW	7	54.9	
4		St Cu	6	bc.		S b E	6.	—		54.0	
8		St Cu	9	cp.		SSW	5	Conf. SSW b E	6.	56.5	27.2
NOON		Cu	8	bc		SSW	3.	S + cross W b S.	6	52.3	
4	A. Cu	St. Cu / Cu Nb	10.	c.		W	4	cross S WSW	6	53.9	
8		St Cu	10	c		W b S	3.	WSW	5	55.9	
MIDT.		St Cu / Cu Nb	10	ocpd.		W b S	3.	SW	5	56.1	
4											
8											
NOON											
4											
8											
MIDT.											
4		St. Cu	10	ocp.		W b N	4	—		54.7	
8											
NOON											
4											
8											
MIDT.											
2a	17		18	19	19a	20	21	20a	21a	22	23

Clouds: 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. Sea Surface: Also record when Confused.

Remarks (24 Time of Remark, 25): 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.)

4.0 am. Squalls less frequent but unabated in force. wind from SSE–SW (unsteady). Hail in all squalls after 2.0. wind settled to W. of S.
Morning squalls, with hail & rain till 6. wind inclined back to S. clearing
Forenoon squall strength less, wind in squalls inclined to head SSE
Noon. Rainfall .09" in last 48 hrs.
Afternoon Squalls force 6.7 accompanied by slight
5.30 Swell 20′ wind easing squalls less frequent slight
Last dog wind force 4 increasing at times to 5 no real squalls, few of the rain showers came to ship though many about.

4.0 am. Clocks on 20m to 9h 40m fast on GMT. Breeze unsteady when under patches of Cu it often went to SW b W. returning to S after clouds passed over.
6.0 very bright rainbow showing following colors from top down. R. Y. G. B. P. mauve. R – R. also a faint double bow.
Morning Rain squalls at times, little wind in them, wind very variable through 3 points but inclined to veer.
9.0 Showers about. 22m rain during watch.
11.20 Wind veered to WSW.

4. Pm. Showers about.
Dogs Occasional attempts at drizzle
9.0 5m dr.
10.20 clouded over, intermittent dr, corona visible. occasional clearing in the sky.

4.0 Breeze unsteady, slight increases at interval to 5. with drizzle. breeze from NW to W.

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. Year 19___ Month ___ Day. Civil Time.	Hour.	Latitude. Observed.	Latitude. Dead Reckoning.	Longitude. Observed.	Longitude. Dead Reckoning.	Course and Distance. Each four hours. True Course.	Distance by Log.	Total Compass Error. Of Compass used for Wind, being Variation and Deviation combined.	Ship's Head. By same Compass as Wind.	Wind, *at the time of observation.* Direction. State if *true*, or subject to Compass Error, or only to Variation.	Force. 0 to 12.	Barometer.* No. ___ Height of Cistern above Sea ___ feet. Uncorrected Reading.	Att. Therm.	Thermometers. Dry Bulb. No.	Wet Bulb. 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.													
___	4														
	8														
	NOON	° ′	° ′	° ′	° ′										
		Current in last	hours	°	mls.										
	4														
	8														
	MIDT.														
___	4														
	8														
	NOON	° ′	° ′	° ′	° ′										
		Current in last	hours	°	mls.										
	4														
	8														
	MIDT.														
___	4														
	8														
	NOON	° ′	° ′	° ′	° ′										
		Current in last	hours	°	mls.										
	4														
	8														
	MIDT.														
___	4														
	8														
	NOON	° ′	° ′	° ′	° ′										
		Current in last	hours	°	mls.										
	4														
	8														
	MIDT.														
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Before accepting the readings of the dry and wet bulb thermometers, the observer should satisfy himself that both are in working order; the dry bulb being free of moisture and the wet bulb being untainted by salt water.

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Captain ______ from ______ to ______

Hour.	Clouds. Names. Upper.	Clouds. Names. Lower.	Prop. of Sky Clouded. 0 to 10.	Weather. According to Beaufort Notation.	Fog Intensity. 0 to 5.	Sea Surface. Waves. Direction *from.*	Waves. Disturbance. 0 to 10.	Swell. Direction *from.*	Swell. Disturbance. 0 to 10.	Temp. by No.	Spec. Grav. by No.	Time of Remark.	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.					Also record when Confused.							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.)
4													
8													
NOON													
4													
8													
MIDT.													
4													
8													
NOON													
4													
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MIDT.													
4													
8													
NOON													
4													
8													
MID'T.													
2a	17		18	19	19a	20	21	20a	21a	22	23	24	25

14767—7500

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.			Thermometers.	
Year 19 ______ Month ______		Observed.	Dead Reckoning.	Observed.	Dead Reckoning.	Each four hours.						Height of Cistern above Sea ...... feet.				
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.	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.	Uncorrected Reading.	Att. Therm.		Dry Bulb. No.	Wet Bulb. No. ......
____	4															
	8															
	NOON	° ′	° ′	° ′	° ′											
		Current in last hours		°	mls.											
	4															
	8															
	MIDT.															
____	4															
	8															
	NOON	° ′	° ′	° ′	° ′											
		Current in last hours		°	mls.											
	4															
	8															
	MIDT.															
____	4															
	8															
	NOON	° ′	° ′	° ′	° ′											
		Current in last hours		°	mls.											
	4															
	8															
	MIDT.															
____	4															
	8															
	NOON	° ′	° ′	° ′	° ′											
		Current in last hours		°	mls.											
	4															
	8															
	MIDT.															
1	2	3	4	5	6	7	8	9	10	11	12	13	14		15	16

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Captain ______________ from ______________ 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. Upper.	Names. Lower.	Prop. of Sky Clouded. 0 to 10.			Direction *from.*	Disturbance. 0 to 10.	Direction *from.*	Disturbance. 0 to 10.				
						Also record when Confused.							
4													
8													
NOON													
4													
8													
MIDT.													
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NOON													
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8													
MIDT.													
2a	17		18	19	19a	20	21	20a	21a	22	23	24	25

14767—7500

Meteorological Log kept on board

DATE. Year 19 Month — Day. Civil Time.	Hour.	Latitude. Observed.	Latitude. Dead Reckoning.	Longitude. Observed.	Longitude. Dead Reckoning.	Course and Distance. Each four hours. True Course.	Distance by Log.	Total Compass Error. Of Compass used for Wind, being Variation and Deviation combined.	Ship's Head. By same Compass as Wind.	Wind, *at the time of observation.* Direction. State if *true*, or subject to Compass Error, or only to Variation.	Force. 0 to 12.	Barometer.* No. Height of Cistern above Sea feet. Uncorrected Reading.	Att. Therm.	Thermometers. Dry Bulb. No.	Wet Bulb. 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.													
	4														
	8														
	NOON	° ′	° ′	° ′	° ′										
		Current in last	hours	°	mls.										
	4														
	8														
	MIDT.														
	4														
	8														
	NOON	° ′	° ′	° ′	° ′										
		Current in last	hours	°	mls.										
	4														
	8														
	MIDT.														
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	NOON	° ′	° ′	° ′	° ′										
		Current in last	hours	°	mls.										
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	NOON	° ′	° ′	° ′	° ′										
		Current in last	hours	°	mls.										
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Before accepting the readings of the dry and wet bulb thermometers, the observer should satisfy himself that both are in working order; the dry bulb being free of moisture and the wet bulb being untainted by salt water.

* 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 from to

Hour.	Clouds. 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. Upper.	Lower.	Prop. of Sky Clouded. 0 to 10.	Weather. According to Beaufort Notation.	Fog Intensity. 0 to 5.	Sea Surface. Waves. Direction *from.*	Disturbance. 0 to 10.	Swell. Direction *from.*	Disturbance. 0 to 10.	Temp. by No.	Spec. Grav. by No.	Time of Remark.	Remarks. 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.)
						Also record when Confused.							
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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.

14767—7500

Meteorological Log kept on board

DATE. Year 19 ___ Month ___ Day. Civil Time.	Hour.	Latitude. Observed.	Latitude. Dead Reckoning.	Longitude. Observed.	Longitude. Dead Reckoning.	Course and Distance. Each four hours. True Course.	Distance by Log.	Total Compass Error. Of Compass used for Wind, being Variation and Deviation combined.	Ship's Head. By same Compass as Wind.	Wind, *at the time of observation.* Direction. State if *true*, or subject to Compass Error, or only to Variation.	Force. 0 to 12.	Barometer.* No. ___ Height of Cistern above Sea ___ feet. Uncorrected Reading.	Att. Therm.		Thermometers. Dry Bulb. No.	Thermometers. Wet Bulb. No.
___	4															
	8															
	NOON	° ′	° ′	° ′	° ′											
		Current in	last hours	°	mls.											
	4															
	8															
	MIDT.															
___	4															
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	NOON	° ′	° ′	° ′	° ′											
		Current in	last hours	°	mls.											
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	NOON	° ′	° ′	° ′	° ′											
		Current in	last hours	°	mls.											
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	MIDT.															
1	2	3	4	5	6	7	8	9	10	11	12	13	14		15	16

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.

Before accepting the readings of the dry and wet bulb thermometers, the observer should satisfy himself that both are in working order; the dry bulb being free of moisture and the wet bulb being untainted by salt water.

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

H52 Coded J Rogues

Punches L White

reverified Or