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CNS. 322 (Revised 1963)

7530-21-562-1292

See Q.R.C.N. Art. 48-54, 45-47, 48-31;
71-4803, 48-32, 48-22, 48-51.

This Log when completed is to be transmitted to the Senior Officer in Command for inspection. Upon return it is to be retained in the ship for reference. Completed Logs shall be forwarded in batches of twelve bound in CNS 321B to Naval Records Centre, Sydney, N.S., in accordance with QRCN article 48-54.

HMCS *PROTECTEUR*

Class of Ship *AOR 509*

SHIP'S LOG

FOR

Month of *OCTOBER* 19*73*

Days at Sea	<i>18</i>
Days in Harbour	<i>13</i>
Total Distance Run	<i>6459.5</i>

[Signature]
Lcdr.
Navigating Officer.

[Signature]
Captain.

[Signature] Capt(N)
Senior Officer in Command.

ARTICLES 48.31 AND 48.54 QUEEN'S REGULATIONS AND ORDERS FOR THE CANADIAN NAVY

48.31— TOUCHING GROUND AND COLLISIONS

- (1) When one of Her Majesty's Canadian Ships touches ground or is involved in a collision with another vessel, or with a floating or sunken object, every effort shall be made to obtain the exact position of the ship at the time of the accident, and an entry shall be made in the ship's log giving the position and the method by which it was obtained. (See article 71-4803—"Report of Touching Ground and Collisions.")
- (2) *Possibility of Damage.* When one of Her Majesty's Canadian Ships comes into such close proximity to another vessel that there is a possibility of damage, being sustained by either the ship or the vessel, the details listed in article 71-4803—(Report of Touching Ground and Collisions) shall be carefully noted.
- (3) *Preservation of Records.*
 - (a) When a collision or narrow escape from a collision occurs, or the ship has touched ground, the Captain shall ensure that the following items are preserved:
 - (i) the Ship's Log Book,
 - (ii) all Engine Room Registers,
 - (iii) the Navigating Officer's Note Book,
 - (iv) the Officer of the Watch's Note Book,
 - (v) the plot, if one was in use,
 - (vi) the charts by which Her Majesty's Canadian Ship was being navigated at the time,
 - (vii) if the ship has touched ground, the echo sounding machine trace, and
 - (viii) the Operations Room Log.
 - (b) Entries in the records shall not be erased, but if correction is found necessary, the entry shall be crossed through and initialled. Subsequent marking or amendment of the chart or plot shall not be made in any circumstances, other than the use of the chart for the continued safe navigation of the ship.
- (4) *Collisions with Docks or Basins.* When a ship collides with or bears hard against the side of a dock or basin, the relevant reports prescribed in Article 71-4803—(Report of Touching Ground and Collisions) shall be made.

48.54— SHIP'S LOG

- (1) *Responsibility.* The Navigating Officer shall have charge of the Ship's Log (Form C.N.S. 322). He shall be responsible for its maintenance, storage and disposal and he shall see that it is produced for inspection at the proper times.
- (2) *Entries.* Entries in the Ship's Log shall be made in pencil and shall include:
 - (a) *general*
 - (i) the employment of the ship's company,
 - (ii) holding Divine Service and reading of prayers,
 - (iii) leave granted, stating in which watch or part of the watch,
 - (iv) joining and leaving, rank and name of officers, total number of men only,
 - (v) general payments,
 - (vi) offences committed by officers and punishments requiring warrants, the serial numbers being given (see Article 101-11—Logging Conduct of Officers),
 - (vii) every alteration of clocks (to be noted in the remarks column),
 - (viii) the time kept each day at noon,
 - (ix) salutes and ceremonies, half-masting and re-hoisting of colours,
 - (x) dressing ship, stating the reason,
 - (xi) evolutions, exercises and landings of parties for service or drill,
 - (xii) closing and opening of water-tight doors, or damage control state where applicable,
 - (xiii) embarkation and disembarkation of passengers,
 - (xiv) details and times of any accident or death occurring on board,
 - (xv) notation of any births, baptisms and marriages which take place on board,
 - (xvi) notation of damage to, or loss of, important store articles or fixtures, making reference, where necessary, to details in lists kept with store accounts,
 - (xvii) terms entered into when engaging a pilot,
 - (xviii) any occasion of touching ground or being in collision,
 - (xix) any relevant information concerning fishing vessels or gear in the vicinity,
 - (xx) the description of weather, wind and sea, the corrected barometer reading and any unusual phenomenon on completion of each watch and at least every hour during threatening weather,
 - (xxi) all occasions of testing boats, life rafts, night lifebuoys and their releasing gear,
 - (xxii) notation of corrections to meteorological instruments,
 - (xxiii) matter whose entry is required by regulations, and
 - (xxiv) other important occurrences;
 - (b) *when in harbour*
 - (i) daily notice of main engines for steam at noon and on any alteration,
 - (ii) arrival and departure of any ship of Her Majesty's forces, of ships-of-war of another nation and movements of other vessels should they be of interest,
 - (iii) names or descriptions of any vessels, lighters, barges or similar craft berthing alongside, with the time of arrival and departure and a statement of the purpose of their coming,
 - (iv) damage caused by or to vessels berthing alongside;
 - (c) *when proceeding to or on arrival from sea*
 - (i) times of weighing or slipping and proceeding,
 - (ii) times of anchorage or mooring the ship, giving depth of water, amount of cable veered and position by bearings of each anchor; and of securing the ship to a wharf or buoy,
 - (iii) the draught of water, fore and aft, before sailing and on arrival in harbour,
 - (iv) times of embarking and disembarking a pilot,
 - (v) if a pilot is relieved of his duties, the time the action was taken;
 - (d) *when at sea*
 - (i) meeting or finding at anchor of any ship of Her Majesty's forces, a ship of war of another nation, and any other vessel whose presence or movement is of interest,
 - (ii) every occurrence connected with the navigation and pilotage of the ship,
 - (iii) all discovered or suspected dangers,
 - (iv) the set and velocity of currents and tidal streams encountered,
 - (v) results of observations made and angles or bearings taken to ascertain the ship's position, currents between noon and noon, and currents experienced on leaving and making land or when running along the land (with the number of hours between observations),
 - (vi) the behaviour of the ship during threatening or stormy weather shall be noted occasionally,
 - (vii) when in company, the position of the leading ships and, if out of station, the particulars concerning all ships involved, if known),
 - (viii) details of aircraft sighted, together with the time of observation (and marks of identification, if known). Movements of aircraft working with the fleet need not be entered unless of unusual interest.
- (3) *Signatures and Initials.* The Ship's Log shall be:
 - (a) initialled by the Officer of the Watch or the Officer of the Day when he is relieved;
 - (b) signed by the
 - (i) Captain weekly,
 - (ii) Senior Officer in Command monthly,
 - (iii) Inspecting Officer at inspections of the ship,
 - (iv) Navigating Officer upon supersession.
- (4) *Corrections.* No erasures shall be made in the Ship's Log. When it is necessary to make a correction, a single line shall be drawn through any error and the necessary entry made. The alteration shall then be initialled by the officer who made the original entry.
- (5) *Inspections.* The Ship's Log shall be inspected by the:
 - (a) Captain weekly; (See article 45.47—"Inspection of Ship's Books by Captain".)
 - (b) Senior Officer in Command monthly;
 - (c) Inspecting Officer at inspections of the ship. (See article 45.46—"Inspection of Ship's Books by Senior Officer in Command".)
- (6) *Disposal.* The Ship's Log shall be:
 - (a) Placed in the cover for Current Ship's Log Book (Form C.N.S. 321A) and kept on the bridge or at the gangway when in use;
 - (b) forwarded to the Senior Officer in Command on completion; (See (3) (b) of this article)
 - (c) returned to the ship after the Senior Officer in Command has signed it, and placed in the Cover for Completed Ship's Log Books (Form C.N.S. 321B) and retained on board;
 - (d) forwarded to Naval Records Centre, Sydney, N.S., in batches of twelve:
 - (i) commencing on the second anniversary of the first Log of the series, and
 - (ii) annually thereafter.

CNS. 322

SHIP'S LOG BOOK

For use at Sea and in Harbour

1. The Log Book is to be carefully preserved. When in use, it is to be kept in the covers provided. When filled, it is to be taken charge of by the Captain, and, after inspection by the Senior Officer in Command, kept on board for reference, if required. Logs shall be forwarded, in batches of twelve, on the expiration of two years from the first log of the series.
2. The Officer of the Watch is responsible for the Log, and for the due observance of the regulations respecting it; and he is to see that it is properly written up, in pencil, and he will sign it with the initials of his name before he leaves the Deck.
3. The Log reading is to be entered hourly in the column provided for the purpose. In the column marked "Distance Run", the distance through the water for each hour is to be registered according to the judgment of the Officer of the Watch, using the Log readings, their errors, if known and the Revolutions as a guide, with allowances for the wind and sea. When the ship has steered on more than one course during the hour, the distance run on each course must be entered.
4. The Standard or Gyro Compass Course, the Direction and Force of the Wind, the State of the Weather, Sea and Swell, are to be registered at the end of each Watch, and when any change occurs.
5. The corrected Barometric Pressure in millibars and the Air and Sea Temperatures are to be registered at 0400, 0800, 1200, 1600, 2000 and 2400; and in stormy weather the corrected Barometric Pressure in millibars is to be registered every hour. Aneroid barometers should be kept corrected to mean sea-level pressure.
6. In recording the Force of the Wind and State of the Weather, Sea and Swell, the scheme on the facing page is to be adopted.
7. The mean number of revolutions of the Engines per minute is to be registered hourly in the column for that purpose.
8. When in sight of Land, or of any known danger, cross bearings of, or angles between, well-defined objects, should be recorded at frequent intervals, and entered in the Log at least once in each Watch, for the information of the relieving Officers. The time of first sighting, and the bearing of land or any marks, and of first obtaining soundings, with the results, are to be recorded.
9. In the space left for *Remarks*, must be recorded full information on all matters of importance or interest; as detailed in QRCN Article 48.54 of which a copy is printed on this form.

At Sea, the Remarks column should contain all relevant information for working up the position of the ship at any moment, taking into consideration all the data logged on the left-hand page of each day.

PRESENT WEATHER CODE (ww)

If precipitation (drizzle, rain, snow, etc.) is occurring at the ship at the time of the weather observation choose the most appropriate number in the range 50 to 99. If no precipitation is occurring at the ship at the time of the weather observation choose the most appropriate number in the range 00 to 49. ALWAYS USE THE HIGHEST CODE NUMBER APPLICABLE.

<p>00-03 CHANGE OF SKY IN LAST HOUR</p> <p>00 Cloud development not observed 01 Clouds becoming less developed 02 State of sky on the whole unchanged 03 Clouds developing</p> <p style="text-align: center;">04-10 HAZE, ETC.</p> <p>04 Smoky 05 Dry haze 06 Widespread dust 07 Dust raised near station } Not for 08 Dust devils within last hour } marine use 09 Duststorm or sandstorm within last hour 10 Mist (visibility 1/2 nautical mile or more)</p> <p style="text-align: center;">11-12 SHALLOW FOG</p> <p>11 In patches } Not deeper than 30' 12 More or less continuous } at sea or 6' ashore</p> <p>13-17 PHENOMENA WITHIN SIGHT BUT NOT AT STATION</p> <p>13 Lightning, no thunder heard 14 Precip. in sight, not reaching surface at ship 15 Precipitation beyond 3 miles, reaching surface 16 Precipitation within 3 miles, reaching surface</p> <p>17-19 PHENOMENA WITHIN LAST HOUR OR AT TIME OF OBSN.</p> <p>17 Thunder heard, but no precipitation at station 18 Squall(s) 19 Funnel cloud(s)</p> <p>20-29 PHENOMENA WITHIN HR. BUT NOT AT TIME OF OBSN.</p> <p>20 Drizzle 21 Rain 22 Snow 23 Rain and snow 24 Drizzle or rain, freezing</p> <p>25 Shower(s) of rain 26 Shower(s) of snow, or of rain and snow</p>	<p>27 Shower(s) of hail, or of hail and rain 28 Fog 29 Thunderstorm, with or without precipitation</p> <p>30-39 (Not likely to be used in ship reports)</p> <table border="0" style="width: 100%;"> <tr> <td style="text-align: left;"><i>Slight or moderate</i></td> <td style="text-align: right;"><i>Severe</i></td> </tr> <tr> <td>30 Dust or sandstorm, decreasing</td> <td style="text-align: right;">33</td> </tr> <tr> <td>31 Dust or sandstorm, unchanging</td> <td style="text-align: right;">34</td> </tr> <tr> <td>32 Dust or sandstorm, increasing</td> <td style="text-align: right;">35</td> </tr> <tr> <td>36 Drifting snow, generally low</td> <td style="text-align: right;">37</td> </tr> <tr> <td>38 Blowing snow, generally high</td> <td style="text-align: right;">39</td> </tr> </table> <p style="text-align: center;">40-49 FOG</p> <p>40 Fog at a distance 41 Fog in patches</p> <p><i>Sky dis- Visibility less than 1/2 mi. at time Sky not</i> <i>cernible of observation discern-</i> <i>ible</i></p> <p>42 Fog, thinning in last hour 43 44 Fog, unchanging in last hour 45 46 Begin'g or thick'g in last hour 47 48 Fog, depositing hard rime 49</p> <p>50-59 DRIZZLE (Consists of numerous minute drops)</p> <table border="0" style="width: 100%;"> <tr> <td style="text-align: left;"><i>Intermittent</i></td> <td style="text-align: right;"><i>Continuous</i></td> </tr> <tr> <td>50 Slight drizzle</td> <td style="text-align: right;">51</td> </tr> <tr> <td>52 Moderate drizzle</td> <td style="text-align: right;">53</td> </tr> <tr> <td>54 Thick drizzle</td> <td style="text-align: right;">55</td> </tr> </table> <p><i>Slight Moderate or thick</i></p> <p>56 Freezing drizzle 57 58 Drizzle and rain 59</p> <p style="text-align: center;">60-69 RAIN</p> <table border="0" style="width: 100%;"> <tr> <td style="text-align: left;"><i>Intermittent</i></td> <td style="text-align: right;"><i>Continuous</i></td> </tr> <tr> <td>60 Slight rain</td> <td style="text-align: right;">61</td> </tr> <tr> <td>62 Moderate rain</td> <td style="text-align: right;">63</td> </tr> <tr> <td>64 Heavy rain</td> <td style="text-align: right;">65</td> </tr> </table> <p><i>Slight Moderate or heavy</i></p> <p>66 Freezing rain 67 68 Rain or drizzle with snow 69</p>	<i>Slight or moderate</i>	<i>Severe</i>	30 Dust or sandstorm, decreasing	33	31 Dust or sandstorm, unchanging	34	32 Dust or sandstorm, increasing	35	36 Drifting snow, generally low	37	38 Blowing snow, generally high	39	<i>Intermittent</i>	<i>Continuous</i>	50 Slight drizzle	51	52 Moderate drizzle	53	54 Thick drizzle	55	<i>Intermittent</i>	<i>Continuous</i>	60 Slight rain	61	62 Moderate rain	63	64 Heavy rain	65	<p>70-79 SOLID PRECIPITATION, NOT IN SHOWERS</p> <table border="0" style="width: 100%;"> <tr> <td style="text-align: left;"><i>Intermittent</i></td> <td style="text-align: right;"><i>Continuous</i></td> </tr> <tr> <td>70 Slight snow in flakes</td> <td style="text-align: right;">71</td> </tr> <tr> <td>72 Moderate snow in flakes</td> <td style="text-align: right;">73</td> </tr> <tr> <td>74 Heavy snow in flakes</td> <td style="text-align: right;">75</td> </tr> </table> <p>76 Ice needles } With or 77 Granulated snow } without 78 Isolated starlike snow crystals } fog 79 Ice pellets }</p> <p style="text-align: center;">80-84 RAIN SHOWER(S)</p> <p>80 Slight, with or without squalls 81 Moderate or heavy, with or without squalls 82 Violent, with squalls, 83 Slight, mixed with snow 84 Moderate or heavy, mixed with snow</p> <p>85-90 SOLID PRECIPITATION IN SHOWER(S)</p> <table border="0" style="width: 100%;"> <tr> <td style="text-align: left;"><i>Slight</i></td> <td style="text-align: right;"><i>Moderate or heavy</i></td> </tr> <tr> <td>85 Snow</td> <td style="text-align: right;">86</td> </tr> <tr> <td>87 Soft or small hail*</td> <td style="text-align: right;">88</td> </tr> <tr> <td>89 Hail* without thunder</td> <td style="text-align: right;">90</td> </tr> </table> <p>(*The hail may be with or without rain or snow)</p> <p>91-94 THUNDER HEARD DURING PRECEDING HOUR BUT NOT AT TIME OF OBSERVATION (Note, choose numbers 17 or 29 whenever applicable)</p> <p>91 Slight rain 92 Moderate or heavy rain 93 Slight snow and rain, or hail 94 Moderate or heavy snow and rain, or hail</p> <p style="text-align: right;">} Precipitation occurring at time of observation</p> <p>95-99 THUNDERSTORM AT TIME OF OBSERVATION</p> <p>95 Slight or moderate thunderstorm without hail 96 Slight or moderate thunderstorm with hail 97 Heavy thunderstorm without hail 98 Thunderstorm with dust or sandstorm 99 Heavy thunderstorm with hail (Ditto)</p> <p style="text-align: right;">} Precipitation occurring at time of obsn.</p>	<i>Intermittent</i>	<i>Continuous</i>	70 Slight snow in flakes	71	72 Moderate snow in flakes	73	74 Heavy snow in flakes	75	<i>Slight</i>	<i>Moderate or heavy</i>	85 Snow	86	87 Soft or small hail*	88	89 Hail* without thunder	90
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BEAUFORT WIND SCALE AND CORRELATIVE SEA DISTURBANCE TABLE

Beaufort Scale Number	Mean Wind Speed Knots	Limits of Wind Speed in Knots	Descriptive Terms	Coastal Criterion	Sea Criterion	Approximate Equivalent Sea Disturbance Table in Open Sea*		ABBREVIATIONS FOR USE IN THE SHIP'S LOG	
						Probable Mean Height of Waves in Feet	Maximum Height in brackets	NBCD state	NBCD
0	0	Less than 1	Calm.....	—	Sea like a mirror.....			Abeam	⊥
1	2	1—3	Light air.....	Sufficient to give good steerage to fishing smacks with the "wind free".	Ripples with the appearance of scales are formed but without foam crests.	—(½)		Alter course	a/c
2	5	4—6	Light breeze...	Fishing smacks with topsails and light canvas, "full and by", make up to 2 knots.	Small wavelets, still short but more pronounced; crests have a glassy appearance and do not break.....	½(1)		Anchor	↓
3	9	7—10	Gentle breeze...	Smacks begin to heel over slightly under topsails and light canvas, make up to 3 knots "full and by".	Large wavelets. Crests begin to break. Foam of glassy appearance. Perhaps scattered white horses.....	2(3)		As requisite	as req
4	13	11—16	Moderate breeze.....	Good working breeze. Smacks heel over considerably on a wind under all sail.	Small waves, becoming longer; fairly frequent white horses.....	3½(5)		Base course	b/c
5	19	17—21	Fresh breeze...	Smacks shorten sail.	Moderate waves, taking a more pronounced long form; many white horses are formed. (Chance of some spray)	6 (8½)		Bearing	bg
6	24	22—27	Strong breeze...	Smacks double-reef gaff mainsails.	Large waves begin to form; the white foam crests are more extensive everywhere. (Probably some spray).....	9½(13)		Cable	c
7	30	28—33	Moderate gale	Smacks remain in harbour and those at sea lie to.	Sea heaps up and white foam from breaking waves begins to be blown in streaks along the direction of the wind. (Spindrift begins to be seen)	13½(19)		Cape	Cp
8	37	34—40	Fresh gale.....	Smacks take shelter if possible.	Moderately high waves of greater length; edges of crests break into spindrift. The foam is blown in well-marked streaks along the direction of the wind.....	18 (25)		Cease fire	CF
9	44	41—47	Strong gale.....	—	High waves. Dense streaks of foam along the direction of the wind. Sea begins to roll. Spray may affect visibility.....	23 (32)		Compass	(C)
10	52	48—55	Whole gale.....	—	Very high waves with long overhanging crests. The resulting foam in great patches is blown in dense white streaks along the direction of the wind. On the whole the surface of the sea takes a white appearance. The rolling of the sea becomes heavy and shocklike. Visibility is affected..	29 (41)		Course	co
11	60	56—63	Storm.....	—	Exceptionally high waves. (Small and medium-sized ships might for a long time be lost to view behind the waves.) The sea is completely covered with long white patches of foam lying along the direction of the wind. Everywhere the edges of the wave crests are blown into froth. Visibility affected.....	37 (52)		Course and speed	co & sp
12	68	64—71	Hurricane.....	—	The air is filled with foam and spray. Sea completely white with driving spray; visibility very seriously affected.....	Over 45		Dead reckoning position	DR
13	76	72—80						Direction finder	D/F
14	85	81—89						Distance	dist
15	95	90—99						Distance made good	DMG
16	104	100—108						Estimated position	EP
17	114	109—118						Fathom	fm

* Determined at coast stations for a height of 33 feet above sea level.
 † Figures in brackets indicate the probable maximum height reached by about one wave in ten.

NOTES

- (1) The Approximate Equivalent Sea Disturbance Table is only intended as a guide to show roughly what may be expected in the open sea remote from land. It should never be used in the reverse way, that is for logging or reporting the state of the sea. In enclosed waters, or when near land with an off-shore wind, wave heights and lengths will be smaller.
- (2) Sea Waves are waves caused by the present wind. Swell Waves are waves originally generated at a distance from the observer and, in general, travel in a direction differing from that of the present wind.
- (3) The Height of a Sea or Swell Wave is the vertical distance of the crest above the trough.

VISIBILITY CODE (VV)

Code figures	
90	Under 50 yards.
91	50 yards.
92	200 yards.
93	500 yards.
94	1000 yards.
95	1 Nautical Mile.
96	2 Nautical Miles.
97	5 Nautical Miles.
98	10 Nautical Miles.
99	25 Nautical Miles or more.

NOTE:—If the visibility distance is between two of the distances given in the table use the code figure for the lower distance—e.g. 4 Miles will be coded as 96.

HMCS MAPLELEAF

FRI DAY

1st OF MARCH

Time	Zone Suffix	Log (Stating type) Electro-magnetic	Distance Run Miles and Tenths	Mean Revs. per Minute	True Course	Gyro Compass Course	Standard Compass Course	Deviation	Variation	Cloud Amount (Eighths)	Wind		Sea Height (In Feet)	Swell		Visibility (Code vv)	Present Weather (Code ww)	Corrected Barometric Pressure in Millibars	Temperature (Celsius)		
											Direction (True)	Speed (Knots)		Direction From (True)	Height (In Feet)				Dry Bulb	Wet Bulb	Sea
0100																					
0200		0000.1	0.1	-	Var	Var	Var	Var	23°W												
0300		0007.4	8.0	131	Var	Var	Var	Var	23°W												
0310		0010.3	3.0		156	156	182	3°W													
0326		0015	4.5		101	101	127	3°W													
0400	+4	0024.5	10.0	157	083	083	108	2°W	23°W	6	220	12	4	220	7	96	10	1000.5	18.3	16.7	14.4
0450		0039.8	15.0		083	083	108	2°W													
0500		0043.1	3.0	160	068	068	093	1°W	24°W												
0600		0061.0	18.0	160	068	068	093	1°W	24°W												
0645		0074.5	13.5		068	068															
0700		0078.2	4.5	160	068	066	093	1°W	24°W												
0800	+4	0095.4	18.0	160	068	066	093	1°W	24°W	8	230	18	5	220	7	95	10	999.0	17.2	16.1	13.9
0900		0112.5	18.0	160	068	066	093	1°W	24°W	8	250	23	6	220	8	96	10	995.0			
1000		0130.0	18.0	160	068	066	094	1°W	25°W	8	250	30	6	240	10	95	10	988.5			
1100		0147.3	18.0	160	068	066	094	1°W	25°W	8	270	32	6	240	10	94	61	983.0			
1200	+4	0164.5	18.0	160	068	066	094	1°W	25°W	8	275	26	5	240	8	94	61	986.0	16.7	16.1	13.3
1203		0165.3	0.9	-																	
1300		0179.5	14.3	141	002	000	025	2°E	25°W	8	295	22	5	240	8	94	60	988.0			
1345		0190.5	11.0	-	-	-	-	-													
1355		0192.5	2.5	-	002	000	025	2°E													
1400		0193.5	1.0	51	265	263	288	2°E	25°W												
15		0195.1	1.6	-	Var	Var	Var	Var	25°W												
1500				50	Var	Var	Var	Var	25°W												
1600	+4	0197.1	2.0							5	320	7	-	-	-	98	01	995.0	17.2	15.6	13.9
1700																					
1800										3	345	3	-	-	-	98	01	997.0	15.6	15.0	13.9
1900																					
2000	+4									0	350	2	-	-	-	98	01	999.5	15.6	15.0	13.9
2100																					
2200																					
2300																					
2400	+4									0	000	2	-	-	-	98	00	1000.0	15.0	14.4	13.9

Distance run through the Water Midnight to Midnight	Leave Granted to Ship's Company		Anchor Bearings	
	200.9	<p>Starboard and 1st of Port Watches.</p> <p>CPO & PO 1630 - 0755 Tuesday.</p> <p>LS & below 1640 - 0745 "</p> <p>OSUT 1640 - 0100 "</p> <p>WK 1640 - 0105 "</p>	1410	<p>Anchor</p> <p>Anglican Church Steeple 348°</p> <p>← Dominion Coal Jetty 019°</p> <p>→ Old Railway Pt. 106°</p> <p>Careening Pt. B.W. 000543</p>

HMCS PROTECTEUR

MON DAY

1ST OF OCTOBER

Time	Zone Suffix	Log (Stating type)	Distance Run Miles and Tenths	Mean Revs. per Minute	True Course	Gyro Com- pass Course	Standard Compass Course	Deviation	Variation	Cloud Amount (Eighths)	Wind		Sea Height (In Feet)	Swell		Visibility (Code vv)	Present Weather (Code ww)	Corrected Baro- metric Pressure in Millibars	Temperature (Celsius)		
											Direction (True)	Speed (Knots)		Direction From (True)	Height (In Feet)				Dry Bulb	Wet Bulb	Sea
0100																					
0200																					
0300																					
0400										1	300	5	-	-	-	96	02	1016.0	5.6	4.4	
0500																					
0600																					
0700																					
0800										0	320	5	-	-	-	98	02	1018.0	6.7	4.4	
0900																					
1000																					
1100																					
1200	+3									1	000	5	0	-	0	98	02	1020	12.8	8.3	
1300																					
1400																					
1500																					
1600										1	000	5	0	-	0	98	02	1020	14.4	10.0	
1700																					
1800																					
1900																					
2000										1	000	5	0	-	0	98	02	1022	13.3	8.9	
2100																					
2200																					
2300																					
2400										1	000	5	0	-	0	98	02	1022	12.2	11.5	

Distance run
through the Water
Midnight to
Midnight

Leave Granted to Ship's Company

Anchor Bearings

PNRFID
1505 Mon until 0755 Tues.

HMCS PROTECTEUR TUES DAY 2ND OF OCTOBER

Time	Zone Suffix	Log (Stating type)	Distance Run Miles and Tenths	Mean Revs. per Minute	True Course	Gyro Com- pass Course	Standard Compass Course	Deviation	Variation	Cloud Amount (Eighths)	Wind		Sea Height (In Feet)	Swell		Visibility (Code vv)	Present Weather (Code ww)	Corrected Baro- metric Pressure in Millibars	Temperature (Celsius)			
											Direction (True)	Speed (Knots)		Direction From (True)	Height (In Feet)				Dry Bulb	Wet Bulb	Sea	
0100																						
0200																						
0300																						
0400										0	000	5	0	-	0	98	01	1022.5	10.6	8.9		
0500																						
0600																						
0700																						
0800										0	000	5	0	-	0	98	02	1022.5	18.0	16.8		
0900																						
1000																						
1100																						
1200	+3									1	CALM	0	-	0	98	02	1024.5	16.1	14.4			
1300																						
1400																						
1500																						
1600										1	300	8	0	-	0	98	02	1022	17.8	13.3		
1700																						
1800																						
1900																						
2000										4	CALM	0	-	0	98	03	1022	15.6	13.9			
2100																						
2200																						
2300																						
2400										4	-	0	0	-	0	98	02	1021	13.9	12.2		
										4	CALM					98	02	1021	13.9	12.2		DH
Distance run through the Water Midnight to Midnight		Leave Granted to Ship's Company										Anchor Bearings										
		PUNED FROM 1555 TUES UNTIL 0755 WED																				

1973

FROM

TO

, OR AT HALIFAX N.S.

REMARKS

Initials of the Officer of the Watch

0716 - Sunrise

0800 - Colours - Hands employed at cleaning stations

0900 - Secured cleaning stations - hands employed by departments

0900 - EXERCISED FIRE STATIONS - FWD. DISTRIBUTION COMPARTMENT
emergency party at

~~0907 SECURED FIRE STATIONS~~

SMB

SH

1824 - EXERCISED FIRE STATIONS: PYROTECHNIC LOCKER ON DECK

1854 - SUNSET

2000 - Rounds Connect

SH

Position	Latitude	Longitude	Depending on	Draught			Notice for Main Engines at Noon
				Time	Forward	Aft	
0800	° ' ,	° ' ,					24 HRS
1200	° ' ,	° ' ,					
2000	° ' ,	° ' ,					

HMCS PROTECTOR

WEDNES DAY

3rd OF OCTOBER

Time	Zone Suffix	Log (Stating type)	Distance Run Miles and Tenths	Mean Revns. per Minute	True Course	Gyro Com- pass Course	Standard Compass Course	Deviation	Variation	Cloud Amount (Eighths)	Wind		Sea Height (In Feet)	Swell		Visibility (Code vv)	Present Weather (Code ww)	Corrected Baro- metric Pressure in Millibars	Temperature (Celsius)		
											Direction (True)	Speed (Knots)		Direction From (True)	Height (In Feet)				Dry Bulb	Wet Bulb	Sea
0100																					
0200																					
0300																					
0400										6	CALM	0	-	0	98	03	1020.15	13.3	12.8		
0500																					
0600																					
0700																					
0800										8	260	5	0	-	0	98	02	1019.1	15.6	15.0	
0900																					
1000																					
1100																					
1200	+3									4	260	5				98	01	1019.0	20.0	16.7	
1300																					
1400																					
1500																					
1600										8	180	5	-	-	-	98	03	1017.0	20.0	18.9	
1700																					
1800																					
1900																					
2000										8	180	5	-	-	-	97	63	1018.0	19.4	17.8	
2100																					
2200																					
2300																					
2400										8	180	5	-	-	-	96	63	1018.0	17.8	16.7	

Distance run through the Water Midnight to Midnight	Leave Granted to Ship's Company	Anchor Bearings
	PERSONNEL NRFD FROM 1600 WED UNTIL 0755 THURS.	

HMCS PROTECTEUR

THURSDAY

4th OF OCTOBER

Time	Zone Suffix	Log (Stating type)	Distance Run Miles and Tenths	Mean Revs. per Minute	True Course	Gyro Compass Course	Standard Compass Course	Deviation	Variation	Cloud Amount (Eighths)	Wind		Sea Height (In Feet)	Swell		Visibility (Code vv)	Present Weather (Code ww)	Corrected Barometric Pressure in Millibars	Temperature (Celsius)			
											Direction (True)	Speed (Knots)		Direction From (True)	Height (In Feet)				Dry Bulb	Wet Bulb	Sea	
0100																						
0200																						
0300																						
0400										8	090	5	-	-	-	96	63	1009.0	16.1	15.6		
0500																						
0600																						
0700																						
0800										8	090	5	-	-	-	96	63	1009.0	16.7	16.1		
0900																						
1000																						
1100																						
1200	43									8	090	3	-	-	-	97	20	1008.0	17.2	17.2		
1300																						
1400																						
1500																						
1600										8	120	3	-	-	-	96	20	1008.0	16.1	16.1		
1700																						
1800																						
1900																						
2000										8	015	10	-	-	-	98	20	1009.0	12.2	13.5		
2100																						
2200																						
2300																						
2400										8	010	5	-	-	-	97	02	1008.5	12.2	11.1		

Distance run through the Water Midnight to Midnight

Leave Granted to Ship's Company

Anchor Bearings

PIRRO - From 1600 Thurs until 0755 Friday

1973 FROM

TO

, OR. AT, HALIFAX, N.S.

REMARKS

Initials
of the
Officer
of the
Watch

0716 - SUNRISE
 0755 - HANDS TO DIVISIONS IN DISPERSAL AREA
 0800 - COLOURS - HALF MASTED IN HONOUR OF FOUR SERVICEMEN KILLED IN TRACKER CRASH
 0805 - HANDS EMPLOYED AT CLEANING STATIONS

[Handwritten initials]

1622 - Exercised fire in galley

1850 - Sunset

1930 - Rounds correct

[Handwritten initials]

Position	Latitude	Longitude	Depending on	Draught			Notice for Main Engines at Noon
				Time	Forward	Aft	
0800	° ' "	° ' "					24 Hrs.
1200	° ' "	° ' "					
2000	° ' "	° ' "					

HMCS PROTECTEUR

FRI DAY

5 OF OCTOBER

Time	Zone Suffix	Log (Stating type)	Distance Run Miles and Tenths	Mean Revns. per Minute	True Course	Gyro Compass Course	Standard Compass Course	Deviation	Variation	Cloud Amount (Eighths)	Wind		Sea Height (In Feet)	Swell		Visibility (Code vv)	Present Weather (Code ww)	Corrected Barometric Pressure in Millibars	Temperature (Celsius)		
											Direction (True)	Speed (Knots)		Direction From (True)	Height (In Feet)				Dry Bulb	Wet Bulb	Sea
0100																					
0200																					
0300																					
0400										8	015	5	-	-	-	97	02	1014.0	10.6	10.6	
0500																					
0600																					
0700																					
0800										8	CALM	-	-	-	98	02	1019.0	10.6	10.6		
0900																					
1000																					
1100																					
1200	+									8	CALM	-	-	-	98	02	1014	15.0	13.9		
1300																					
1400																					
1500																					
1600										8	180	8	-	-	-	98	02	1012	16	13.9	
1700																					
1800																					
1900																					
2000										8	180	8	-	-	-	98	51	1009	13.9	13.3	
2100																					
2200																					
2300										8	180	8	-	-	-	98	61	1007	14.4	14.4	
2400										8	180	8	-	-	-	98	61	1007	14.4	14.4	

Distance run through the Water Midnight to Midnight

Leave Granted to Ship's Company

Anchor Bearings

PNRFD FROM 1200 FRIDAY 5 OCT
TILL 0730 TUESDAY 9 OCT

19 73

FROM

TO

, OR AT HALIFAX NS

REMARKS

Initials of the Officer of the Watch

0716-SUNSET
0800-Hands employed at Cleaning Stations
0800-Colours- Half masted in honour of service personnel killed in Tracher crash.

0905 - Hands Employed by Departments.

ST

1200 - ~~RAISE~~ ^{RAISE} RAISED ENSIGN - Make and mend ROUTINE - SECURE

1845 SUNSET

1920 ROUNDS CORRECT

1925 EXERCISED FIRE STATIONS TELEPHONE EXCHANGE

DM

Position	Latitude	Longitude	Depending on	Draught			Notice for Main Engines at Noon
				Time	Forward	Aft	
0800	° ' "	° ' "					24 HRS
1200	° ' "	° ' "					
2000	° ' "	° ' "					

HMCS PROTECTOR

SATUR DAY

6th OF OCTOBER

Time	Zone Suffix	Log (Stating type)	Distance Run Miles and Tenths	Mean Revs. per Minute	True Course	Gyro Com- pass Course	Standard Compass Course	Deviation	Variation	Cloud Amount (Eighths)	Wind		Sea Height (In Feet)	Swell		Visibility (Code vv)	Present Weather (Code ww)	Corrected Baro- metric Pressure in Millibars	Temperature (Celsius)			
											Direction (True)	Speed (Knots)		Direction From (True)	Height (In Feet)				Dry Bulb	Wet Bulb	Sea	
0100																						
0200																						
0300																						
0400										8	180	12	0	-	0	96	50	1005	15	14.4		
0500																						
0600																						
0700																						
0800										1	315	18	0	-	0	98	01	1007	10.6	10.0		
0900																						
1000																						
1100																						
1200	43									6	315	20	0	-	0	98	03	1007	14.4	13.3		
1300																						
1400																						
1500																						
1600										6	320	20	0	-	0	98	02	1007	18	13.9		
1700																						
1800																						
1900																						
2000										8	340	20	0	-	0	98	03	1005	11.1	8.9		
2100																						
2200																						
2300																						
2400										3	000	20	0	-	0	98	01	1006	11.1	8.3		

Distance run through the Water Midnight to Midnight	Leave Granted to Ship's Company		Anchor Bearings	
	PNRFD 0930 SAT UNTIL 0755 TUES			

HMCS PROTECTEUR

SUN DAY

7TH OF OCTOBER

Time	Zone Suffix	Log (Stating type)	Distance Run Miles and Tenths	Mean Revs. per Minute	True Course	Gyro Com- pass Course	Standard Compass Course	Deviation	Variation	Cloud Amount (Eighths)	Wind		Sea Height (In Feet)	Swell		Visibility (Code vv)	Present Weather (Code ww)	Corrected Baro- metric Pressure in Millibars	Temperature (Celsius)		
											Direction (True)	Speed (Knots)		Direction From (True)	Height (In Feet)				Dry Bulb	Wet Bulb	Sea
0100																					
0200																					
0300																					
0400										1	000	15	0	-	0	98	01	1006	8.9	7.9	
0500																					
0600																					
0700																					
0800										1	000	15	0	-	0	98	02	1007	8.9	8.0	
0900																					
1000																					
1100																					
1200	43									9	315	10				98	01	1007.5	10.0	6.7	
1300																					
1400																					
1500																					
1600										8	325	10				98	03	1007.5	12.2	8.3	
1700																					
1800																					
1900																					
2000										8	320	10				98	03	1007.5	11.7	8.9	
2100																					
2200																					
2300																					
2400										8	330	8				98	03	1008.5	11.1	8.3	

Distance run through the Water Midnight to Midnight	Leave Granted to Ship's Company		Anchor Bearings	
	PNRFD LEAVE GRANTED FROM 1000 SUN. TO 0755 TUES.			

1973 - FROM

TO

OR AT HALIFAX N.S.

REMARKS

Initials
of the
Officer
of the
Watch

0719 - Sunrise

0800 - Colours

JMB

0900 - SAT & SUN DUTY WATCHES EMPLOYED IN CLEANING SHIP

1000 - SECURE CLEANING STATIONS.

1300 - EXERCISED THE EMERGENCY PARTY - FIRE IN CABIN 32

1844 - SUNSET

1925 - ROUNDS CORRECT

BR

Position	Latitude	Longitude	Depending on	Draught			Notice for Main Engines at Noon
				Time	Forward	Aft	
0800	° ' "	° ' "					24 HRS
1200	° ' "	° ' "					
2000	° ' "	° ' "					

HMCS PROTECTEUR

MON DAY

8TH OF OCTOBER

Time	Zone Suffix	Log (Stating type)	Distance Run Miles and Tenths	Mean Revs. per Minute	True Course	Gyro Com- pass Course	Standard Compass Course	Deviation	Variation	Cloud Amount (Eighths)	Wind		Sea Height (In Feet)	Swell		Visibility (Code vv)	Present Weather (Code ww)	Corrected Baro- metric Pressure in Millibars	Temperature (Celsius)		
											Direction (True)	Speed (Knots)		Direction From (True)	Height (In Feet)				Dry Bulb	Wet Bulb	Sea
0100																					
0200																					
0300																					
0400										1	315	15				99	01	1017	9.4	7.2	
0500																					
0600																					
0700																					
0800										5	330	10				98	03	1019.5	10.0	7.2	
0900																					
1000																					
1100																					
1200	3									2	045	12	-	-	-	98	01	1015	11.1	8.9	
1300																					
1400																					
1500																					
1600										2	350	15	-	-	-	98	02	1014.5	13.9	10.6	
1700																					
1800																					
1900																					
2000										0	000	20	-	-	-	98	00	1017	9.4	7.8	
2100																					
2200																					
2300																					
2400										8	350	10	-	-	-	94	04	1018	8.3	7.2	

Distance run through the Water Midnight to Midnight	Leave Granted to Ship's Company		Anchor Bearings	
	PNRFD LEAVE GRANTED TO 0755 - TUES 09 OCT 73.			

1973

FROM

TO

, OR AT

HALIFAX
N.S.

REMARKS

Initials
of the
Officer
of the
Watch

0720 - SUNRISE

0800 - COLOURS

0900 - SUP AND MON DUTY WATCHES EMPLOYED AT CLEANING STATIONS

1000 SECURED CLEANING STATIONS

1420 - EXERCISED EMERGENCY PARTY - FIRE E.R. BILGE.

1842 - SUNSET

1935 - ROUNDS CORRECT

[Handwritten initials]

[Handwritten initials]

[Handwritten initials]

[Handwritten initials]

[Handwritten initials]

Position	Latitude	Longitude	Depending on	Draught			Notice for Main Engines at Noon
				Time	Forward	Aft	
0800	° ' "	° ' "					24 Hrs.
1200	° ' "	° ' "					
2000	° ' "	° ' "					

HMCS PROTECTEUR

TUES DAY

9th OF OCTOBER

Time	Zone Suffix	Log (Stating type)	Distance Run Miles and Tenths	Mean Revs. per Minute	True Course	Gyro Com- pass Course	Standard Compass Course	Deviation	Variation	Cloud Amount (Eighths)	Wind		Sea Height (In Feet)	Swell		Visibility (Code vv)	Present Weather (Code ww)	Corrected Baro- metric Pressure in Millibars	Temperature (Celsius)		
											Direction (True)	Speed (Knots)		Direction From (True)	Height (In Feet)				Dry Bulb	Wet Bulb	Sea
0100																					
0200																					
0300																					
0400										0	030	6	-	-	-	98	01	1018.5	8.3	7.2	
0500																					
0600																					
0700																					
0800										0	000	5	-	-	-	98	02	1019	7.2	6.1	
0900		8367.24																			
1000		8372.88	5.6	71.4	VAR	VAR	VAR	VAR	25W												
1100		8382.91	10.1	64.2	VAR	VAR	VAR	VAR	23W												
1200	+3	8389.26	6.4	38.8	VAR	VAR	VAR	VAR	23W	1	340	15	1	020	2	98	02	1023.0	10.0	10.0	7.8
1220					VAR	VAR	VAR	VAR	23W												
1300		8398.97	11.5	57.4	110 1/2	110	135	2W	23W												
1400		8411.75	11.9	59.8	110 1/2	110	135	2W	23W												
1440					110 1/2	110	135	2W	23W												
1500		8420.53	11.9	59.9	340 1/2	340	003	0	23W												
1545					340 1/2	340	003	0													
1600	+3	8430.65	10.12	60.0	150 1/2	150	175	2W	23W	7	340	15	1	340	3	98	02	1021	14.2	12.8	
1700		8441.82	11.17	59.1	VAR	VAR	VAR	VAR	23W												
1800	+3	8449.99	8.4	50.2	180 1/2	180	209	6W	23W												
					150 1/2	150	175	2W	23W	7	340	10	1	340	2	98	02	1021.0	14.4	12.6	7.6
1900		8456.33	8.1	40.3	150	150	175	2W													
					100	100	124	1W	23W												
2000	+3	8468.00	12.1	60.4	100	100	124	1W	23W	7	340	15	2	350	3	98	02	1020.5	11.1	8.9	15.0
2100		8476.56	12.1	60.4	100	100	124	1W	23W												
2200		8485.18	12.2	60.8	100	100	124	1W	23W												
2300		8497.50	12.2	61.0	100	100	124	1W	23W												
2400	+3	8509.27	12.3	66.4	VAR	VAR	VAR	VAR	23W	8	000	20	2	350	2	98	02	1021.5	12.2	8.9	15.0

Distance run through the Water Midnight to Midnight	Leave Granted to Ship's Company		Anchor Bearings	
	156.1			

HMCS

PROTECTOR.

10th DAY

OF OCTOBER

Time	Zone Suffix	Log (Stating type)	Distance Run Miles and Tenths	Mean Revs. per Minute	True Course	Gyro Com- pass Course	Standard Compass Course	Deviation	Variation	Cloud Amount (Eighths)	Wind		Sea Height (In Feet)	Swell		Visibility (Code vv)	Present Weather (Code ww)	Corrected Baro- metric Pressure in Millibars	Temperature (Celsius)			
											Direction (True)	Speed (Knots)		Direction From (True)	Height (In Feet)				Dry Bulb	Wet Bulb	Sea	
0100		8524.40	15.13	83.9	196 $\frac{1}{2}$	105.	130	2°W	23W													
0200		8540.71	16.31	83.9	104 $\frac{1}{2}$ 101 $\frac{1}{2}$	103 100	127 126	1°W 2°W	23W 23W													
0300		8565.10	14.89	84	101 $\frac{1}{2}$ 106 $\frac{1}{2}$ 98 $\frac{1}{2}$	100 105 088	125 130 112	2°W 2°W 9°W	23W 23W 23W													
0400	+3	8569.53	14.5	83.9	09 $\frac{1}{2}$	090	115	2°W	23W	3	010	12	1	075	2	97	02	1020.1	11.1	8.9	13.2	
0500		8585.03	14.5	83.9	090	090	114	2°W	22°W													
0600		8600.76	14.5	83.9	090	090	114	2°W	22°W													
0700		8615.07	14.7	83.9	090	090	114	2°W	22°W													
0800	+3	8630.24	15.0	83.7	090	090	114	2°W	22°W	7	010	18	2	020	3	98	03	1018.0	10.0	7.8	13.3	
0900		8642.97	16.5	83.7	090	090	114	1/2°W	23 $\frac{1}{2}$ W													
1000		8659.32	16.5	83.7	090	090	114	1/2°W	23 $\frac{1}{2}$ W													
1100		8673.25	16.5	83.7	090	090	114	1/2°W	23 $\frac{1}{2}$ W													
1200	+3	8688.36	16.7	83.5	090	090	114	1/2°W	23 $\frac{1}{2}$ W	7	335	19	3	045	5	98	02	1018.0	12.2	9.8	13.3	
1300		8702.85	16.6	83.0	090	090	114	0	24W													
1400		8716.95	16.6	83.3	090	090	114	0	24W													
1500		8731.00	17.1	85.9	090	090	114	0	24W													
1600	+3	8742.10	15.10	85.9	090	090	114	0	24W	7	355	20	5	340	8	98	02	1016.0	12.8	9.4	13.0	
1700		8761.69	15.35	86.5	090	090	114	0	24W													
1800	+3	8771.00	15.51	88.5	090	090	114	0	24W	7	355	20	5	340	8	98	02	1014.0	12.9	9.2	13.1	
1900		8792.77	15.5	98.6	090	090	114	0	24°W													
2000	+3	8808.60	15.8	98.7	090	090	114	0°	24°W	7	000	18	6	340	10	98	02	1016.0	7.2	9.4	15.6	
2100		8823.70	14.9	97.1	090	090	114	0°	24°W													
2200		8838.54	15.1	98.2	090	090	114	0°	24°W													
2300		8853.00	19.6	98.2	090	090	114	0°	24°W													
2400	+3	8869.25	19.6	98.5	090	090	114	0	24W	6	000	20	4	340	8	98	02	1012.8	8.9	6.7	12.8	

Distance run through the Water Midnight to Midnight	Leave Granted to Ship's Company		Anchor Bearings	
	380.5			

1973. FROM HALIFAX NS TO LIVERPOOL (-U.K.), OR AT

REMARKS		Initials of the Officer of the Watch
	0020 { 43° 35.7' N Draught { 61° 16.5' N	
0110 A/C 103° 0130 A/C 100°	0110 { 43° 32.1' N Draught { 60° 59.7' N	
0202 A/C 105° 0215 A/C 088° 0258 A/C 090°	0220 { 48° 27.5' N Draught { 60° 33.7' N	
0315. Change draught to 68/100. not following. - Navigating by DR.	0330 { 43° 30.0' N DR { 59° 47.0' W	<i>[Signature]</i>
	0600 { 43° 30.0' N DR { 59° 18.0' W	
0705 - SUNRISE NAV LIGHTS OFF.		
0800 - Hands employed at Cleaning Stations	0800 { 43° 30.0' N DR { 58° 34.0' W	<i>[Signature]</i>
0900 - Secured cleaning stations - hands employed by departments	0900 { 43° 28.0' N DR { 58° 05.0' W	
	1100 { 43° 28.0' N DR { 57.21.0' W	
	1140 { 43 25.5' N obs pos { 57 09.0' W	<i>[Signature]</i>
	1300 { 43° 25.1' N DR { 56 38.0' W	
	1400 { 43 25.5' N DR { 56 12.5' W	
1450 - sp 19	1500 { 43 25.5' N DR { 55 52.0' W	
	1600 { 43 25.5' N DR { 55 27.0' W	<i>[Signature]</i>
	1700 { 43 25.5' N DR { 54 04.0' W	
1803 - Sunset Nav lights on.	1800 { 43 25.5' N DR { 54 41.0' W	<i>[Signature]</i>
	1900 { 43 25.5' N DR { 54° 15.0' W	
	2000 { 43 25.5' N DR { 53° 53.0' W	<i>[Signature]</i>
2400 - Advanced clocks 1 hour to zone (+2)	2330 { 43° 22.5' N DR { 52 24.0' W	

Position	Latitude	Longitude	Depending on	Draught			Notice for Main Engines at Noon
				Time	Forward	Aft	
0800	43° 27.5' N	58° 28.0' W	0834 (+3) OBS POS				
1200	43° 25.5' N	57° 00' W	1140 (+3) obs pos + DR.				
2000	43° 55' N	53° 53' W	2000 (+3) DR.				

HMCS PROTECTEUR

THURSDAY

11TH OF OCTOBER

Time	Zone Suffix	Log (Stating type)	Distance Run Miles and Tenths	Mean Revs. per Minute	True Course	Gyro Com- pass Course	Standard Compass Course	Deviation	Variation	Cloud Amount (Eighths)	Wind		Sea Height (In Feet)	Swell		Visibility (Code vv)	Present Weather (Code ww)	Corrected Baro- metric Pressure in Millibars	Temperature (Celsius)			
											Direction (True)	Speed (Knots)		Direction From (True)	Height (In Feet)				Dry Bulb	Wet Bulb	Sea	
0100	(+2)																					
0200		8884.47	19.6	98.5	090	090	114	0	24W													
0300		8900.47	19.6	98.5	090	090	114	0	24W													
0400	+2	8917.00	19.5	98.2	090	090	114	0	24W	6	000	20	4	350	6	98	02	1012	8.9	7.2	14.4	
0500		8929.60	19.6	98.5	090	090	114	0	24W													
0600		8946.06	19.5	98.4	090	090	114	0	24W													
0700		8959.40	19.5	98.1	065	065	089	1E	25W													
0800	+2	8973.30	19.6	98.9	065	065	089	1E	25W	6	345	20	4	330	6	98	02	1011	8.9	6.7	10.0	
0900		8987.83	19.4	99.4	065	065	089	1°E	25°W													
1000		9002.73	19.4	99.5	VAR	VAR	VAR	VAR	25°W													
1100		9017.75	19.1	98.0	065	065	089	1°E	25°W													
1200	+2	9032.00	19.0	97.5	065	065	089	1°E	25°W	5	290	26	4	300	6	98	02	1010.0	8.9	7.7	10.0	
1300		9047.00	19.0	97.8	065	065	089	1E	25W													
1400		9061.95	19.0	98.1	065	065	089	1E	25W													
1500		9076.28	19.0	97.9	065	065	089	1E	25W													
1600	+2	9091.78	19.3	99.4	065	065	089	1°E	25°W	8	280	30	3	300	8	98	02	1007.0	13.7	11.1	14.1	
1700		9105.40	19.6	99.3	065	065	089	1E	25W													
1800		9120.60	19.6	99.2	065	065	089	1E	25W	8	275	30	3	300	8	98	02	1007	9.7	8.9	14.1	
1900		9135.17	19.6	98.5	065	065	089	2W	25W	8	260											
2000	+2	9150.30	19.7	99.5	065	065	089	2W	25W	8	250	30	4	360	8	98	02	1005	8.6	7.2	14.1	
2100		9166.00	19.7	99.7	065	065	089	2°E	26°W													
2200		9180.02	19.6	99.6	065	065	089	2°E	26°W													
2300		9195.78	19.6	99.6	065	065	089	2°E	25°W													
2400	+2	9211.70	19.5	98.6	065	065	089	2°E	26°W	8	270	20	5	270	8	97	02	1004.5	11.1	8.9	16.4	

Distance run through the Water Midnight to Midnight	Leave Granted to Ship's Company		Anchor Bearings	
	447.0			

1973 FROM HALIFAX

TO LIVERPOOL, ENGLAND; OR AT

REMARKS



Initials of the Officer of the Watch

0200 DR { 43° 22' N
51° 57' W

0300 DR { 43° 20' N
51° 33' W

0400 DR { 43 22 N
51 07 W

MUB

0600 - calc 065°

0800 DR { 43° 37.3' N
49° 34.5' W

[Signature]

0926 - Alc 095
0935 - Alc 105
0955 - Alc 065

1200 DR { 44° 00' N
48° 33' W

[Signature]

1445 LORAN { 44° 20.0' N
47° 23.0' W

[Signature]

1605 LORAN { 44° 40' N
46° 50' W

1827 - Sunset (New Light on)

1940 LORAN { 45° 05' N
45 23 W

[Signature]

2114 LORAN { 45° 12.0' N
44° 38.0' W

2245 LORAN { 45° 33.0' N
44° 03.5' W

2325 LORAN { 45° 35.0' N
43 44.0 W

[Signature]

Position	Latitude	Longitude	Depending on	Draught			Notice for Main Engines at Noon
				Time	Forward	Aft	
0800	43° 37.3	49° 34.9 W	0800 (+2) DR.				
1200	44° 00.0 N	48° 33.0 W	1200 DR				
2000	45° 07.0 N	45° 11.0 W	DR on 1940 LORAN.				

HMCS PROTECTEUR

FRI DAY

12th OF OCTOBER

Time	Zone Suffix	Log (Stating type)	Distance Run Miles and Tenths	Mean Revs. per Minute	True Course	Gyro Com- pass Course	Standard Compass Course	Deviation	Variation	Cloud Amount (Eighths)	Wind		Sea Height (In Feet)	Swell		Visibility (Code vv)	Present Weather (Code ww)	Corrected Baro- metric Pressure in Millibars	Temperature (Celsius)		
											Direction (True)	Speed (Knots)		Direction From (True)	Height (In Feet)				Dry Bulb	Wet Bulb	Sea
0100		9226.66	19.1	98.6	065	065	089	1°E	25°W												
0200		9242.70	19.2	99.8	065	065	089	1°E	25°W												
0300		9257.60	19.0	98.1	065	065	089	1°E	25°W												
0400	+2	9273.16	19.5	99.7	065	065	089	1°E	25°W	8	250	28	5	265	8	98	02	1003.5	10.6	8.9	13.9
0500		9288.90	20.0	100.0	065	065	090	1E	26W												
0600		9304.27	20.0	100.0	065	065	090	1E	26W												
0700		9319.60	20.0	100.0	065	065	090	1E	26W												
0800	+2	9334.9	19.5	99.7	065	065	090	1E	26W	8	260	28	5	264	8	98	02	1003	12.2	10.6	17.8
0900		9352.0	19.0	102.7	065	065	090	1E	26W												
1000		9367.00	19.0	99.1	065	065	090	1E	26W												
1100		9382.76	19.0	99.1	065	065	090	1E	26W												
1200	+2	9398.25	19.0	99.4	065	065	090	1E	26W	7	260	25	4	265	6	98	01	1002.5	13.1	10.9	16.7
1300		9413.80	19.0	99.4	075	075	096	4°E	25°W												
1400		9428.80	19.0	99.5	075	075	096	3°E	24°W												
1500		9444.00	19.0	99.4	075	075	096	3°E	24°W												
1600	+2	9459.75	19.0	99.3	075	075	096	3°E	24°W	3	240	22	4	250	6	98	01	1002.0	13.9	11.7	15.0
1700		9475.12	19.0	99.1	075	075	096	3°E	24°W												
1800	+2	9490.46	19.1	99.3	075	075	096	3°E	24°W	3	230	26	3	255	7	98	02	1002.0	13.9	12.2	14.4
1900		9505.48	19.1	99.3	075	075	096	4E	25W												
2000	+2	9521.00	19.1	99.3	075	075	096	4E	25W	3	230	25	3	255	7	98	02	1002	14.2	11.4	14.7
2100		9536.24	19.0	99.0	075	075	096	4°E	25W												
2200		9551.54	19.0	99.0	075	075	096	4°E	25W												
2300		9567.16	19.1	99.4	075	075	096	4°E	25W												
2400	+2	9582.50	19.0	99.2	075	075	096	4°E	25W	4	235	30	3	255	6	98	02	1002.0	14.3	11.2	14.6

Distance run through the Water Midnight to Midnight	Leave Granted to Ship's Company		Anchor Bearings	
	46.07			

HMCS PROTECTEUR

SATUR DAY

13th OF OCTOBER

Time	Zone Suffix	Log (Stating type)	Distance Run Miles and Tenths	Mean Revs. per Minute	True Course	Gyro Com- pass Course	Standard Compass Course	Deviation	Variation	Cloud Amount (Eighths)	Wind		Sea Height (In Feet)	Swell		Visibility (Code vv)	Present Weather (Code ww)	Corrected Baro- metric Pressure in Millibars	Temperature (Celsius)		
											Direction (True)	Speed (Knots)		Direction From (True)	Height (In Feet)				Dry Bulb	Wet Bulb	Sea
0100		9597.85	19.0	99.3	075	075	096	2°E	23°W												
0200		9613.38	19.0	99.2	075	075	096	1°E	22°W												
0300		9628.90	19.0	99.4	075	075	096	1°E	22°W												
0400	+2	9644.53	19.0	99.3	075	075	096	1°E	22°W	2	225	22	3	255	6	98	02	998.0	14.4	12.2	14.1
0500		9660.00	19.0	99.3	075	075	096	1°E	22°W												
0600		9674.29	19.0	99.1	075	075	096	1°E	22°W												
0700		9689.49	19.0	99.4	075	075	096	1°E	22°W												
0742			13.0		075	075	096	0°													
0800	+2	9704.65	6.0	99.0	085	085	106	0°	21°W	7	220	22	2	225	5	98	03	997.5	15.0	13.9	16.7
0900		9720.40	19.0	99.1	085	085	106	0°	21°W												
1000		9735.90	19.0	99.0	085	085	106	0°	21°W												
1100		9749.80	19.0	99.0	085	085	106	0°	21°W												
1200	+2	9764.75	19.0	99.2	085	085	106	0°	21°W	3	230	17	2	230	6	98	01	998	15.0	13.3	16.7
1300		9779.90	19.0	99.4	085	085	106	3E	18W												
1400		9794.90	19.0	99.2	085	085	106	3E	18W												
1500		9810.25	19.0	99.0	085	085	106	3E	18W												
1600	+2	9825.38	19.0	98.9	085	085	106	3E	18W	5	270	17	2	250	4	98	03	998	15.6	13.3	16.7
1700		9840.22	19.0	98.9	085	085	106	3E	18W												
1800	+2	9855.50	19.0	98.8	085	085	106	3E	18W	4	270	16	2	250	4	98	03	998	15.0	13.6	16.5
1900		9870.26	19.0	98.9	085	085	105	1°W	19°W												
2000	+2	9885.73	19.0	99.1	085	085	105	1°W	19°W	5	220	18	2	250	5	98	02	998.0	13.9	12.8	
2100		9900.70	19.0	99.1	085	085	105	2°W	18°W												
2200		9915.73	19.0	99.0	085	085	105	2°W	18°W												
2300		9931.25	19.0	97.4	085	085	105	2°W	18°W												
2400	+2	9946.32	19.0	101.1	085	085	105	2°W	18°W	5	245	14	1	260	5	98	02	998	14.4	12.8	15.9

Distance run through the Water Midnight to Midnight	Leave Granted to Ship's Company		Anchor Bearings	
	456.0			

1973 FROM HALIFAX NS. TO MUELBAU (UK) , OR AT SEA

REMARKS		Initials of the Officer of the Watch
	0300 LORAN { 48° 11.0' N 31 56.0' W	JB
0619 - Sunrise		
0742 - a/c 085	0725 LORAN { 48° 35.0' N 30° 00.0' W	JB
0800 - Hands to cleaning stations		
0900 - Secured cleaning stations - Hands employed by departments	0900 DR { 48° 39.5' N 29° 14' W	
	1000 DR { 48° 41' N 28° 47' W	
1058 - BUNKERING SHIP - SMOKING RESTRICTIONS IN EFFECT	1100 DR { 48° 43' N 28° 17.5' W	
1115 - AFT FOAM SYSTEM ON LINE		
1136 - BUNKERING COMPLETED - SMOKING REST. LIFTED	1200 DR { 48° 45' N 27° 50' W	JB
	1300 DR { 48° 46' N 27° 21' W	
	1400 DR { 48° 49' N 26° 53' W	
	1500 DR { 48° 50' N 26° 24' W	
	1600 DR { 48° 51' N 25° 54' W	JB
1657 - Sunset - few lights switched on.	1700 DR { 48° 53.0' N 25° 25.0' W	
1719 - Moonrise		
	1800 DR { 48° 55.0' N 24° 55.0' W	JB
	1900 LORAN { 49° 01.0' N 24° 52.0' W	JB
	2225 LORAN { 49° 09.0' N 23° 17.0' W	
2400 - Clocks advanced one hour to zone +1		JB

Position	Latitude	Longitude	Depending on	Draught			Notice for Main Engines at Noon
				Time	Forward	Aft	
0800	48° 38' 0" N	29° 42' 5" W	0725 LORAN				
1200	48° 45' N	27° 50' W	1200 DR				
2000	49° 01' N	24° 25' W	1900(12) LORAN + DR.				

HMCS PROTECTEUR

SUNDAY

14th OF OCTOBER

Time	Zone Suffix	Log (Stating type)	Distance Run Miles and Tenths	Mean Revs. per Minute	True Course	Gyro Com- pass Course	Standard Compass Course	Deviation	Variation	Cloud Amount (Eighths)	Wind		Sea Height (In Feet)	Swell		Visibility (Code vv)	Present Weather (Code ww)	Corrected Baro- metric Pressure in Millibars	Temperature (Celsius)			
											Direction (True)	Speed (Knots)		Direction From From (True)	Height (In Feet)				Dry Bulb	Wet Bulb	Sea	
0100	(+)																					
0200	+1	9961.51	19.0	99.8	085	085	106	3°W	18°W													
0300		9977.00	19.0	99.4	085	085	106	3°W	18°W													
0400	+1	9993.40	19.0	99.5	085	085	106	3°W	18°W	7	245	14	1	250	5	98	03	998	15.6	13.9	16.7	
0500		0009.00	19.0	99.8	085	085	106	4°W	17°W													
0600		0024.10	19.0	99.4	085	085	106	4°W	17°W													
0700		0039.39	19.0	99.8	085	085	106	4°W	17°W													
0800	+1	0054.40	19.0	99.8	085	085	106	4°W	17°W	4	240	15	2	240	10	98	02	998	15.0	13.9	12.8	
0900		0069.50	19.0	-	085	085	106	4°W	17°W													
1000		0085.40	19.0	-	085	085	103	2°W	16°W													
1100		0099.95	19.0	99.3	085	085	103	2°W	16°W													
1200	+1	0115.51	19.0	99.2	085	085	103	2°W	16°W													
1300		0130.62	19.0	99.3	085	085	102	1°W	16°W													
1400		0145.70	18.5	93.4	085	085	102	2°W	15°W													
1500		0160.00	18.0	85.8	085	085	101	1°W	15°W													
1600	+1	0176.88	17.0	85.9	085	085	101	1°W	15°W	4	260	12	3	250	6	98	02	995.0	15.6	13.3	16.7	
1700		0191.50	17.0	86.1	085	085	100	1°W	14°W													
1800	+1	0206.50	17.0	86.1	085	085	100	1°W	14°W	5	265	16	2	250	5	98	02	995.0	14.4	12.8	16.1	
1900		0221.80	17.2	86.8	085	085	098	1°E	14°W													
2000	+1	0237.05	17.0	85.5	085	085	098	1°E	14°W	5	265	18	1	250	5	98	02	995.0	14.4	12.8	17.1	
2100		0252.25	17.1	85.8	085	085	098	1°E	14°W													
2200		0267.61	17.1	86.1	085	085	098	1°E	14°W													
2207					085	085	098	1°E														
2212					135	135	147	2°E														
2300		0282.46	17.0	85.6	085	085	098	1°E	14°W													
2400	+1	0291.38	17.2	86.1	090	090	102	1°E	13°W	5	265	18	1	250	5	98	02	995.0	14.4	12.8	17.0	

Distance run through the Water Midnight to Midnight

418.1

Leave Granted to Ship's Company

Anchor Bearings

1973 FROM HALIFAX N.S. TO LIVERPOOL U.K. OR AT SEA

REMARKS		Initials of the Officer of the Watch
	0200 D.R. Posit. 49° 09' N 22° 05' W	
	0300 D.R. Posit 49° 11' N 21° 37' W	
	0400 D.R. Post 49° 13' N 21° 09' W	MPK
	0500 DR { 49° 14' N 20° 43' W	
	0600 DR { 49° 17' N 20° 14' W	
0644 - Sunrise - Navigation lights off - #1 gyro correct by suns amplitude - #2 gyro 2° low by comparison.	0700 DR { 49° 19' N 19° 46' W	
	0740 LRN { 49 16 N 19 37 W	MPK
0815 - No man over board as of this time - low counter defective in MCR.	0800 DR { 49° 16.5 N 19° 02.0 W	
0850 - man aloft to repair deck radar.		
0900 - secured man aloft.		
0930 - man aloft for deck	1000 DR { 49° 17.0 N 18° 36.0 W	
0940 - secured man aloft. (deck still defective)		
1000 - Rem counter in MCR repaired.	1100 DR { 49 19.0 N 18 10.0 W	
	1200 DR { 49 20.0 N 17 44.0 W	MPK
1331 - Sp 17 (1400 DR { 49° 23.0 N 16° 55.0 W	
	1600 DR { 49 26.0 N 16 05.0 W	MPK
1719 - Sunset - Navigation lights on	1800 DR { 49° 30' N 15° 48' W	MPK
	1910 LORAN 49° 33' N 14° 43' W	MPK
2207 - Alc 135 2212 - Alc 085	2300 LORAN { 49° 41.5 N 13° 01.0 W	
2306 - Alc 090		
2355 - advanced one hour to zone time.	2355 WEN { 49 37.0 N 12 42.0 W	MPK

Position	Latitude	Longitude	Depending on	Draught			Notice for Main Engines at Noon
				Time	Forward	Aft	
0800	49° 16.5' N	19° 28' W	0740 LRN + DR.				
1200	49° 20.0' N	17° 44.0' W	0740 LRN + DR.				
2000	49° 35.0' N	14° 22.0' W	1910 (+1) LRN + DR.				

1973 FROM HALIFAX NS TO LIVERPOOL (UK) OR AT SEA.

REMARKS		Initials of the Officer of the Watch
TIME	ZONE CHANGE +1 TO ZULU	
0200	DR { 48 37.0N 12 16.0N	
0300	DR { 48 37.0N 11 51.0N	
0400	DR { 49 37.0N 11 24.5N	Py/S
0700- SUNRISE NAV LTS. OFF	LORAN { 49° 40.0N 10° 22.5W	
0755- HANDS TO DIVISIONS.	LORAN { 49° 38.0N 9° 45.0W	Py/S
0805- Hands employed at Cleaning Station		
	1051 { 49° 39' 5" N DECCA { 8° 19' 0" W	
	1300 DECCA 49° 38' N 07° 30' W	
1345- 9/10 085°	1345 DECCA 49° 39' N 07° 12' 6" W	
	1430 DECCA 49° 39' 5" N 06° 56' W	
1517- 9/10 090°	1540 DECCA 49° 41' 5" N 06° 29' W	Py/S
1604- Navigation lights on 1656- a/c 105	DECCA { 49° 42.8N 6° 09.1W	
1712- a/c 080 1735- Sunset	DECCA { 49° 44.1N 5° 35.4W	Py/S
1837- MC 083. 1850- SP1W	DECCA { 49° 47' 5" N 5° 15' 5" W	
	1930 { 49° 50' 0" N 4° 50' 5" W	Py/S
	2005 DECCA 49° 51' 2" N 04° 39' 7" W	
2108- 9/10 110° 2145- 9/10 075° 2120- 9/10 090° 2133- 9/10 095°	2125 DECCA 49° 53' N 04° 12' W	
2250- 9/10 078°	2255 DECCA 49° 57' 2" N 03° 42' 5" W	
2400- CLOCKS ADVANCED ONE HOUR TO TIME ZONE (-1)	2340 DECCA 50° 00' N 03° 27' W	Py/S

Position	Latitude	Longitude	Depending on	Draught			Notice for Main Engines at Noon
				Time	Forward	Aft	
0800	49° 38.6' N	09° 34.5' W	0730(+10) LCN + DR.				
1200	49° 38' N	07° 54' W	DECCA				
2000	49° 51' N	04° 40' W	DECCA				

1973

FROM

Halifax N.S.

TO

Liverpool U.K.

OR AT

SEA

REMARKS		Initials of the Officer of the Watch
0120 - a/c 060° 0130 - a/c 078	0135 DECCA { 50° 03' 0" N 3° 09' 2" W	
0245 - a/c 100° 0255 - a/c 070°	0245 DECCA { 50° 05' 5" N 2° 46' 1" W	
0315 a/c 075° 0320 a/c 067° 0330 - a/c 075°	0323 DECCA { 50° 07' 1" N 2° 34' 8" W	<i>[Signature]</i>
0400 - a/c 065°		
0457 - a/c 077°		
	0600 DECCA { 50 15.7 N 01 52.3 W	
0621 - a/c 263° 0635 - Sp 11	0700 DECCA { 50 16.5 N 01 59.5 W	
0704 - a/c 262° 0733 - Sunrise - Navigation lights off		<i>[Signature]</i>
0807 - A/c 255 Sp 12 0821 - Sp 6	0802 DECCA { 50 15.0 N 02 18.9 W	
0922 - Sp 12 0935 - Ras SSD Closed Up. 0955 - Preserver alongside Commenced Consolidation Ras	0930 DECCA { 50° 12.7 N 02 31.9 W	
1113 - RAS Co altered to 257	1150 DECCA { 50° 07.0 N 03 11.5 W	<i>[Signature]</i>
1305 - HMCS Preserver assumed guide	1300 DECCA { 50 03.5 N 03 31.0 W	
1410 - assumed guide	1350 DECCA { 49 58.9 N 03 46.8 W	
1505 - HMCS Preserver assumed guide 1550 - Slipped - Hands to flying stations - took station 167 Preserver 1000° - a/c 250 Sp 14 1555 - Secured Ras station and SSP 1556 - a/c 035 - Sp 13	1453 DECCA { 49 57.2 N 4 05.2 W	
1610 - A/c 030 Sp 12 1618 - 2nd Star 1000° Starboard Preserver a/c 010 Sp 12 1620 - Sp 6 Recovered 30 1627 - Launched 30 Sp 103 1717 - Recovered 30 1719 - Launched 30 1727 - Recovered 30 1745 - Secured Flying Stars	1600 - a/c 077 Sp 12. Hands to Flying Stars 1654 - Recovered 29. 1700 DECCA { 50° 02.5 N 4° 23.0 W	<i>[Signature]</i>
1851 - a/c 150° 1856 - a/c 100°	1834 Sunset - NAV Lt. SWITCHED ON. 1830 DECCA { 49° 58' 2" N 04° 0' 5" W	
1906 - a/c 101° 1940 - a/c 103°	1935 DECCA { 49° 54' N 03° 33' W	<i>[Signature]</i>
2014 - A/c 115° 2026 - A/c 090° 2037 - Sp 6 2038 - A/c 255°	2040 DECCA { 49° 49.0 N 03° 06.0 W	
2105 - Navigation alongside port	2135 DECCA { 49° 46.0 N 03° 20.0 W	
2150 - Navigation slipped		
2208 - Saguenay alongside Port 2230 - Log U/S	2240 DECCA { 49° 40.0 N 03° 38.0 W	
2310 - Saguenay detached 2315 - Secured RAS Stars & RAS SSD 2318 - A/c 260 Sp 15 2320 - Sp 8	2350 DECCA { 49° 39.8 N 03° 56.0 W	<i>[Signature]</i>

Position	Latitude	Longitude	Depending on	Draught			Notice for Main Engines at Noon
				Time	Forward	Aft	
0800	50° 16' N	02° 18.9' W	0802(-) DECCA				
1200	50° 06.2' N	03° 13.5' W	1200 DECCA				
2000	49° 51.0' N	03° 12.1' W	1935(-) DECCA + DR.				

HMCS PROTECTEUR

WEDNESDAY

17th OF OCTOBER

Time	Zone Suffix	Log (Stating type)	Distance Run Miles and Tenths	Mean Revs. per Minute	True Course	Gyro Compass Course	Standard Compass Course	Deviation	Variation	Cloud Amount (Eighths)	Wind		Sea Height (In Feet)	Swell		Visibility (Code vv)	Present Weather (Code ww)	Corrected Barometric Pressure in Millibars	Temperature (Celsius)			
											Direction (True)	Speed (Knots)		Direction From (True)	Height (In Feet)				Dry Bulb	Wet Bulb	Sea	
0035 0100		u/s	9.5	47.4	260 VAR	260 VAR	269 VAR	1W VAR	8W 3W													
0200		u/s	14.7	73.6	VAR	VAR	VAR	VAR	8W													
0259 0300		u/s	14.8	74.1	VAR 260	VAR 260	VAR 270	VAR 2W	8W 8W													
0400	-1	u/s	14.8	70.7 63.0	260	260	270	2°W	8°W	1	000	15	2	340	4	98	02	1010.0	11.1	7.8	13.6	
0500		u/s	12.5	63.9	260 280	260 280	270 290	2°W 2°W	8°W													
0600		u/s	11.9	59.3	285	285	296	3°W	8°W													
0700		u/s	8.6	43.4	285	285	296	3°W	8°W													
0800	-1	u/s	8.7	44.1	285 180 200	285 180 200	296 190 211	3°W 2°W 2°W	8°W	5	015	20	2	340	3	98	02	1014.0	10.5	7.2	12.8	
0900		u/s	13.3	66.4	VAR	VAR	VAR	VAR	8°W													
1000		u/s	16.1	81.0	VAR	VAR	VAR	VAR	8°W													
1030 1100		u/s	12.8	62.4	180 270	180 270	190 280	2°W 2°W	8°W													
1200	-1	u/s	10.0	49.0	000	000	009	1°W	8°W	4	000	16	2	320	3	98	02	1017.0	10.6	6.7	14.4	
1220 1243 1300		u/s	10.0	50.4	000 260 270	000 260 270	009 270 280	1W 2W 2W	8W 8W 8W													
1400		u/s	10.0	50.4	270	270	280	2W	8W													
1444 1500		u/s	10.0	50.3	000 255	000 255	009 267	1W 4W	8W 8W													
1600	-1	u/s	10.0	50.1	255	255	267	4W	8W	3	350	15	2	310	4	98	02	1020.5	11.1	7.2	13.6	
1700		u/s	10.0	49.1	255 230	255 230	267 240	4°W 2°W	8°W													
1800	-1	u/s	9.8	49.1	230 000 230	230 000 230	240 009 240	2°W 1°W 2°W	8°W	3	000	12	2	340	4	98	02	1021.0	10.3 8.0	8.3	14.4	
1812 1845 1855 1900		u/s	9.4	50.9	230 320 065 230	230 320 065 230	241° 330° 074° 241°	2°W 1°W 2°W	9W 9W 9W													
2000	-1	u/s	11.8	61.1	230	230	241°	2°W	9W	7	000	1	2	340	4	97	15	1022.0	10.0	7.2	14.7	
2100		u/s	12.3	60.8	230	230	240	10°W														
2200		u/s	12.3	60.8	230	230	240	10°W														
2215 2240 2300		u/s	11.5	56.0	230 040 230	230 040 230	240 051 240	1°W 10°W														
2400	-1	u/s	10.2	51.4	230	230	240	10°W		6	000	10	2	320	3	98	02	1023.0	11.1	8.1	15.6	

Distance run through the Water Midnight to Midnight	Leave Granted to Ship's Company		Anchor Bearings	
	274.8			

1973 FROM Halifax, N.S. TO Liverpool U.K. OR AT SEA

REMARKS		Initials of the Officer of the Watch
0030 - Commenced Casex AS 0035 - Commenced zig-zag plan 11 Base Co 260 Sp 15	0037 DECCA { 49° 39' N 04° 03.8' W	
	0152 DECCA { 49° 33.3' N 04° 30.5' W	
0259 - Ceased zig-zag - S/C 260 0300 - Completed Casex AS	0247 DECCA { 49° 30.9' N 04° 51.6' W	
0337 - Sp 12	0340 DECCA { 49° 27.6' N 05° 11.1' W	JMB
0414 - A/C 280	0500 DECCA { 49° 29.0' N 05° 40.0' W	
0515 - A/C 285 Sp 8		
	0632 DECCA { 49° 32.0' N 05° 58.0' W	
0751 - Sumner War dpts off 0755 - A/C 180 Sp 12 0800 - Hands employed at Cleaning Stns 0845 - Sp 16 0824 - Commenced zig-zag plan 9 0830 - Flying Stns.	0753 DECCA { 49° 35.0' N 06° 14.0' W	JMB
0905 - a/c 000 0908 - Launched Sk 30 0909 - Stood down Flying Stns	1000 DECCA { 49° 16.5' N 6° 14.2' W	
0910 - a/c 090 0930 - a/c 180 1000 - Sp 10	1055 DECCA { 49° 09.5' N 6° 17.7' W	
1030 - a/c 270 1030 - Flying Stns 1100 - a/c 000 1105 - Launched Sk 29 1108 - Recovered Sk 30		A
1220 - a/c 260° 1240 - Sighted periscope by 290° 1243 - a/c 270°	1230 DECCA { 49° 19.9' N 06° 22.0' W	
1345 - Hands to flying stations	1343 DECCA { 49° 10.2' N 06° 29.5' W	
1400 - a/c 000 1415 - Launched Helo 430 1442 - recovered Helo 429 1444 - a/c 255° 1455 - secured flying stations.	1451 DECCA { 49° 13.7' N 06° 32.0' W	
	1545 { 49° 11.2' N 06° 45.0' W	
1519 - A/C 230 Sp 9 1626 - Sp 10	1652 DECCA { 49° 06.0' N 07° 02.5' W	
1722 - Hands to Flying Stns 1729 - A/C 000 1730 - Recovered Sk 30 A/C 230	1755 DECCA { 49° 02.5' N 07° 08.5' W	JMB
1845 A/C 320° 1855 A/C 230° SPEED 12	1850 DECCA { 49° 06' N 07° 18' W	
1835 SUNSET - NAV. LTS SWITCHED ON	1948 DECCA { 48° 00' N 07° 29' W	J
	2055 DECCA { 48° 53.0' N 7° 40.0' W	
2215 - a/c 040 2240 - a/c 230 SP 5 2245 - Sp 8	2240 DECCA { 48° 45.0' N 7° 53.0' W	
2300 - Sp 5 - Hands to Replenishment Stns 2315 - RAS SSD closed up 2320 - Sp 12	2335 - Saguenay alongside Stbd 2377 - First line to Saguenay 2390 - Napiagan alongside Port 2393 - First line to Napiagan	J.T.

Position	Latitude	Longitude	Depending on	Draught			Notice for Main Engines at Noon
				Time	Forward	Aft	
0800	49° 33.5' N	06° 13.5' W	0753(-1) DECCA + DR				
1200	49° 17.5' N	06° 18.0' W	1217(-1) DECCA + DR				
2000	48° 58' N	07° 30' W	1948(-1) DECCA + DR				

HMCS PROTECTEUR

THURSDAY

18th OF OCTOBER

Time	Zone Suffix	Log (Stating type)	Distance Run Miles and Tenths	Mean Revs. per Minute	True Course	Gyro Com- pass Course	Standard Compass Course	Deviation	Variation	Cloud Amount (Eighths)	Wind		Sea Height (In Feet)	Swell		Visibility (Code vv)	Present Weather (Code ww)	Corrected Baro- metric Pressure in Millibars	Temperature (Celsius)			
											Direction (True)	Speed (Knots)		Direction From (True)	Height (In Feet)				Dry Bulb	Wet Bulb	Sea	
0025 0100		u/s	8.6	43.1	230 000	230 000	243 010	5W 2W	8W 8W													
0158 0200		u/s	16.0	50.2	000 025	000 025	010 035	2W 2W	8W 8W													
0300		u/s	15.5	78.7	025	025	035	2W	8W													
0400	-1	u/s	15.8	79.5	025	025	035	2W	8W	2	270	10	2	320	4	98	02	1025	11.1	7.2	15.9	
0500		u/s	15.8	79.5	025	025	035	2W	8W													
0600		u/s	16.1	81.7	025	025	035	2W	8W													
0700		u/s	16.1	82.7	025	025	035	2W	8W													
0800	-1	u/s	16.1	82.7	025	025	035	2W	8W	4	270	15	2	320	4	98	03	1025.0	12.2	11.1	14.8	
0900		u/s	16.4	82.9	025	025	034	1°E	10°W													
0955 1000		u/s	16.3	82.3	025 000	025 000	034 009	1°E	10°W													
1007 1100		u/s	16.5	83.4	025 035	025 035	034 043	1°E	10°W													
1150 1158 1200	-1	u/s	16.5	83.8	035 000 035	035 000 035	043 009 043	2°E 1°E 2°E	10°W	4	275	9	2	010	3	98	02	1025.5	10.6	7.2	14.4	
1300		u/s	16.5	83.6	035	035	043	2°E	10°W													
1400		u/s	13.0	59.7	VAR	VAR	VAR	VAR	10°W													
1500		u/s	10.8	52.7	VAR	VAR	VAR	VAR	10°W													
1600	-1	u/s	13.4	65.3	020	020	028	2°E	10°W													
1700		u/s	13.4	65.3	020	020	028	2°E	10°W													
1800	-1	u/s	13.5	65.4	020	020	028	2°E	10°W	4	270	19	2	070	4	98	02	1023.5	10.4	7.6	14.4	
1900		u/s	13.4	65.3	020	020	028	2°E	10°W													
2000	-1	u/s	13.4	65.3	020	020	028	2°E	10°W	5	270	15	2	230	3	98	03	1022.0	12.2	10.0	14.7	
2100		u/s	13.4	65.3	020	020	028	2E	10W													
2200		u/s	13.4	65.2	020	020	028	2E	10W													
2205 2237					020 015	020 015	028 023	2E 2E	10W 10W													
2300		u/s	13.4	65.2	005	005	013	2E	10W													
2305 2315					005 005	005 005	013	2E	10W													
2400	-1	u/s	11.5	57.4	035	035	043	1°E	9°W	2	300	18	2	300	2	98	01	1019	11.7	9.4	13.7	

Distance run through the Water Midnight to Midnight

339.8

Leave Granted to Ship's Company

Anchor Bearings

1973 FROM Halifax, N.S. TO Liverpool, ^{Eng} A.S. U.K. OR AT SEA

REMARKS		Initials of the Officer of the Watch
0001 - Navigation stopped. 0010 - Squawney stopped. 0018 - Hands to flying stations 0020 - a/c 000 - Sp 6	0055 - Sp 10 0058 - Recovered hls 27	0100 DECCA { 48° 42' N 07° 53.5' W
0155 - Launched hls 30 0156 - Secured flying stations 0158 - a/c 025 - Sp 16		0200 DECCA { 48° 42' N 07° 54' W
		0320 DECCA { 49° 05' N 07° 56' W
		0425 DECCA { 49° 19' N 07° 43' W
		0554 DECCA { 49° 40.5' N 07° 24.4' W
		0650 DECCA { 49° 52.5' N 07° 20.5' W
0755 - Sunrise - navigation lights off - #1 Gyro correct by sun's amplitude #2 gyro 2° high by comparison		0745 DECCA { 50° 07.0' N 07° 08.8' W
0830 - Flying Stns 0855 - Launched Sk 37		
0925 - Launched Sk 29 0930 - Stood down Flying Stns 0955 - Flying Stns a/c 000		0912 DECCA { 50° 28' 0" N 7° 02' 2" W
1000 - Recovered Sk 29 - a/c 025 1007 - a/c 035 1005 - Stood down Flying Stns		1005 DECCA { 50° 41.5' N 6° 54' 0" W
1125 - Flying Stns 1150 - a/c 000 1152 - Recovered Sk 37	1155 - a/c 035	1120 DECCA { 50° 57' 5" N 6° 39' 0" W
		1200 DECCA { 51° 08' 3" N 06° 25' W
1312 - YL 050° 1315 - Sp 1310TS 1320 - YL 035°	1349 - Sp 4 CARRYING OUT BOW THRUSTER TRIAL	
1415 - TRIAL COMPLETE C 035 Sp 13 1500 - YL 020°		1434 DECCA { 51° 34' 4" N 05° 56' W
		1644 DECCA { 52° 01.6' N 05° 37.3' W
		1726 DECCA { 52° 10.6' N 05° 32.5' W
1822 - SUNSET NAV LOTS ON.		1852 DECCA { 52° 25.7' N 05° 22.8' W
		1945 DECCA { 52° 35.3' N 05° 16.6' W
2205 - a/c 0150 2237 - a/c 0050		
2305 - Sp 11 2315 - a/c 020 2350 - a/c 035		

Position	Latitude	Longitude	Depending on	Draught			Notice for Main Engines at Noon
				Time	Forward	Aft	
0800	50° 11.0' N	07° 04.2' W	0745(-) DECCA + DR.				
1200	51° 08' 3" N	6° 24' 8" W	DECCA				
2000	52° 40' N	08° 14' W	1945(-) Decca + DR.				

HMCS PROTECTEUR

FRI DAY

19th OF OCTOBER

Time	Zone Suffix	Log (Stating type)	Distance Run Miles and Tenths	Mean Revs. per Minute	True Course	Gyro Com- pass Course	Standard Compass Course	Deviation	Variation	Cloud Amount (Eighths)	Wind		Sea Height (In Feet)	Swell		Visibility (Code vv)	Present Weather (Code ww)	Corrected Baro- metric Pressure in Millibars	Temperature (Celsius)			
											Direction (True)	Speed (Knots)		Direction From (True)	Height (In Feet)				Dry Bulb	Wet Bulb	Sea	
0000					035	035	043	1°E														
0085		U/S	11.6	56.6	080	080	089	0°	9°W													
0100					085	085	093	1°E														
0120					085	085	093	1°E														
0141		U/S	9.9	47.7	090	090	099	0°	9°W													
0200					092	092	101	0°														
0230					092	092	101	0°														
0300		U/S	8.2	41.3	090	090	099	0°	9°W													
0400	-1	U/S	9.0	45.5	090	090	099	0°	9°W	8	220	28	2	200	3	97	63	1012.0	10.8	10.3	15.4	
0500		U/S	8.2	41.4	090	090	099	0°	9°W													
0600		U/S	7.1	35.9	VAR	VAR	VAR	VAR	9°W													
0700		U/S	9.9	49.0	VAR	VAR	VAR	VAR	9°W													
0800	-1	U/S	3.6	18.8	VAR	VAR	VAR	VAR	9°W	8	250	20	1	200	2	97	62	1008.0	6.7	6.1	17.8	
0900		U/S	3.6	18.8	VAR	VAR	VAR	VAR	9°W													
1000		U/S	2.5	12.6	VAR	VAR	VAR	VAR	9°W													
1025					VAR	VAR	VAR	VAR	9°W													
1100		U/S	0.9	4.5	VAR	VAR	VAR	VAR	9°W													
1200	-1									8	145	20				96	80	1005	12.8	12.2		
1300																						
1400																						
1500																						
1600										8	145	20				96	02	1006	12.8	10.0		
1700																						
1800																						
1900																						
2000										8	145	10				96	02	1008	11.1	10.0		
2100																						
2200																						
2300																						
2400										5	145	15				98	01	1009.5	12.8	10.0		

Distance run through the Water Midnight to Midnight	Leave Granted to Ship's Company		Anchor Bearings	
	PERSONNEL NOT REQUIRED FOR DUTY FROM 1300 FRID TO 0755 MOND.			
74.5				

HMCS PROTECTEUR

SATUR DAY

20th OF OCTOBER

Time	Zone Suffix	Log (Stating type)	Distance Run Miles and Tenths	Mean Revns. per Minute	True Course	Gyro Compass Course	Standard Compass Course	Deviation	Variation	Cloud Amount (Eighths)	Wind		Sea Height (In Feet)	Swell		Visibility (Code vv)	Present Weather (Code ww)	Corrected Barometric Pressure in Millibars	Temperature (Celsius)		
											Direction (True)	Speed (Knots)		Direction From (True)	Height (In Feet)				Dry Bulb	Wet Bulb	Sea
0100																					
0200																					
0300																					
0400										7	050	10				96	01	1010	11.1	10.0	
0500																					
0600																					
0700																					
0800										8	CALM					96	60	1009.5	11.1	10.0	
0900																					
1000																					
1100																					
1200	-1									8	196	10	-	-	-	96	10	1007	11.7	11.7	
1300																					
1400																					
1500																					
1600										8	195	10	-	-	-	96	10	1006	11.7	12.2	
1700																					
1800																					
1900																					
2000										8	255	20	-	-	-	96	10	1003	11.7	12.2	
2100																					
2200																					
2300																					
2400										8	250	30				96	10	1006.5	11.7	11.7	

Distance run through the Water Midnight to Midnight	Leave Granted to Ship's Company		Anchor Bearings
	PERSONNEL NOT REQUIRED FOR DUTY FROM 0930 SAT UNTIL 0755 MON.		

HMCS PROTECTEUR

SUN DAY

21ST OF OCTOBER

Time	Zone Suffix	Log (Stating type)	Distance Run Miles and Tenths	Mean Revs. per Minute	True Course	Gyro Com- pass Course	Standard Compass Course	Deviation	Variation	Cloud Amount (Eighths)	Wind		Sea Height (In Feet)	Swell		Visibility (Code vv)	Present Weather (Code ww)	Corrected Baro- metric Pressure in Millibars	Temperature (Celsius)			
											Direction (True)	Speed (Knots)		Direction From (True)	Height (In Feet)				Dry Bulb	Wet Bulb	Sea	
0100																						
0200																						
0300																						
0400										8	275	25	-	-	-	96	21	1007.5	17.8	10.0		
0500																						
0600																						
0700																						
0800										6	290	15	-	-	-	98	10	1008	11.1	11.1		
0900																						
1000																						
1100																						
1200	-1									5	350	8	-	-	-	98	02	1013.0	11.1	10.0		
1300																						
1400																						
1500																						
1600										7	350	10	-	-	-	98	03	1015.0	11.7	11.7		
1700																						
1800																						
1900																						
2000										6	350	5				98	02	1017.0	11.7	11.7		
2100																						
2200																						
2300																						
2400										7	350	5				98	01	1018.0	10.6	10.6		

Distance run through the Water Midnight to Midnight	Leave Granted to Ship's Company	Anchor Bearings
	PERSONNEL NOT REQUIRED FOR DUTY FROM 1030 SUN UNTIL 0755 MON	

1973

FROM

TO

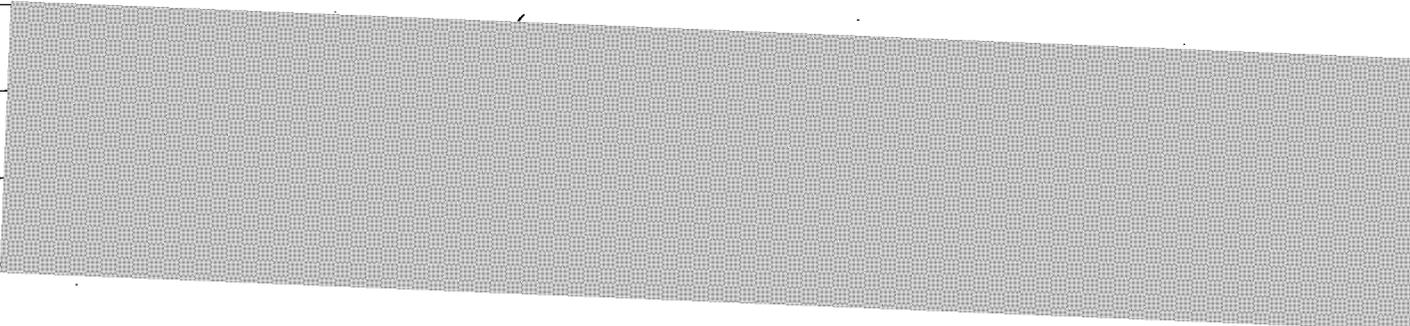
, OR AT LIVERPOOL

REMARKS

Initials of the Officer of the Watch

s.19(1)

0430



front their heads
company of two
a second time
a ball beam
ated

MP

0900 COLOURS

1215 - 10 Cadets from HMS Conway onboard for tour

1400 - 15 Cadets from HMS Conway onboard for tour

1555 - HMS Conway cadets ashore.

1805 - Sunset

1930 - Exercised Emergency Party at fire stns

2030 - Rounds correct.

JP

Position	Latitude	Longitude	Depending on	Draught			Notice for Main Engines at Noon
				Time	Forward	Aft	
0800	° ' "	° ' "					12 HRS
1200	° ' "	° ' "					
2000	° ' "	° ' "					

HMCS PROTECTEUR

MONDAY

22ND OF OCTOBER

Time	Zone Suffix	Log (Stating type)	Distance Run Miles and Tenths	Mean Revs. per Minute	True Course	Gyro Com- pass Course	Standard Compass Course	Deviation	Variation	Cloud Amount (Eighths)	Wind		Sea Height (In Feet)	Swell		Visibility (Code vv)	Present Weather (Code ww)	Corrected Baro- metric Pressure in Millibars	Temperature (Celsius)		
											Direction (True)	Speed (Knots)		Direction From (True)	Height (In Feet)				Dry Bulb	Wet Bulb	Sea
0100																					
0200																					
0300																					
0400										7	300	5	-	-	-	98	02	1017.5	10.6	10.6	
0500																					
0600																					
0700																					
0800										8	290	10	-	-	-	98	20	1016.0	10.6	10.6	
0900																					
1000																					
1100																					
1200	-1									8	090	5	-	-	-	98	52	1015.0	10.6	10.6	
1300																					
1400																					
1500																					
1600										7	055	8	-	-	-	98	50	1015.0	12.8	11.1	
1700																					
1800																					
1900																					
2000										5	055	8	-	-	-	98	01	1018.0	12.0	11.0	
2100																					
2200																					
2300																					
2400										3	055	7	-	-	-	98	02	1018.0	11.7	11.1	

Distance run through the Water Midnight to Midnight	Leave Granted to Ship's Company	Anchor Bearings
	<i>Personnel not required for duty from 1600 Monday until 0755 Tuesday</i>	

1973

FROM

TO

OR AT LIVERPOOL

REMARKS

Initials
of the
Officer
of the
Watch

0751 - Sunrise

0755 - Hands to divisions in dispersal area

0800 - Hands employed at cleaning stations

0900 - Colours

0915 - HMS Beander & HMS Matepan to sea

0930 - 21 members of Ship's Company to tour of Mersey Tunnels

1645 - Exercised Fire in Fridge Machinery Space

1810 - All off duty officers and 30 C&PO to reception at Town Hall

1930 - Ship toured by 25 Sea Rangers

1940 - Rounds Correct

2030 - Ships Hockey Team departed ship by bus to play Liverpool Leopards

2100 - Sea Rangers ashore

Position	Latitude	Longitude	Depending on	Draught			Notice for Main Engines at Noon
				Time	Forward	Aft	
0800	° ' ,	° ' ,					-12 HRS-
1200	° ' ,	° ' ,					
2000	° ' ,	° ' ,					

HMCS *PROTECTOR*

TUESDAY

23rd OF OCTOBER

Time	Zone Suffix	Log (Stating type)	Distance Run Miles and Tenths	Mean Revs. per Minute	True Course	Gyro Com- pass Course	Standard Compass Course	Deviation	Variation	Cloud Amount (Eighths)	Wind		Sea Height (In Feet)	Swell		Visibility (Code vv)	Present Weather (Code ww)	Corrected Baro- metric Pressure in Millibars	Temperature (Celsius)			
											Direction (True)	Speed (Knots)		Direction From (True)	Height (In Feet)				Dry Bulb	Wet Bulb	Sea	
0100																						
0200																						
0300																						
0400										7	055	0	-	-	-	97	03	1020.0	11.1	10.6		
0500																						
0600																						
0700																						
0800										6	285	10	-	-	-	98	02	1022	11.1	10.0		
0900																						
1000																						
1100																						
1200	-1									4	270	8	-	-	-	98	02	1022	11.7	11		
1300																						
1400																						
1500																						
1600										2	300	4	-	-	-	98	02	1022.5	11.7	10		
1700																						
1800																						
1900																						
2000										2	235	3	-	-	-	98	02	1023	12.2	11.6		
2100																						
2200																						
2300																						
2400										2	CALM		-	-	-	98	00	1023	12.8	10		

Distance run through the Water Midnight to Midnight	Leave Granted to Ship's Company	Anchor Bearings
	PERSONNEL NOT REQUIRED FOR LEAVE DUTY FROM 1200 TUESDAY TILL 0755 WEDNESDAY	

HMCS PROTECTEUR

WEDNESDAY

24th OF OCTOBER

Time	Zone Suffix	Log (Stating type)	Distance Run Miles and Tenths	Mean Revs. per Minute	True Course	Gyro Com- pass Course	Standard Compass Course	Deviation	Variation	Cloud Amount (Eighths)	Wind		Sea Height (In Feet)	Swell		Visibility (Code vv)	Present Weather (Code ww)	Corrected Baro- metric Pressure in Millibars	Temperature (Celsius)			
											Direction (True)	Speed (Knots)		Direction From (True)	Height (In Feet)				Dry Bulb	Wet Bulb	Sea	
0100																						
0200																						
0300																						
0400										2	CALM	-	-	-	98	00	1026	11.7	9.4			
0500																						
0600																						
0700																						
0800										5	100	5	0	-	0	98	02	1026	11.1	9.4		
0900																						
1000																						
1100																						
1200	-1									6	100	5	0	-	0	98	02	1026	13.3	11.1		
1300																						
1400																						
1500																						
1600										6	100	5	0	-	0	98	02	1026	15.6	12.2		
1700																						
1800																						
1900																						
2000										2	100	5	0	-	0	98	02	1025	13.9	11.7	...	
2100																						
2200																						
2300																						
2400										0	100	5	0	-	0	98	02	1025	12.8	10.6		

Distance run through the Water Midnight to Midnight	Leave Granted to Ship's Company		Anchor Bearings	
	P.N.R.F.D. 1200 Wed until 0755 Thur			

HMCS PROTECTEUR

THURSDAY

25th OF OCTOBER

Time	Zone Suffix	Log (Stating type)	Distance Run Miles and Tenths	Mean Revs. per Minute	True Course	Gyro Com- pass Course	Standard Compass Course	Deviation	Variation	Cloud Amount (Eighths)	Wind		Sea Height (In Feet)	Swell		Visibility (Code vv)	Present Weather (Code ww)	Corrected Baro- metric Pressure in Millibars	Temperature (Celsius)		
											Direction (True)	Speed (Knots)		Direction From (True)	Height (In Feet)				Dry Bulb	Wet Bulb	Sea
0100																					
0200																					
0300																					
0400										4	100	5	0	-	0	98	02	1024	11.7	10.0	
0500																					
0600																					
0700																					
0800										6	100	5	0	-	0	98	02	1024	11.7	10.0	
0900																					
1000																					
1100		u/s	0.5	3.6 14.8	VAR	VAR	VAR	VAR	9°W												
	-1	u/s	2.9	14.8	VAR	VAR	VAR	VAR	9°W												
1200	⊕	u/s	16.2	81.7	VAR	VAR	VAR	VAR	9°W	8	260	15	1	210	2	97	02	1029.5	10.6	9.4	11.1
1300		u/s	20.1	100.8	270 275	270 275	273 283	1°W 1°W	9°W 9°W												
1400		u/s	20.1	101.2	275 260	275 260	283 268	1°W 1°W	9°W 9°W												
1500		u/s	21.0	99.4	260 245	260 245	268 253	1°W 1°W	9°W 9°W												
1600	⊕	u/s	16.2	86.8	195	195	206	2°E	9°W	8	200	20	2	210	2	95	02	1030.0	10.4	9.6	11.2
1700		u/s	16.8	84.5	195	195	206	2°W	9°W												
1800	⊕	u/s	16.8	84.5	195	195	206	2°W	9°W	6	220	16	1	210	3	98	02	1029	12.8	12.6	13.2
1900		u/s	16.8	83.6	195	195	206	2°W	9°W												
1905					195	195	206	2°W													
2000	⊕	u/s	16.7	82.9	200	200	211	2°W	9°W	6	240	12	1	220	3	98	01	1029.5	12.8	12.8	13.3
2025					200	200	211	2°W													
2100		u/s	17.3	86.1	240	240	298	2°E 1°E	9°W												
2200		u/s	17.5	88.4	290	290	298	2°E 2°W	10°W												
2300		u/s	17.5	88.1	VAR	VAR	VAR	VAR	10°W												
2400	⊕	u/s	17.5	88.5	240	240	248	2°E 2°W	10°W	6	125	12	1	210	4	98	02	1029.5	12.8	11.1	14.4

Distance run through the Water
Midnight to
Midnight

223.8

Leave Granted to Ship's Company

Anchor Bearings

HMCS PROTECTEUR FRI DAY 26 OF OCTOBER

Time	Zone Suffix	Log (Stating type)	Distance Run Miles and Tenths	Mean Revs. per Minute	True Course	Gyro Com- pass Course	Standard Compass Course	Deviation	Variation	Cloud Amount (Eighths)	Wind		Sea Height (In Feet)	Swell		Visibility (Code vv)	Present Weather (Code ww)	Corrected Baro- metric Pressure in Millibars	D Bu
											Direction (True)	Speed (Knots)		Direction From (True)	Height (In Feet)				
0045 0050 0100		u/s	17.5	88.6	240	240	250	1°E	11°W										
0125 0135 0200		u/s	17.5	88.7	240	240	250	1°E	11°W										
0300		u/s	17.5	88.5	240	240	250	1°E	11°W										
0400	⊖	u/s	17.5	88.4	240	240	250	1°E	11°W	7	125	16	1	210	5	98	02	1025.0	12
0500		u/s	17.5	88.3	240	240	250	1°E	11°W										
0600		u/s	17.5	88.2	240	240	250	1°E	11°W										
0700		u/s	17.4	88.1	240	240	252	1°W	11°W										
0800	⊖	u/s	17.4	88.1	240	240	252	1°W	11°W	3	140	18	1	210	5	98	02	1024.0	12
0900		u/s	19.0	100.8	240	240	253	1°W	12°W										
1000		u/s	19.1	102.8	240	240	253	1°W	12°W										
1100		u/s	18.9	99.5	240	240	253	1°W	12°W										
1200	⊖	u/s	18.9	99.2	240	240	253	1°W	12°W	8	145	18	2	150	4	98	02	1021.0	13
1300		u/s	18.9	99.1	240	240	254	1°W	13°W										
1400		u/s	14.8	68.8	260	260	273 1/2	1 1/2°W	13°W										
1500		u/s	18.8	96.4	240	240	254°	1°W	13°W										
1600		u/s	12.0	69.4	240	240	254°	1°W	13°W	8	145	14	2	150	4	96	02	1018.5	13
1700		u/s	16.5	83.0	240	240	254	1°W	13°W										
1800	⊖	u/s	17.8	96.7	VAR	VAR	VAR	VAR	13°W	8	150	14	2	150	5	97	02	1016.0	15
1800	+1	u/s	17.7	95.9	VAR	VAR	VAR	VAR	13°W										
1900		u/s	17.8	96.2	VAR	VAR	VAR	VAR	13°W										
1927 2000	+1	u/s	18.0	96.4	240	240	255	1°W	14°W	8	150	18	2	160	5	98	02	1015.0	15
2100		u/s	18.0	96.4	VAR	VAR	VAR	VAR	14°W										
2200		u/s	18.0	96.4	250	250	264	0	14°W										
2300		u/s	18.0	96.3	250	250	264	0	14°W										
2400	+1	u/s	18.0	95.5	250	250	264	0	14°W	3	150	18	4	160	5	98	02	1013.0	16

Distance run through the Water Midnight to Midnight	Leave Granted to Ship's Company	Anchor Bearings
440.0		

19 73 FROM LIVERPOOL U.K. TO HAL FAX, N.S. OR AT SEA

REMARKS		Initials of the Officer of the Watch
0045-4/c 260 To AVOID FISHERMAN 0050-4/c 240	0052 DECCA 51° 27' 2N 07° 28' W	
0125-4/c 220 - To AVOID FISHERMAN 0135-4/c 240	0150 DECCA 51° 18' N 07° 47' 5W	
	0230 DECCA 51° 12' 3N 08° 02' 5 W	
	0354 DECCA 51° 02' N 08° 32' 5W	MPB
	0440 DECCA { 50° 55.0' N 08° 49.0 W	
	0549 DECCA { 50° 45.5' N 09° 15.0 W	
	0650 DECCA { 50° 37.5' N 09° 38.0 W	
0727 - Sunrise - Navigation lights off. 0800 - Hands employed at cleaning station.	0736 LRN { 50° 26.0' N 10° 11.0 W	MEB
0930 - Commenced Gun Functioning 0950 - Completed Gun Functioning		
1030 - Hands to Flying Altms	1015 LORAN { 50° 05.0 N 11° 08.0 W	
	1200 DR { 49° 48.0 N 11° 49.0 W	JLB
1259 - launched SK 27		
1320 - A/c 260 Sp 16 1322 - co. + sp various to manoeuvre around destroyer.		
1402 - A/c 240 Sp 18 1410 - recovered SK 27 1416 - recovered SK 17		
1535 - overboard man over board. 1546 - "over used" steering gear breakdown.	1525 LRN { 49 23.0 N 13 06.0 W	MEB
1620 - Reverted to primary steering - Set Co 240 Sp 18 - Secured Tiller Flats. STD. secured Bow Thruster. 1630 - Flying Stns	1615 DECCA { 49° 20' 0 N 13° 10' 0 W	
1725 - a/c 200 1728 - Recovered SK 30 a/c 280	1715 DECCA { 49° 15' 5 N 13° 33' 0 W	JT
1703 - a/c 200 - launched SK 20 1705 - a/c 280 1725 - a/c 200 1726 - launched SK 27 1728 - a/c 240 STOOD DOWN FLYING STNS 1800 - FLYING STNS		
1809 - a/c 200 1815 - Recovered SK 29 1820 - LAUNCHED SK 24 1833 - FLYING STNS 1847 - a/c 200 1853 - Recovered SK 30 1854 - a/c 240	1845 LORAN 48° 50' N 14° 29' W	
1927 - a/c 250		MPB
2017 - a/c 200 2019 - launched helo 447 2020 - a/c 250 2021 - a/c 200 2027 - Recovered helo 429 2028 - a/c 250 2030 - Secured flying stations		
	2200 DR. { 48° 28.5 N 15° 50.0 W	
	2220 Lm { 48° 26 N 15° 52 W	
		MEB

Position	Latitude	Longitude	Depending on	Draught			Notice for Main Engines at Noon
				Time	Forward	Aft	
0800	50° 26' N	16° 11' W	0736(40) LRN + DR.				
1200	49° 48' 0N	11° 49' 0 W	DR FROM 1015 LRN				
2000	48° 43' 0N	15° 00' 0 W	1845(41) LRN + DR.				

HMCS PROTECTEUR

SATURDAY

27th OF OCTOBER

Time	Zone Suffix	Log (Stating type)	Distance Run Miles and Tenths	Mean Revs. per Minute	True Course	Gyro Com- pass Course	Standard Compass Course	Deviation	Variation	Cloud Amount (Eighths)	Wind		Sea Height (In Feet)	Swell		Visibility (Code vv)	Present Weather (Code ww)	Corrected Baro- metric Pressure in Millibars	Temperature (Celsius)			
											Direction (True)	Speed (Knots)		Direction From (True)	Height (In Feet)				Dry Bulb	Wet Bulb	Sea	
0100		uls	18.0	96.5	250	250	265	0	15°W													
0143					250	250	265	0														
0150					260	260	276	1°W														
0200		uls	18.0	96.2	250	250	265	0	15°W													
0300		uls	18.0	96.0	250	250	265	0	15°W													
0400	+1	uls	18.0	95.7	250	250	265	0	15°W	8	000	20	3	160	5	97	50	1012.5	14.4	12.2	17.2	
0500		us	18.0	95.8	250	250	265	0	15°W													
0600		us	18.0	95.6	250	250	265	0	15°W													
0700		us	18.0	95.1	250	250	265	1°W	16°W													
0800	+1	us	18.0	95.2	250	250	265	1°W	16°W	8	070	34	6	210	9	96	40	1017.0	8.9	7.7	16.8	
0900		u/s	18.0	95.6	250	250	264	2°E	16°W													
1000		u/s	18.0	95.3	260	260	274	2°E	16°W													
1100		u/s	18.0	95.4	260	260	274	2°E	16°W													
1200	+1	u/s	18.0	95.5	260	260	274	2°E	17°W	3	025	36	5	330	8	98	01	1021.5	12.2	8.3	16.7	
1300		u/s	18.0	95.8	260	260	275	2°E	17°W													
1400		u/s	17.4	91.0	260	260	275	2°E	17°W													
1500		u/s	18.0	96.6	260	260	276	1°E	17°W													
1600	+1	u/s	17.5	92.4	260	260	276	2°E	18°W	2	020	28	2	000	6	98	01	1024.0	11.7	8.3	16.7	
1700		u/s	12.9	64.3	260	260	276	2°E	18°W													
1800	+1	u/s	12.8	64.0	VAR	VAR	VAR	VAR	18°W													
1800	+2	u/s	17.4	87.4	VAR	VAR	VAR	VAR	18°W	2	020	25	2	000	6	98	02	1025.0	12.0	8.3	16.7	
1800	+2	u/s	17.5	88.1	VAR	VAR	VAR	VAR	18°W													
1900					260	260	274	4°E														
2000	+2	u/s	17.3	86.2	260 010 260	260 010 260	274 026 274	4°E 2°E 4°E	18°W	2	010	25	2	000	5	98	02	1028.0	12.2	8.3	18.2	
2100		us	18.0	86.9	260	260	274	4°E	18°W													
2200		us	18.0	86.7	260	260	276	5°W	19°W													
2300		us	17.9	87.6	260	260	276	3°W	19°W													
2400	+2	us	18.0	96.8	260	260	276	3°W	19°W	1	010	27	2	000	5	98	02	1029.0	12.2	8.3	18.1	

Distance run through the Water Midnight to Midnight	Leave Granted to Ship's Company		Anchor Bearings	
	436.8			

HMCS PROTECTEUR

SUN
~~WED~~ DAY

28 OF OCTOBER

Time	Zone Suffix	Log (Stating type)	Distance Run Miles and Tenths	Mean Revs. per Minute	True Course	Gyro Com- pass Course	Standard Compass Course	Deviation	Variation	Cloud Amount (Eighths)	Wind		Sea Height (In Feet)	Swell		Visibility (Code vv)	Present Weather (Code ww)	Corrected Baro- metric Pressure in Millibars	Temperature (Celsius)		
											Direction (True)	Speed (Knots)		Direction From (True)	Height (In Feet)				Dry Bulb	Wet Bulb	Sea
0100		u/s	18.0	97.6	260	260	279	0	19W												
0200		u/s	18.0	97.1	260	260	279	0	19W												
0300		u/s	18.0	97.0	260	260	279	1°E	20W												
0400	+2	u/s	18.0	98.1	260	260	279	1°E	20W	3	050	14	3	010	5	97	02	1030.0	13.3	9.9	16.7
0500		u/s	17.4	97.0	260	260	279	1°E	20W												
0600		u/s	17.5	97.3	260	260	279	1°E	20W												
0700		u/s	18.0	97.2	260	260	279	1°E	20W												
0800	+2	u/s	18.0	97.1	260	260	279	1°E	20W	6	170	4	0	320	5	98	03	1031.0	13.3	10.0	17.6
0900		u/s	18.0	97.1	260	260	279	1E	20W												
1000		u/s	18.0	97.2	260	260	279	1E	20W												
1100		u/s	18.0	96.9	260	260	279	1E	20W												
1200	+2	u/s	18.2	97.7	260	260	279	1E	20W	5	190	15	2	200	6	98	01	1028.5	13.9	10.9	15.6
1300		u/s	18.1	97.5	260	260	280	1°E	21W												
1400		u/s	18.1	97.4	260	260	280	1°E	21W												
1500		u/s	18.0	96.8	VAR	VAR	VAR	VAR	21W												
1600	+2	u/s	18.0	60.2	VAR	VAR	VAR	VAR	21W	8	170	25	2	190	5	98	03	1023.0	14.4	11.1	16.1
1700		u/s	12.0	60.2	190	190	213	2E	21W												
1800	+2	u/s	16.0	78.1	190	190	213	2E	21W	7	190	16	3	180	6	98	02	1022.0	15.0	11.7	16.1
1900		u/s	18.0	97.6	275	275	297	0	22W												
2000	+2	u/s	18.0	97.6	275	275	297	0	22W	7	150	33	7	170	7	98	01	1019.5	15.1	13.3	16.4
2100		u/s	17.2	97.1	275	275	297	0	22W												
2200		u/s	17.2	97.0	275	275	297	0	22W												
2300		u/s	17.0	96.9	275	275	297	0	22W												
2400	+2	u/s	17.0	96.9	275	275	297	1°E	23W	8	160	46	6	180	16	97	03	1018.0	15.6	14.4	

Distance run through the Water Midnight to Midnight	Leave Granted to Ship's Company		Anchor Bearings	
	410.7			

1973

FROM LIVERPOOL ENG. TO HALIFAX

OR AT SEA

REMARKS		Initials of the Officer of the Watch
	0020 LORAN { 46° 23.5' N 26° 26.0' W	
	0410 LORAN { 46° 24' N 28° 00' W	<i>[Signature]</i>
0633 - SUNRISE - NAV LOG SWITCHED ON		
	0730 LORAN { 46° 20' N 29° 34' W	<i>[Signature]</i>
0830 - Hands employed at cleaning stations		
0930 - Secured cleaning stations - Hands to clean for divisions		
1000 - Hands to ceremonial divisions	0940 LORAN { 46° 10.5' N 30° 31.0' W	
1040 - Divisions completed		
	1300 LORAN { 46° 02.0' N 31° 53.0' W	
1400 - Hands to Flying Stars		
1426 - AK 200 1427 - AIC 260 1448 - AIC 200 1450 - AIC 260		
1529 - AIC 200 1530 - Hands to RAS Stars 1531 - AIC 260 1534 - AIC 190	1536 - Launched Halo 1537 - AIC 260 Stood down Flying Stars 1544 - AIC 190 Sp 12	<i>[Signature]</i>
1602 - RN first line passed 1615 - recovered 30 1620 - launched 30 1625 - 54 ft of line passed 1630 - RN last line passed	1654 57 last line passed	
1701 - recovered 30 1705 - RE first line passed 1720 - RE last line passed, 1711 - Sunset 1730 AIC 275 SP 18		1735 LORAN { 45° 25.0' N 32° 51.0' W <i>[Signature]</i>
	1935 LORAN { 45° 32.5' N 33° 41.0' W <i>[Signature]</i>	
	2350 LORAN { 45° 43' N 35° 31' W <i>[Signature]</i>	

Position	Latitude	Longitude	Depending on	Draught			Notice for Main Engines at Noon
				Time	Forward	Aft	
0800	46° 18' N	29° 47' W	LORAN (0730)				
1200	46° 05.5' N	31° 33' W	0940(12) LORAN + D.R.				
2000	45° 34' N	33° 53' W	1935(12) LORAN + D.R.				

HMCS PROTECTEUR

MON DAY

29TH OF OCTOBER

Time	Zone Suffix	Log (Stating type)	Distance Run Miles and Tenths	Mean Revs. per Minute	True Course	Gyro Compass Course	Standard Compass Course	Deviation	Variation	Cloud Amount (Eighths)	Wind		Sea Height (In Feet)	Swell		Visibility (Code vv)	Present Weather (Code ww)	Corrected Barometric Pressure in Millibars	Temperature (Celsius)		
											Direction (True)	Speed (Knots)		Direction From (True)	Height (In Feet)				Dry Bulb	Wet Bulb	Sea
0100		u/s	18.0	96.6	275	275	297	2W	20W												
0200		u/s	18.0	97.0	275	275	297	2W	20W												
0300		u/s	18.0	96.2	275	275	297	2W	20W												
0400	+2	u/s	18.0	96.8	275	275	297	2W	20W	8	000	25	5	250	12	98	02	1013.0	12.7	11.7	16.5
0500		u/s	18.0	95.9	275	275	297	1°E	23°W												
0600		u/s	18.0	95.6	275	275	297	1°E	23°W												
0700		u/s	18.0	94.7	275	275	297	1°E	23°W												
0800	+2	u/s	18.0	94.8	275	275	297	1°E	24°W	8	350	32	6	300	12	97	60	1017.0	8.3	6.7	16.1
0900		u/s	18.0	94.7	275	275	297	2°E	24°W												
1000		u/s	18.0	95.1	275	275	297	2°E	24°W												
1100		u/s	16.0	79.7	275	275	297	2°E	24°W												
1200	+2	u/s	17.5	86.6	275	275	295	4°E	24°W	6	360	22	8	350	16	97	01	1019.5	7.2	4.4	16.1
1300		u/s	18.0	95.6	275	275	295	5°E	25°W												
1400		u/s	18.0	95.1	270	270	287 287	8°E	25°W												
1500		u/s	18.0	95.7	270	270	287	8°E	25°W												
1600	+2	u/s	17.8	95.3	270	270	287	8°E	25°W	7	350	27	6	320	12	98	02	1022.5	6.1	3.9	
1700		u/s	17.7	95.0	270	270	293	2°E	25°W												
1800	+2	u/s	17.6	94.9	270	270	293	2°E	25°W	7	350	28	5	305	15	98	02	1026.0	5.6	3.1	17.2
1800	+3	u/s	18.0	94.9	270	270	293	2E	25W												
1900		u/s	18.0	95.1	270	270	293	2E	25W												
2000	+3	u/s	18.0	95.3	270	270	293	2E	25W	7	340	15	5	305	12	98	02	1027.6	5.6	3.3	17.2
2100		u/s	18.0	97.2	270	270	293	2°E	25°W												
2200		u/s	18.0	96.0	270	270	293	2°E	25°W												
2300		u/s	18.0	96.2	270	270	293	2°E	25°W												
2400	+3	u/s	18.0	96.2	265	265	289	1°E	25°W	7	000	30	5	300	12	98	02	1027.5	4.4	1.1	

Distance run through the Water Midnight to Midnight

446.6

Leave Granted to Ship's Company

Anchor Bearings

1973 FROM LIVERPOOL ENG TO HALIFAX N.S. , OR AT SEA

REMARKS		Initials of the Officer of the Watch
0710 - Sunrise Nav Lgt off		
	0800 DR { 45° 50.0 N 38° 52.0 W	JMB
1008 - 6116		
1125 - 5118		
	1200 DR { 45° 59.0 N 40° 27.0 W	JMB
1300 - R/L 270		
1741 - SUNSET - NAV LYS ON. 1800 - CLOCKS RETARDED ONE HOUR TO TIME ZONE +3		JMB
	2000 DR { 46° 03 N 44° 25 W	JMB
2300 - AIC 265		

Position	Latitude	Longitude	Depending on	Draught			Notice for Main Engines at Noon
				Time	Forward	Aft	
0800	45° 50.0 N	38° 52.0 W	28 2350(+2) LRN + DR				
1200	45° 59' N	40° 27' W	2350(+2) LRN + DR.				
2000	46° 03' N	44° 25.0 W	28 2350(+2) LRN + DR.				

HMCS PROTECTEUR

TUES DAY

30th OF OCTOBER

Time	Zone Suffix	Log (Stating type)	Distance Run Miles and Tenths	Mean Revs. per Minute	True Course	Gyro Compass Course	Standard Compass Course	Deviation	Variation	Cloud Amount (Eighths)	Wind		Sea Height (In Feet)	Swell		Visibility (Code vv)	Present Weather (Code ww)	Corrected Barometric Pressure in Millibars	Temperature (Celsius)			
											Direction (True)	Speed (knots)		Direction From (True)	Height (In Feet)				Dry Bulb	Wet Bulb	Sea	
0100		US	18.0	96.4	265	265	289	2°E	26°W													
0200		US	18.1	98.1	265	265	289	2°E	26°W													
0300		US	18.0	97.5	265	265	289	2°E	26°W													
0400	+3	US	18.0	97.1	265	265	289	2°E	26°W	7	310	16	3	370	8	98	02	1027.5	5.0	2.6	6.7	
0500		U/S	18.0	96.9	265	265	289	2°E	26°W													
0600		U/S	18.0	98.3	265	265	289	2°E	26°W													
0700		U/S	18.0	97.7	265	265	289	2°E	26°W													
0800	+3	U/S	18.0	97.3	265	265	289	2°E	26°W	4	325	12	3	280	10	98	01	1027.0	5.6	3.9	5.6	
0900		U/S	15.0	78.6	265	265	289	1/2°E	25 1/2°W													
1000		U/S	14.0	68.3	265	265	289	1/2°E	25 1/2°W													
1100		U/S	17.0	91.3	265	265	289	1/2°E	25 1/2°W													
1200	+3	U/S	18.0	97.8	265	265	289	1/2°E	25 1/2°W	6	290	20	3	290	8	98	03	1027.5	6.7	4.4	7.4	
1300		U/S	18.0	97.8	265	265	289	1/2°E	25 1/2°W													
1400		U/S	18.0	97.4	265	265	289	1/2°E	25 1/2°W													
1500		U/S	18.0	97.5	265	265	289	1/2°E	25 1/2°W													
1600	+3	U/S	18.0	97.4	265	265	289	1/2°E	25 1/2°W	4	230	20	3	290	6	98	02	1027.5	6.7	4.8	8.9	
1700		U/S	18.3	98.3	265	265	289	2°E	26°W													
1800	+3	U/S	18.2	97.7	265	265	289	2°E	26°W	1	230	16	3	290	5	98	01	1027.5	6.7	3.9	8.3	
1800	+4	U/S	18.25	97.9	265	265	289	2°E	26°W													
1900		US	18.25	97.9	265	265	289	2°E	26°W													
2000	+4	US	18.25	98.4	265	265	289	2°E	26°W	2	155	14	1	290	3	98	02	1027.5	7.2	5.0	8.3	
2025		U/S			265	265	289	2°E														
2100		U/S	18.0	97.8	200	200	224	2°E	26°W													
2134		U/S			200	200	224	2°E														
2200		U/S	18.0	97.9	265	265	289	2°E	26°W													
2253		U/S			265	265	289	2°E														
2300		U/S	18.0	98.1	200	200	224	2°E	26°W													
2400	+4	U/S	18.0	97.6	VAR	VAR	VAR	VAR	26°W	3	120	17	1	270	3	98	02	1023.0	10.0	8.9	10.0	

Distance run through the Water Midnight to Midnight

443.5

Leave Granted to Ship's Company

Anchor Bearings

1973 FROM LIVERPOOL, ENG TO HALIFAX, N.S., OR AT SEA

REMARKS		Initials of the Officer of the Watch
0648 - Sunrise		
0720 - Crossed 100 fath line in position ^{45°} 48° 41.0' N - 48° 17.5' W _{SW}		
0800 - HANDS TO RAS STNS. 0810 - RAS SSD CLOSE UP 0820 - FLYING STNS SPI4 0831 - SV ALONGSIDE PORT - NIPIGON STBD		
0904 - SAGUENAY SLIPPED 0946 - NIPIGON SLIPPED 0920 - QUEBEC ALONGSIDE PORT 0922 - RECOVERED SK17 0927 - LAUNCHED SK17		
1002 - RECOVERED SK17 1015 - SHUT DOWN STBD STEERING MOTOR 1007 - QUEBEC EXERCISED EMERGENCY BREAKAWAY - CONSORTS DETACHED 1009 - STOOD DOWN FLYING STNS 1012 - SPIR - SECURED RAS SSD		
1230 - Hands to flying stations		1120 DECCA 45° 32' N 49° 40' W
1302 - Launched helo 417 1323 - Launched helo 429 - Secured flying stations		1354 { 45 26.2 N DECCA { 50 45.5 W
1532 - Hands to flying stations 1540 - Recovered helo 429 for hot refuel. 1551 - Launched helo 429		1446 { 45 25.3 N DECCA { 51 09.8 W
1601 - Recovered helo 1616 - Launched helo 1617 - Stood down Flying Stns		1550 { 45 23.0 N DECCA { 51 37.2 W
1720 - Summit New data summation 1800 - Hands to flying stns 1748 - launched 30 1750 - recovered 25.		1654 { 45° 21.2 N DECCA { 52° 06.2 W
1807 - launched 25 1811 - recovered 17 1815 - launched 17		1800 { 45° 19.5 N DECCA { 52° 37.5 W
2015 - Flying Stns 2057 - Launched SK 30 2025 - a/c 200 2057 - Recovered SK 29 2030 - Recovered SK 30		1807 { 45° 18.0 N DECCA { 53° 02.0 W
2110 - Launched SK 29 2124 - a/c 265 Stood down Flying Stns. 2116 - Recovered SK 17 2131 - Launched SK 17		1856 { 45 18.0 N DECCA { 53 26.2 W
2245 - Flying Stns. 2252 - a/c 200 2259 - Recovered SK 29 2301 - a/c 270 2336 - a/c 270 2332 - a/c 200 2335 - Recovered SK 30		1944 { 45 18.6 N DECCA { 53 47.0 W
		2320 { 44° 59' 5" N DECCA { 57° 57' 8" W

Position	Latitude	Longitude	Depending on	Draught			Notice for Main Engines at Noon
				Time	Forward	Aft	
0800	45° 39' N	48° 29.2' W	0720 LOAN/ECHO SOUNDER				
1200	45° 33' N	50° 05' W	1120 DECCA				
2000	45° 15.3' N	53° 53.2' W	1944-DECCA				

HMCS PROTECTEUR

WEDNES DAY

3 / OF OCTOBER

Time	Zone Suffix	Log (Stating type)	Distance Run Miles and Tenths	Mean Revns. per Minute	True Course	Gyro Com- pass Course	Standard Compass Course	Deviation	Variation	Cloud Amount (Eighths)	Wind		Sea Height (In Feet)	Swell		Visibility (Code vv)	Present Weather (Code ww)	Corrected Baro- metric Pressure in Millibars	Temperature (Celsius)		
											Direction (True)	Speed (Knots)		Direction From (True)	Height (In Feet)				Dry Bulb	Wet Bulb	Sea
0100		u/s	18.0	97.8	VAR	VAR	VAR	VAR	25°W												
0200		u/s	18.0	97.5	275	275	294	6°E	25°W												
0300		u/s	18.0	97.8	275	275	294	6°E	25°W												
0400	+4	u/s	18.0	97.5	275	275	294	6°E	25°W	8	120	20	1	250	3	97	02	1017.0	10.0	9.4	10.0
0450					275	275	299	1E	25W												
0500		u/s	18.0	97.9	260	260	284	1E	25W												
0550					260	260	284	1E	25W												
0600		u/s	18.0	97.5	275	275	299	1E	25W												
0700		u/s	18.0	97.7	275	275	299	1E	25W												
0800	+4	u/s	18.0	97.5	260	260	284	1E	25W	3	110	20	3	140	5	97	02	1009.0	12.2		
0900		u/s	18.0	97.6	260	260	284	1/2E	24 1/2W												
1000		u/s	18.0	97.5	255	255	279	1/2E	24 1/2W												
1037					255	255	279	1/2E													
1100		u/s	17.5	90.4	250	250	274	0	24W												
1123					250	250	274	0													
1150					255	255	278	1/2E													
1200	+4	u/s	17.0	85.5	260	260	284	0	24W	6	130	25	3	145	5	97	50	999.0	12.8	12.2	10.6
1300		u/s	17.0	85.7	260	260	284	1°W	23W												
1400		u/s	16.1	81.8	260	260	284	1°W	23W												
1500		u/s	16.0	80.6	VAR	VAR	VAR	VAR	23W												
1600	+4	u/s	17.0	85.5	VAR	VAR	VAR	VAR	23W	7	125	28	2	110	5	97	02	992.0	12.8	12.2	
1700		u/s	16.0	79.0	340	340	002	1 1/2E	23W												
1800		u/s	13.0	64.9	340	340	002	1°W	23W	7	128	29	3	150	7	98	42	992.0	15.0	14.2	10.6
1812					160	160	184	1°W													
1900		u/s	12.6	61.2	120	120	143	0	23W												
1933					120	120	143	0													
2000	+4	u/s	12.2	61.2	235	235	256	2°E	23W	7	205	20	3	160	6	96	02	990.0	12.2	11.7	12.8
2100		u/s	12.0	60.0	235	235	256	2E	23W												
2200		u/s	11.9	59.4	235	235	256	2E	23W												
2300		u/s	11.9	59.2	235	235	256	2E	23W												
2400	+4	u/s	11.8	58.8	235	235	256	2E	23W	8	280	30	5	235	6	97 96	02	990.5	12.8	12.2	12.8

Distance run through the Water Midnight to Midnight	Leave Granted to Ship's Company	Anchor Bearings
	382.0	

1973 FROM LIVERPOOL TO HALIFAX, OR AT SEA

REMARKS		Initials of the Officer of the Watch
0010 - 1/2 200 0015 - RECOVERED SK 17 0018 - 1/2 270	0025 - SECURED FLYING STNS 0028 - 1/2 275	
	0140 DECCA { 44° 53.6' N 55° 53.3' W	
	0330 DECCA { 44° 58' N / 44° 45' N 56° 39' W	MB
0430 - a/c 260°	0500 LRN { 45° 50.4' N 57° 22.0' W	
0547 - a/c 275°	0556 DECCA { 44° 49.8' N 57° 49.3' W	
0638 Sunrise - Navigation lights off. 0740 - a/c 260	0659 DECCA { 44° 50.5' N 58° 14.3' W	
	0750 DECCA { 44° 48.7' N 58° 37.5' W	MB
0900 - A/c 255	0900 DECCA { 44° 46.6' N 59° 08.0' W	
1020 - 1/2 17.5 1037 A/c 250	1056 DECCA { 44° 39.5' N 59° 53.4' W	
1123 - A/c 255 1150 - A/c 260	1149 DECCA { 44° 35.5' N 60° 11.3' W	MB
1330 - Flying Stns	1355 DECCA { 44° 31.2' N 60° 57.2' W	
1402 - Stood down Flying Stns 1435 - Flying Stns 1436 - a/c 270	1440 - a/c 125 SP 12 1445 - Launched Sk 17 1447 - a/c 270 SP 17.5 1500 - a/c 310	
1515 - a/c 160 1518 - a/c 270 1522 - a/c 180	1525 - Launched Sk 30 1551 - Launched Sk 29 1552 - a/c 280 SP 19	
1615 - Co 370 SP 15 1620 Co 340 1630 - A/c 270	1650 SP 13	
1701 - SP 14 1717 - 40N Lead line 1730 - 54 Lead line	1737 - Co 160 1749 - SP 11 1734 Sunset NAV & TASK LT SWITCHED ON	
1805 - QE SLIPPED 1812 - 1/2 120 SP 13 1854 - QE ALONGSIDE PORT	1819 DECCA { 44° 39' N 61° 27.2' W	MB
1925 - QE SLIPPED 1930 - SECURED RAS STNS & SSD 1933 - PROTECTEUR DETACHED 1/2 235 SP 12 - SHUT DOWN STBD STEERING MOTOR	1937 DECCA { 44° 33.2' N 61° 08.1' W	MB
	2051 DECCA { 44° 26.5' N 61° 21.5' W	
	2150 DECCA { 44° 21.8' N 61° 32.5' W	
	2251 DECCA { 44° 16.2' N 61° 43.0' W	
	2346 DECCA { 44° 10.6' N 61° 51.2' W	MB

Position	Latitude	Longitude	Depending on	Draught			Notice for Main Engines at Noon
				Time	Forward	Aft	
0800	44° 48.8' N	58° 40.7' W	0750 (+4) DECCA + DR				
1200	44° 37.0' N	60° 14.0' W	1200 (+4) DECCA				
2000	44° 30.6' N	61° 13.5' W	1937 (+4) DECCA + DR.				

ARE SUBJECT TO CHANGE AND REFERENCE SHOULD BE MADE TO Q.R.C.N. AND OTHER RELEVANT PUBLICATIONS.

REGULATIONS FOR PREVENTING COLLISIONS AT SEA

Established by Order-in-Council P.C. 1953-1287 dated 13 Aug. 1953. (Effective 1 January, 1954).

Part A.—Preliminary and Definitions

Rule 1

(a) These Rules shall be followed by all vessels and seaplanes upon the high seas and in all waters connected therewith navigable by seagoing vessels, except as provided in Rule 30. Where, as a result of their special construction, it is not possible for seaplanes to comply fully with the provisions of Rules specifying the carrying of lights and shapes, these provisions shall be followed as closely as circumstances permit.

(b) The Rules concerning lights shall be complied with in all weathers from sunset to sunrise, and during such times no other lights shall be exhibited, except such lights as cannot be mistaken for the prescribed lights or impair their visibility or distinctive character, or interfere with the keeping of a proper look-out.

(c) In the following Rules, except where the context otherwise requires:

- (i) the word "vessel" includes every description of water craft, other than a seaplane on the water, used or capable of being used as a means of transportation on water;
- (ii) the word "seaplane" includes a flying boat and any other aircraft designed to manoeuvre on the water;
- (iii) the term "power-driven vessel" means any vessel propelled by machinery;
- (iv) every power-driven vessel which is under sail and not under power is to be considered a sailing vessel, and every vessel under power, whether under sail or not, is to be considered a power-driven vessel;
- (v) a vessel or seaplane on the water is "under way" when she is not at anchor, or made fast to the shore, or aground;
- (vi) the term "height above the hull" means height above the upper-most continuous deck;
- (vii) the length and breadth of a vessel shall be deemed to be the length and breadth appearing in her certificate of registry;
- (viii) the length and span of a seaplane shall be its maximum length and span as shown in its certificate of airworthiness, or as determined by measurement in the absence of such certificate;
- (ix) the word "visible", when applied to lights, means visible on a dark night with a clear atmosphere;
- (x) the term "short blast" means a blast of about one second's duration;
- (xi) the term "prolonged blast" means a blast from four to six seconds' duration;
- (xii) the word "whistle" means whistle or siren;
- (xiii) the word "tons" means gross tons.

Part B.—Lights and Shapes

Rule 2

(a) A power-driven vessel when under way shall carry:

- (i) On or in front of the foremast, or if a vessel without a foremast then in the forepart of the vessel, a bright white light so constructed as to show an unbroken light over an arc of the horizon of 20 points of the compass (22½ degrees), so fixed as to show the light 10 points (112½ degrees) on each side of the vessel, that is, from right ahead to 2 points (22½ degrees) abaft the beam on either side, and of such a character as to be visible at a distance of at least 5 miles.
- (ii) Either forward of or abaft the white light mentioned in subsection (i) a second white light similar in construction and character to that light. Vessels of less than 150 feet in length, and vessels engaged in towing, shall not be required to carry this second white light but may do so.
- (iii) These two white lights shall be so placed in a line with and over the keel that one shall be at least 15 feet higher than the other and in such a position that the lower light shall be forward of the upper one. The horizontal distance between the two white lights shall be at least three times the vertical distance. The lower of these two white lights or, if only one is carried, then that light, shall be placed at a height above the hull of not less than 20 feet, and, if the breadth of the vessel exceeds 20 feet, then at a height above the hull not less than such breadth, so however, that the light need not be placed at a greater height above the hull than 40 feet. In all circumstances the light or lights, as the case may be, shall be so placed as to be clear of and above all other lights and obstructing superstructures.
- (iv) On the starboard side a green light so constructed as to show an unbroken light over an arc of the horizon of 10 points of the compass (112½ degrees), so fixed as to show the light from right ahead to 2 points (22½ degrees) abaft the beam on the starboard side, and of such a character as to be visible at a distance of at least 2 miles.
- (v) On the port side a red light so constructed as to show an unbroken light over an arc of the horizon of 10 points of the compass (112½ degrees), so fixed as to show the light from right ahead to 2 points (22½ degrees) abaft the beam on the port side, and of such a character as to be visible at a distance of at least 2 miles.
- (vi) The said green and red side lights shall be fitted with inboard screens projecting at least 3 feet forward from the light, so as to prevent these lights from being seen across the bows.

(b) A seaplane under way on the water shall carry:

- (i) In the forepart amidships where it can best be seen a bright white light, so constructed as to show an unbroken light over an arc of the horizon of 220 degrees of the compass, so fixed as to show the light 110 degrees on each side of the seaplane, namely, from right ahead to 20 degrees abaft the beam on either side, and of such a character as to be visible at a distance of at least 3 miles.
- (ii) On the right or starboard wing tip a green light, so constructed as to show an unbroken light over an arc of the horizon of 110 degrees of the compass, so fixed as to show the light from right ahead to 20 degrees abaft the beam on the starboard side, and of such a character as to be visible at a distance of at least 2 miles.
- (iii) On the left or port wing tip a red light, so constructed as to show an unbroken light over an arc of the horizon of 110 degrees of the compass, so fixed as to show the light from right ahead to 20 degrees abaft the beam on the port side, and of such a character as to be visible at a distance of at least 2 miles.

Rule 3

(a) A power-driven vessel when towing or pushing another vessel shall, in addition to her sidelights, carry two bright white lights in a vertical line one over the other, not less than 6 feet apart, and when towing more than one vessel shall carry an additional bright white light 6 feet above or below such lights, if the length of the tow, measuring from the stern of the towing vessel to the stern of the last vessel towed, exceeds 600 feet. Each of these lights shall be of the same construction and character and one of them shall be carried in the same position as the white light mentioned in Rule 2 (a) (i), except the additional light, which shall be carried at a height of not less than 14 feet above the hull. In a vessel with a single mast, such lights may be carried on the mast.

(b) The towing vessel shall also show either the stern light specified in Rule 10 or in lieu of that light a small white light abaft the funnel or aftermast for the tow to steer by, but such light shall not be visible forward of the beam. The carriage of the white light specified in Rule 2 (a) (ii) is optional.

(c) A seaplane on the water, when towing one or more seaplanes or vessels, shall carry the lights prescribed in Rule 2 (b) (i), (ii) and (iii); and, in addition, she shall carry a second white light of the same construction and character as the white light mentioned in Rule 2 (b) (i), and in a vertical line at least 6 feet above or below such light.

Rule 4

(a) A vessel which is not under command shall carry, where they can best be seen, and, if a power-driven vessel, in lieu of the lights required by Rule 2 (a) (i) and (ii), two red lights in a vertical line one over the other not less than 6 feet apart, and of such a character as to be visible all round the horizon at a distance of at least 2 miles. By day, she shall carry in a vertical line one over the other not less than 6 feet apart, where they can best be seen, two black balls or shapes each not less than 2 feet in diameter.

(b) A seaplane on the water which is not under command may carry, where they can best be seen, two red lights in a vertical line, one over the other, not less than 3 feet apart, and of such a character as to be visible all round the horizon at a distance of at least 2 miles, and may by day carry in a vertical line one over the other not less than 3 feet apart, where they can best be seen, two black balls or shapes, each not less than 2 feet in diameter.

(c) A vessel engaged in laying or in picking up a submarine cable or navigation mark, or a vessel engaged in surveying or underwater operations when from the nature of her work she is unable to get out of the way of approaching vessels, shall carry, in lieu of the lights specified in Rule 2 (a) (i) and (ii), three lights in a vertical line one over the other not less than 6 feet apart. The highest and lowest of these lights shall be red, and the middle light shall be white, and they shall be of such a character as to be visible all round the horizon at a distance of at least 2 miles. By day, she shall carry in a vertical line one over the other not less than 6 feet apart, where they can best be seen, three shapes each not less than 2 feet in diameter, of which the highest and lowest shall be globular in shape and red in colour, and the middle one diamond in shape and white.

(d) The vessels and seaplanes referred to in this Rule, when not making way through the water, shall not carry the coloured sidelights, but when making way they shall carry them.

(e) The lights and shapes required to be shown by this Rule are to be taken by other vessels and seaplanes as signals that the vessel or seaplane showing them is not under command and cannot therefore get out of the way.

(f) These signals are not signals of vessels in distress and requiring assistance. Such signals are contained in Rule 31.

Rule 5

(a) A sailing vessel under way and any vessel or seaplane being towed shall carry the same lights as are prescribed by Rule 2 for a power-driven vessel or a seaplane under way, respectively, with the exception of the white lights specified therein, which they shall never carry. They shall also carry stern lights as specified in Rule 10, provided that vessels towed, except the last vessel of a tow, may carry, in lieu of such stern light, a small white light as specified in Rule 3 (b).

(b) A vessel being pushed ahead shall carry, at the forward end, on the starboard side a green light and on the port side a red light, which shall have the same characteristics as the lights described in Rule 2 (a) (iv) and (v) and shall be screened as provided in Rule 2 (a) (vi), provided that any number of vessels pushed ahead in a group shall be lighted as one vessel.

Rule 6

(a) In small vessels, when it is not possible on account of bad weather or other sufficient cause to fix the green and red sidelights, these lights shall be kept at hand lighted and ready for immediate use, and shall, on the approach of or to other vessels, be exhibited on their respective sides in sufficient time to prevent collision, in such manner as to make them most visible, and so that the green light shall not be seen on the port side nor the red light on the starboard side, nor, if practicable, more than 2 points (22½ degrees) abaft the beam on their respective sides.

(b) To make the use of these portable lights more certain and easy, the lanterns containing them shall each be painted outside with the colour of the lights they respectively contain, and shall be provided with proper screens.

Rule 7

Power-driven vessels of less than 40 tons, vessels under oars or sails of less than 20 tons, and rowing boats, when under way shall not be required to carry the lights mentioned in Rule 2, but if they do not carry them they shall be provided with the following lights:

(a) Power-driven vessels of less than 40 tons, except as provided in section (b), shall carry:

- (i) In the forepart of the vessel, where it can best be seen, and at a height above the gunwale of not less than 9 feet, a bright white light constructed and fixed as prescribed in Rule 2 (a) (i) and of such a character as to be visible at a distance of at least 3 miles.
- (ii) Green and red sidelights constructed and fixed as prescribed in Rule 2 (a) (iv) and (v), and of such a character as to be visible at a distance of at least 1 mile, or a combined lantern showing a green light and a red light from right ahead to 2 points (22½ degrees) abaft the beam on their respective sides. Such lantern shall be carried not less than 3 feet below the white light.

(b) Small power-driven boats, such as are carried by seagoing vessels, may carry the white light at a less height than 9 feet above the gunwale, but it shall be carried above the sidelights or the combined lantern mentioned in subsection (a) (ii).

(c) Vessels of less than 20 tons, under oars or sails, except as provided in section (d), shall, if they do not carry the sidelights, carry where it can best be seen a lantern showing a green light on one side and a red light on the other, of such a character as to be visible at a distance of at least 1 mile, and so fixed that the green light shall not be seen on the port side, nor the red light on the starboard side. Where it is not possible to fix this light, it shall be kept ready for immediate use and shall be exhibited in sufficient time to prevent collision and so that the green light shall not be seen on the port side nor the red light on the starboard side.

(d) Small rowing boats, whether under oars or sail, shall only be required to have ready at hand an electric torch or a lighted lantern showing a white light, which shall be exhibited in sufficient time to prevent collision.

(e) The vessels and boats referred to in this Rule shall not be required to carry the lights or shapes prescribed in Rules 4 (a) and 11 (e).

Rule 8

- (a) (i) Sailing pilot-vessels, when engaged on their station on pilotage duty and not at anchor, shall not show the lights prescribed for other vessels, but shall carry a white light at the masthead visible all round the horizon at a distance of at least 3 miles, and shall also exhibit a flare-up light, or flare-up lights at short intervals, which shall never exceed 10 minutes.

- (ii) On the near approach of or to other vessels they shall have their sidelights lighted ready for use and shall flash or show them at short intervals, to indicate the direction in which they are heading, but the green light shall not be shown on the port side, nor the red light on the starboard side.
- (iii) A sailing pilot-vessel of such a class as to be obliged to go alongside of a vessel to put a pilot on board may show the white light instead of carrying it at the masthead and may, instead of the sidelights above mentioned, have at hand ready for use a lantern with a green glass on the one side and a red glass on the other to be used as prescribed above.
- (b) A power-driven pilot-vessel when engaged on her station on pilotage duty and not at anchor shall, in addition to the lights and flares required for sailing pilot-vessels, carry at a distance of 8 feet below her white masthead light a red light visible all round the horizon at a distance of at least 3 miles, and also the sidelights required to be carried by vessels when under way. A bright intermittent all round white light may be used in place of a flare.
- (c) All pilot-vessels, when engaged on their stations on pilotage duty and at anchor, shall carry the lights and show the flares prescribed in sections (a) and (b), except that the sidelights shall not be shown. They shall also carry the anchor light or lights prescribed in Rule 11.
- (d) All pilot-vessels, whether at anchor or not at anchor, shall, when not engaged on their stations on pilotage duty, carry the same lights as other vessels of their class and tonnage.

Rule 9

- (a) Fishing vessels when not fishing shall show the lights or shapes prescribed for similar vessels of their tonnage. When fishing they shall show only the lights or shapes prescribed by this Rule, which lights or shapes, except as otherwise provided, shall be visible at a distance of at least 2 miles.
- (b) Vessels fishing with trolling (towing) lines, shall show only the lights prescribed for a power-driven or sailing vessel under way as may be appropriate.
- (c) Vessels fishing with nets or lines, except trolling (towing) lines, extending from the vessel not more than 500 feet horizontally into the seaway shall show, where it can best be seen, one all round white light and in addition, on approaching or being approached by another vessel, shall show a second white light at least 6 feet below the first light and at a horizontal distance of at least 10 feet away from it (6 feet in small open boats) in the direction in which the outlying gear is attached. By day such vessels shall indicate their occupation by displaying a basket where it can best be seen; and if they have their gear out while at anchor, they shall, on the approach of other vessels, show the same signal in the direction from the anchor ball towards the net or gear.
- (d) Vessels fishing with nets or lines, except trolling (towing) lines, extending from the vessel more than 500 feet horizontally into the seaway shall show, where they can best be seen, three white lights at least 3 feet apart in a vertical triangle visible all round the horizon. When making way through the water, such vessels shall show the proper coloured sidelights but when not making way they shall not show them. By day they shall show a basket in the forepart of the vessel as near the stem as possible not less than 10 feet above the rail; and, in addition, where it can best be seen, one black conical shape, apex upwards. If they have their gear out while at anchor they shall, on the approach of other vessels, show the basket in the direction from the anchor ball towards the net or gear.
- (e) Vessels when engaged in trawling, by which is meant the dragging of a dredge net or other apparatus along or near the bottom of the sea, and not at anchor:

- (i) If power-driven vessels, shall show in the same position as the white light mentioned in Rule 2 (a) (i) a tri-coloured lantern, so constructed and fixed as to show a white light from right ahead to 2 points (22½ degrees) on each bow, and a green light and a red light over an arc of the horizon from 2 points (22½ degrees) on each bow to 2 points (22½ degrees) abaft the beam on the starboard and port sides, respectively; and not less than 6 nor more than 12 feet below the tri-coloured lantern a white light in a lantern, so constructed as to show a clear, uniform, and unbroken light all round the horizon. They shall also show the stern light specified in Rule 10 (a).
- (ii) If sailing vessels, shall carry a white light in a lantern so constructed as to show a clear, uniform, and unbroken light all round the horizon, and shall also, on the approach of or to other vessels show, where it can best be seen, a white flare-up light in sufficient time to prevent collision.
- (iii) By day, each of the foregoing vessels shall show, where it can best be seen, a basket.
- (f) In addition to the lights which they are by this Rule required to show vessels fishing may, if necessary in order to attract attention of approaching vessels, show a flare-up light. They may also use working lights.
- (g) Every vessel fishing, when at anchor, shall show the lights or shapes specified in Rule 11 (a), (b) or (c); and shall, on the approach of another vessel or vessels, show an additional white light at least 6 feet below the forward anchor light and at a horizontal distance of at least 10 feet away from it in the direction of the outlying gear.
- (h) If a vessel when fishing becomes fast by her gear to a rock or other obstruction she shall in daytime haul down the basket required by sections (c), (d) or (e) and show the signal specified in Rule 11 (c). By night she shall show the light or lights specified in Rule 11 (a) or (b). In fog, mist, falling snow, heavy rainstorms or any other condition similarly restricting visibility, whether by day or by night, she shall sound the signal prescribed by Rule 15 (c) (v), which signal shall also be used, on the near approach of another vessel, in good visibility.

NOTE.—For fog signals for fishing vessels, see Rule 15 (c) (ix).

Rule 10

- (a) A vessel when under way shall carry at her stern a white light, so constructed that it shall show an unbroken light over an arc of the horizon of 12 points of the compass (135 degrees), so fixed as to show the light 6 points (67½ degrees) from right aft on each side of the vessel, and of such a character as to be visible at a distance of at least 2 miles. Such light shall be carried as nearly as practicable on the same level as the sidelights.

NOTE.—For vessels engaged in towing or being towed, see Rules 3 (b) and 5.

- (b) In a small vessel, if it is not possible on account of bad weather or other sufficient cause for this light to be fixed, an electric torch or a lighted lantern shall be kept at hand ready for use and shall, on the approach of an overtaking vessel, be shown in sufficient time to prevent collision.
- (c) A seaplane on the water when under way shall carry on her tail a white light, so constructed as to show an unbroken light over an arc of the horizon of 140 degrees of the compass, so fixed as to show the light 70 degrees from right aft on each side of the seaplane, and of such a character as to be visible at a distance of at least 2 miles.

Rule 11

- (a) A vessel under 150 feet in length, when at anchor, shall carry in the forepart of the vessel, where it can best be seen, a white light in a lantern so constructed as to show a clear, uniform, and unbroken light visible all round the horizon at a distance of at least 2 miles.
- (b) A vessel of 150 feet or upwards in length, when at anchor, shall carry in the forepart of the vessel, at a height of not less than 20 feet above the hull, one such light, and at or near the stern of the vessel and at such a height that it shall be not less than 15 feet lower than the forward light, another such light. Both these lights shall be visible all round the horizon at a distance of at least 3 miles.

- (c) Between sunrise and sunset every vessel when at anchor shall carry in the forepart of the vessel, where it can best be seen, one black ball not less than 2 feet in diameter.

(d) A vessel engaged in laying or in picking up a submarine cable or navigation mark, or a vessel engaged in surveying or underwater operations, when at anchor, shall carry the lights or shapes prescribed in Rule 4 (c) in addition to those prescribed in the appropriate preceding sections of this Rule.

(e) A vessel aground shall carry by night the light or lights prescribed in sections (a) or (b) and the two red lights prescribed in Rule 4 (a). By day she shall carry, where they can best be seen, three black balls, each not less than 2 feet in diameter, placed in a vertical line one over the other, not less than 6 feet apart.

(f) A seaplane on the water under 150 feet in length, when at anchor, shall carry, where it can best be seen, a white light, visible all round the horizon at a distance of at least 2 miles.

(g) A seaplane on the water 150 feet or upwards in length, when at anchor, shall carry, where they can best be seen, a white light forward and a white light aft, both lights visible all round the horizon at a distance of at least 3 miles; and, in addition, if the seaplane is more than 150 feet in span, a white light on each side to indicate the maximum span, and visible, so far as practicable, all round the horizon at a distance of 1 mile.

(h) A seaplane aground shall carry an anchor light or lights as prescribed in sections (f) and (g), and in addition may carry two red lights in a vertical line, at least 3 feet apart, so placed as to be visible all round the horizon.

Rule 12

Every vessel or seaplane on the water may, if necessary in order to attract attention, in addition to the lights which she is by these Rules required to carry, show a flare-up light or use a detonating or other efficient sound signal that cannot be mistaken for any signal authorized elsewhere under these Rules.

Rule 13

(a) Nothing in these Rules shall interfere with the operation of any special rules made by the Government of any nation with respect to additional station and signal lights for ships of war, for vessels sailing under convoy, or for seaplanes on the water; or with the exhibition of recognition signals adopted by shipowners, which have been authorized by their respective Governments and duly registered and published.

(b) Whenever the Governments concerned shall have determined that a naval or other military vessel or waterborne seaplane of special construction or purpose cannot comply fully with the provisions of any of these Rules with respect to the number, position, range or arc of visibility of lights or shapes, without interfering with the military function of the vessel or seaplane, such vessel or seaplane shall comply with such other provisions in regard to the number, position, range, or arc of visibility of lights or shapes as her Government shall have determined to be the closest possible compliance with these Rules in respect of that vessel or seaplane.

Rule 14

A vessel proceeding under sail, when also being propelled by machinery, shall carry in the daytime forward, where it can best be seen, one black conical shape, point upwards, not less than 2 feet in diameter at its base.

Rule 15

(a) A power-driven vessel shall be provided with an efficient whistle, sounded by steam or by some substitute for steam, so placed that the sound may not be intercepted by any obstruction, and with an efficient fog-horn, to be sounded by mechanical means, and also with an efficient bell. A sailing vessel of 20 tons or upwards shall be provided with a similar fog-horn and bell.

- (b) All signals prescribed by this Rule for vessels under way shall be given:
- by power-driven vessels on the whistle;
 - by sailing vessels on the fog-horn;
 - by vessels towed on the whistle or fog-horn.

(c) In fog, mist, falling snow, heavy rainstorms, or any other condition similarly restricting visibility, whether by day or night, the signals prescribed in this Rule shall be used as follows:

- A power-driven vessel making way through the water, shall sound at intervals of not more than 2 minutes a prolonged blast.
- A power-driven vessel under way, but stopped and making no way through the water, shall sound at intervals of not more than 2 minutes two prolonged blasts, with an interval of about 1 second between them.
- A sailing vessel under way shall sound, at intervals of not more than 1 minute, when on the starboard tack one blast, when on the port tack two blasts in succession, and when with the wind abaft the beam three blasts in succession.
- A vessel when at anchor shall at intervals of not more than 1 minute ring the bell rapidly for about 5 seconds. In vessels of more than 350 feet in length the bell shall be sounded in the forepart of the vessel, and in addition there shall be sounded in the after part of the vessel, at intervals of not more than 1 minute for about 5 seconds, a gong or other instrument, the tone and sounding of which cannot be confused with that of the bell. Every vessel at anchor may in addition, in accordance with Rule 12, sound three blasts in succession, namely, one short, one prolonged, and one short blast, to give warning of her position and of the possibility of collision to an approaching vessel.
- A vessel when towing, a vessel engaged in laying or in picking up a submarine cable or navigation mark, and a vessel under way which is unable to get out of the way of an approaching vessel through being not under command or unable to manoeuvre as required by these Rules shall, instead of the signals prescribed in subsections (i), (ii) and (iii) sound, at intervals of not more than 1 minute, three blasts in succession, namely, one prolonged blast followed by two short blasts.
- A vessel towed, or, if more than one vessel is towed, only the last vessel of the tow, if manned, shall, at intervals of not more than 1 minute, sound four blasts in succession, namely, one prolonged blast followed by three short blasts. When practicable, this signal shall be made immediately after the signal made by the towing vessel.
- A vessel aground shall give the signal prescribed in subsection (iv) and shall, in addition, give three separate and distinct strokes on the bell immediately before and after each such signal.
- A vessel of less than 20 tons, a rowing boat, or a seaplane on the water, shall not be obliged to give the above-mentioned signals, but if she does not, she shall make some other efficient sound signal at intervals of not more than 1 minute.
- A vessel when fishing, if of 20 tons or upwards, shall at intervals of not more than 1 minute, sound a blast, such blast to be followed by ringing the bell; or she may sound, in lieu of these signals, a blast consisting of a series of several alternate notes of higher and lower pitch.

Rule 16

Speed to be moderate in fog, etc.

(a) Every vessel, or seaplane when taxi-ing on the water, shall, in fog, mist, falling snow, heavy rainstorms or any other condition similarly restricting visibility, go at a moderate speed, having careful regard to the existing circumstances and conditions.

(b) A power-driven vessel hearing, apparently forward of her beam, the fog-signal of a vessel the position of which is not ascertained, shall, so far as the circumstances of the case admit, stop her engines, and then navigate with caution until danger of collision is over.

Part C.—Steering and Sailing Rules

Preliminary

1. In obeying and construing these Rules, any action taken should be positive, in ample time, and with due regard to the observance of good seamanship.
2. Risk of collision can, when circumstances permit, be ascertained by carefully watching the compass bearing of an approaching vessel. If the bearing does not appreciably change, such risk should be deemed to exist.
3. Mariners should bear in mind that seaplanes in the act of landing or taking off, or operating under adverse weather conditions, may be unable to change their intended action at the last moment.

Rule 17

When two sailing vessels are approaching one another, so as to involve risk of collision, one of them shall keep out of the way of the other, as follows:

- (a) A vessel which is running free shall keep out of the way of a vessel which is close-hauled.
- (b) A vessel which is close-hauled on the port tack shall keep out of the way of a vessel which is close-hauled on the starboard tack.
- (c) When both are running free, with the wind on different sides, the vessel which has the wind on the port side shall keep out of the way of the other.
- (d) When both are running free, with the wind on the same side, the vessel which is to windward shall keep out of the way of the vessel which is to leeward.
- (e) A vessel which has the wind aft shall keep out of the way of the other vessel.

Rule 18

(a) When two power-driven vessels are meeting end on, or nearly end on, so as to involve risk of collision, each shall alter her course to starboard, so that each may pass on the port side of the other. This Rule only applies to cases where vessels are meeting end on, or nearly end on, in such a manner as to involve risk of collision, and does not apply to two vessels which must, if both keep on their respective courses, pass clear of each other. The only cases to which it does apply are when each of two vessels is end on, or nearly end on, to the other; in other words, to cases in which, by day, each vessel sees the masts of the other in a line, or nearly in a line, with her own; and by night, to cases in which each vessel is in such a position as to see both the sidelights of the other. It does not apply, by day, to cases in which a vessel sees another ahead crossing her own course; or, by night, to cases where the red light of one vessel is opposed to the red light of the other or where the green light of one vessel is opposed to the green light of the other or where a red light without a green light or a green light without a red light is seen ahead, or where both green and red lights are seen anywhere but ahead.

(b) For the purposes of this Rule and Rules 19 to 29 inclusive, except Rule 20 (b), a seaplane on the water shall be deemed to be a vessel, and the expression "power-driven vessel" shall be construed accordingly.

Rule 19

When two power-driven vessels are crossing, so as to involve risk of collision, the vessel which has the other on her own starboard side shall keep out of the way of the other.

Rule 20

(a) When a power-driven vessel and a sailing vessel are proceeding in such directions as to involve risk of collision, except as provided in Rules 24 and 26, the power-driven vessel shall keep out of the way of the sailing vessel.

(b) A seaplane on the water shall, in general, keep well clear of all vessels and avoid impeding their navigation. In circumstances, however, where risk of collision exists, she shall comply with these Rules.

Rule 21

Where by any of these Rules one of two vessels is to keep out of the way, the other shall keep her course and speed. When, from any cause the latter vessel finds herself so close that collision cannot be avoided by the action of the giving-way vessel alone, she also shall take such action as will best aid to avert collision (see Rules 27 and 29).

Rule 22

Every vessel which is directed by these Rules to keep out of the way of another vessel shall, if the circumstances of the case admit, avoid crossing ahead of the other.

Rule 23

Every power-driven vessel which is directed by these Rules to keep out of the way of another vessel shall, on approaching her, if necessary, slacken her speed or stop or reverse.

Rule 24

(a) Notwithstanding anything contained in these Rules, every vessel overtaking any other shall keep out of the way of the overtaken vessel.

(b) Every vessel coming up with another vessel from any direction more than 2 points (22½ degrees) abaft her beam, i.e. in such a position, with reference to the vessel which she is overtaking, that at night she would be unable to see either of that vessel's sidelights, shall be deemed to be an overtaking vessel; and no subsequent alteration of the bearing between the two vessels shall make the overtaking vessel a crossing vessel within the meaning of these Rules, or relieve her of the duty of keeping clear of the overtaken vessel until she is finally past and clear.

(c) If the overtaking vessel cannot determine with certainty whether she is forward of or abaft this direction from the other vessel, she shall assume that she is an overtaking vessel and keep out of the way.

Rule 25

(a) In a narrow channel every power-driven vessel when proceeding along the course of the channel shall, when it is safe and practicable, keep to that side of the fairway or mid-channel which lies on the starboard side of such vessel.

(b) Whenever a power-driven vessel is nearing a bend in a channel where a power-driven vessel approaching from the other direction cannot be seen, such vessel, when she shall have arrived within one-half mile of the bend, shall give a signal by one prolonged blast of her whistle, which signal shall be answered by a similar blast given by any approaching power-driven vessel that may be within hearing around the bend. Regardless of whether an approaching vessel on the farther side of the bend is heard, such bend shall be rounded with alertness and caution.

Rule 26

All vessels not engaged in fishing shall, when under way, keep out of the way of any vessels fishing with nets or lines or trawls. This Rule shall not give to any vessel engaged in fishing the right of obstructing a fairway used by vessels other than fishing vessels.

Rule 27

In obeying and construing these Rules due regard shall be had to all dangers of navigation and collision, and to any special circumstances, including the limitations of the craft involved, which may render a departure from the above Rules necessary in order to avoid immediate danger.

Part D.—Miscellaneous

Rule 28

(a) When vessels are in sight of one another, a power-driven vessel under way, in taking any course authorized or required by these Rules, shall indicate that course by the following signals on her whistle, namely:—

One short blast to mean "I am altering my course to starboard."

Two short blasts to mean "I am altering my course to port."

Three short blasts to mean "My engines are going astern."

(b) Whenever a power-driven vessel which, under these Rules, is to keep her course and speed, is in sight of another vessel and is in doubt whether sufficient action is being taken by the other vessel to avert collision, she may indicate such doubt by giving at least five short and rapid blasts on the whistle. The giving of such a signal shall not relieve a vessel of her obligations under Rules 27 and 29 or any other Rule, or of her duty to indicate any action taken under these Rules by giving the appropriate sound signals laid down in this Rule.

(c) Nothing in these Rules shall interfere with the operation of any special rules made by the Government of any nation with respect to the use of additional whistle signals between ships of war or vessels sailing under convoy.

Rule 29

Nothing in these Rules shall exonerate any vessel, or the owner, master or crew thereof, from the consequences of any neglect to carry lights or signals, or of any neglect to keep a proper look-out, or of the neglect of any precaution which may be required by the ordinary practice of seamen, or by the special circumstances of the case.

Rule 30

Reservation of Rules for Harbours and Inland Navigation

Nothing in these Rules shall interfere with the operation of a special rule duly made by local authority relative to the navigation of any harbour, river, lake, or inland water, including a reserved seaplane area.

Rule 31

Distress Signals

When a vessel or seaplane on the water is in distress and requires assistance from other vessels or from the shore, the following shall be the signals to be used or displayed by her, either together or separately, namely:

(a) A gun or other explosive signal fired at intervals of about a minute.

(b) A continuous sounding with any fog-signal apparatus.

(c) Rockets or shells, throwing red stars fired one at a time at short intervals.

(d) A signal made by radiotelegraphy or by any other signalling method consisting of the group . . . — — — . . . in the Morse Code.

(e) A signal sent by radiotelephony consisting of the spoken word "Mayday".

(f) The International Code Signal of distress indicated by N.C.

(g) A signal consisting of a square flag having above or below it a ball or anything resembling a ball.

(h) Flames on the vessel (as from a burning tar barrel, oil barrel, etc.).

(i) A rocket parachute flare showing a red light.

The use of any of the above signals, except for the purpose of indicating that a vessel or a seaplane is in distress, and the use of any signals which may be confused with any of the above signals, is prohibited.

Note.—A radio signal has been provided for use by vessels in distress for the purpose of actuating the auto-alarms of other vessels and thus securing attention to distress calls or messages. The signal consists of a series of twelve dashes, sent in 1 minute, the duration of each dash being 4 seconds, and the duration of the interval between two consecutive dashes 1 second.

Rule 32

All orders to helmsmen shall be given in the following sense: right rudder or starboard to mean "put the vessel's rudder to starboard"; left rudder or port to mean "put the vessel's rudder to port".

ST. LAWRENCE RIVER REGULATIONS

Established by Order in Council P.C. 1954-1925. (Effective 8 December, 1954).

REGULATIONS FOR THE ST. LAWRENCE RIVER FROM FATHER POINT TO VICTORIA BRIDGE AT MONTREAL

1. These regulations may be cited as the St. Lawrence River Regulations.

2. These Regulations apply to the St. Lawrence River between Victoria Bridge at Montreal and Father Point including the harbours of Montreal, Three Rivers and Quebec.

3. When any aid to navigation or any mark or dredge of the Department of Transport is moved, carried away or damaged by any person, vessel or vehicle, such person or the person in charge of the vessel or vehicle shall forthwith replace or repair the aid to navigation, mark or dredge, to the fullest extent possible in the circumstances.

4. The owner of every vessel is liable to the Crown for damage done by such vessel to any aid to navigation or other property of the Crown.

5. No person shall encumber navigable waters or in any way obstruct the navigation thereof with stones, filth, rubbish, timber, logs, spars, rafts, cribs or wrecks of vessels; or throw therein fuel-oil, coal ashes, cinders, hay, straw, ballast or any other matter or thing by which navigation may be impeded or injured; and a further like penalty to that which is hereinafter imposed for a breach of this section shall be incurred by any person guilty of such breach, if he does not remove or cause to be removed any such obstruction within a reasonable time to the satisfaction of the Minister of Transport after being required to do so by any officer appointed for such purpose by the Minister; and a further like penalty shall be incurred for every subsequent day during which such obstruction is not removed.

6. No vessel while under way or drifting shall trail its anchor.

7. No vessel drawing nine feet of water or less and no barge or raft shall, except in case of accident, stress of weather or force of current use the deep water channels

- (a) near Pointe aux Trembles (en haut);
- (b) at, between or near Varennes and Buoy 5-M St. Ours Traverse, except between Buoys 104-M and 116-M, and between Buoys 122-M and 124-M;
- (c) in Lake St. Peter between the upper end of the St. Francis Bank and the English Bank;
- (d) at or near Port St. Francis;
- (e) at, between or near Batiscan and Cap Charles;
- (f) in the dredged channel below Quebec known as Madame Reef-Brule Bank Channel, between Buoys 120½B and 112B, except between Buoys 114½B and 114B; or
- (g) at or near Buoys 109½B, 109B and 108B.

8. Vessels drawing nine feet of water or less and barges and rafts shall at all times keep to the proper side of the fairway and away from the established steamer track between Quebec and Father Point, except when crossing the steamer track at right angles.

9. Rafts descending the river, whether in tow or otherwise, shall

- (a) keep to the north of Ile Deslauriers or Laurette Island, and Ile Bellegarde; and
- (b) when opposite to Ile au Raisin in Lake St. Peter, keep to the south of the Ship Channel, as far as Nicolet Traverse.

10. No vessel, when passing any dredge, wreck or tow of barges, shall move at greater than slow speed.

11. Between Victoria Bridge at Montreal and the western limits of the harbour of Quebec every vessel overtaking another and intending to pass shall, at a distance of one-half mile from the other vessel, give one prolonged blast on its whistle, to which the other shall, if safe and practicable, reply by a similar signal, decrease its speed, to dead slow if necessary, and direct its course to port, and the overtaking vessel, upon arriving in close proximity to the overtaken vessel, shall also reduce its speed, maintaining only sufficient speed to enable it to pass the overtaken vessel to starboard; after having answered the prolonged blast of the overtaking vessel by a similar signal, if the overtaken vessel does not consider it safe and practicable to allow the other vessel to pass to starboard, it shall, after an interval of not less than one minute and not more than two minutes, give one short blast and direct its course to starboard and the overtaking vessel shall direct its course to port and pass accordingly.

12. A vessel navigating against the current or tide shall before meeting another vessel at any sharp turn or narrow passage, or where the navigation is intricate, stop, and if necessary, come to a position of safety below or above the point of danger and there remain until the channel is clear.

13. The following conditions apply to vessels being towed:

- (a) if canal barges, there shall not be more than ten in number, five in length and two abreast;
- (b) if sand barges, there shall not be more than six in number, three in length and two abreast;
- (c) if mixed vessels, there shall not be more than eight in number, four in length and two abreast; and
- (d) a complete tow from the stem of the tug to the stern of tow shall not exceed 1,000 feet in length.

14. (1) A steam vessel when at anchor shall, between sunrise and sunset, carry in its forward part a black ball not less than two feet in diameter, and at or near the stern another such ball; the forward ball shall be carried at a height above the superstructure or other erections other than the funnel on the vessel, but in no case less than twenty feet above the hull, and the stern or after ball shall not be less than fifteen feet lower than the forward ball; the above signals shall be reversed when the vessel is anchored only by the stern.

(2) Every vessel anchoring with a stern anchor shall notify the Signal Service at Quebec by wireless thereof, which in turn shall notify all vessels.

14A. (1) Every dredge shall show at its forward and after ends

- (a) from sunrise to sunset, two black balls or shapes not less than two feet in diameter, and
- (b) from sunset to sunrise, two red lights suspended one over the other not less than six feet apart and not less than ten feet outside the hull on the side on which other vessels are to pass.

(2) In the case of a dipper dredge, the shapes and lights prescribed by subsection (1) shall be suspended at a sufficient height and a sufficient distance from its side that they shall, with the dipper arm and boom athwartship, be visible at all times.

15. Every person who commits a breach of these regulations is liable on summary conviction to a penalty not exceeding five hundred dollars and the costs of the conviction and, in default of payment of such penalty and costs, to imprisonment for a period of not more than thirty days.

RULES OF THE ROAD FOR THE GREAT LAKES

Established by Order in Council P.C. 1954-1927. (Effective 8 December, 1954).

RULES OF THE ROAD FOR THE GREAT LAKES

Definitions

1. In these rules,

- (a) "motor boat" includes every vessel propelled by machinery and not more than sixty-five feet in length except vessels towing, the length to be measured from end to end over the deck, excluding sheer;
- (b) "pilot" includes the master, officer or other person in charge of the navigation of a vessel;
- (c) "prescribed" means prescribed by these Rules;
- (d) "steam vessel" includes any vessel propelled by machinery, whether under sail or not;
- (e) "sailing vessel" includes every steam vessel that is under sail and is not being propelled by machinery;
- (f) "under way" — a vessel is under way when she is not at anchor, made fast to the shore, or aground; and
- (g) "visible" when applied to lights means visible on a dark night with a clear atmosphere.

Application

2. (1) These rules apply on Lakes Ontario, Erie, Huron (including Georgian Bay), Michigan and Superior, their connecting and tributary waters, and the Ottawa and St. Lawrence Rivers and their tributaries as far east as the lower exit of the Lachine Canal and the Victoria Bridge at Montreal.

(2) The rules concerning lights apply in all weathers from sunset to sunrise, and during such time no other lights that could be mistaken for the prescribed lights or impair their visibility shall be exhibited.

Steam Vessels

3. (1) Except in the cases hereinafter expressly provided for, a steam vessel when under way shall carry,

- (a) on or in front of the foremast, or if a vessel without a foremast, then in the fore part of a vessel, a bright white light so constructed as to show an unbroken light over an arc of the horizon of twenty points of the compass, so fixed as to throw the light ten points on each side of the vessel, namely, from right ahead to two points abaft the beam on either side, and of such a character as to be visible at a distance of at least five miles; such light shall be at a greater height above the water than the side lights required by paragraphs (b) and (c);
- (b) on the starboard side, a green light, so constructed as to show an unbroken light over an arc of the horizon of ten points of the compass, so fixed as to throw the light from right ahead to two points abaft the beam on the starboard side and of such a character as to be visible at a distance of at least two miles; and
- (c) on the port side, a red light, so constructed as to show an unbroken light over an arc of the horizon of ten points of the compass, so fixed as to throw the light from right ahead to two points abaft the beam on the port side, and of such a character as to be visible at a distance of at least two miles.

(2) The green and red lights required by paragraphs (b) and (c) of subsection (1) shall each be fitted with an inboard screen projecting at least three feet forward from the light, so as to prevent the light from being seen across the bow.

(3) A steam vessel of over one hundred feet register length when under way shall carry, in addition to the lights prescribed by subsection (1), a bright white light so fixed as to throw the light all around the horizon, and of such a character as to be visible at a distance of at least three miles, such lights to be placed in line with the keel at least fifteen feet higher than, and more than fifty feet abaft, the light required by paragraph (a) of subsection (1); or in lieu thereof two such lights of the same character and height as herein described placed not over thirty inches apart horizontally, one on either side of the keel, and so arranged that one or the other or both shall be visible from any angle of approach.

(4) A steam vessel not more than one hundred feet in length when under way shall carry, in addition to the lights prescribed by subsection (1), a bright white light aft to show all around the horizon; such light shall be placed in line with the keel higher than the light required by paragraph (a) of subsection (1).

Vessels towing, other than those towing rafts

4. A steam vessel having a tow other than a raft, shall in addition to the lights prescribed for vessels of her length by rule 3, carry forward a second bright white light; such light shall be of the same construction and character and fixed in the same manner as the light prescribed by rule 3 (1) (a) and shall be carried in a position not less than six feet vertically above or below that light; such steam vessel shall also carry a small white light abaft the funnel or aftermast for the tow to steer by, but such light shall not be visible forward of the beam.

Vessels Towing Rafts

5. A steam vessel having a raft in tow shall, instead of the forward lights mentioned in rule 4, carry on or in front of the foremast, or if a vessel without a foremast, then in the fore part of the vessel, two white lights in a horizontal line athwartships and not less than eight feet apart, each so fixed as to throw the light all around the horizon and of such a character as to be visible at a distance of at least five miles; such steam vessel shall also carry the small white steering light aft, of the character and fixed as required by rule 4, and shall also comply with the requirements of rule 3 respecting side lights, screens and range lights.

Tugboats

6. (1) A tugboat under one hundred tons register (net) whose principal business is harbour towing, shall carry the red and green side lights carried by other steam vessels; and at the foremast head or, if the tugboat has no foremast, then on top of the pilot house, a white light so constructed as to show a uniform and unbroken light over an arc of the horizon of twenty points of the compass, and so fixed as to throw the light ten points on each side of the vessel, namely, from right ahead to two points abaft the beam on either side, and of such a character as to be visible at a distance of at least three miles; and when towing, except when towing a raft, shall carry an additional white light of the same character and construction as the headlight and carried not less than three feet vertically above or below the headlight.

(2) When towing a raft, two headlights shall be carried in a horizontal line athwartships not less than four feet apart, each so fixed as to throw the light all around the horizon, and of such a character as to be visible at a distance of at least three miles; such headlights shall be in lieu of the headlights prescribed by subsection (1).

Ferryboats

7. (1) Every double-end ferryboat propelled by machinery, except a cable ferry, shall carry the green and red side lights required for other vessels, and in lieu of the white lights shall carry two bright white lights as a central range, one at or near each end of the vessel; the white lights shall be placed at equal heights above the hull, in the centre line of the vessel, and so constructed as to be visible at a distance of at least three miles all around the horizon; the green and red side lights shall be of such a character as to be visible at a distance of at least two miles, and shall be fitted with inboard screens projecting at least three feet forward from the lights, to prevent them from being seen across the bow.

(2) Other ferryboats propelled by machinery, except cable ferries, shall carry the lights prescribed for steam vessels of their length.

Open Boats

8. (1) An open boat is not obliged to carry the side lights required for other vessels but shall, if she does not carry such lights, carry a lantern having a green slide on one side and a red slide on the other side; and on the approach of or to other vessels such lantern shall be exhibited in sufficient time to prevent collision and in such manner that the green light shall not be seen on the port side nor the red light on the starboard side; an open boat, when at anchor or stationary, shall exhibit a bright white light; she shall not, however, be prevented from using a flare-up light in addition when considered expedient.

(2) A rowing boat or a canoe, whether having a sail or not, shall show a white light in sufficient time to prevent collision.

Motor Boats

9. (1) Motor boats as defined in these rules are classified as follows:

Class A: less than sixteen feet in length;

Class 1: sixteen feet or over and less than twenty-six feet in length;

Class 2: twenty-six feet or over and less than forty feet in length; and

Class 3: forty feet or over and not more than sixty-five feet in length.

(2) Such motor boats are not obliged to carry the lights prescribed by rule 3, but if they do not carry them they shall be provided with the following lights:

(a) A motorboat of Class A or Class 1 shall carry

(i) a bright white light aft to show all around the horizon;

(ii) a combined lantern in the fore part of the vessel and lower than the white light aft so constructed and fixed as to show a green light from right ahead to two points abaft the beam on the starboard side and a red light from right ahead to two points abaft the beam on the port side.

(b) A motorboat of Class 2 or Class 3 shall carry

(i) a bright white light in the fore part of the vessel, as near the stem as practicable, so constructed as to show an unbroken light over an arc of the horizon of twenty points of the compass, and so fixed as to throw the light from right ahead to two points abaft the beam on either side;

(ii) a bright white light aft to show all around the horizon, placed higher than the white light forward; and

(iii) on the starboard side a green light so constructed as to show an unbroken light over an arc of the horizon of ten points of the compass, and so fixed as to throw the light fr 000611

ahead to two points abaft the beam on the starboard side; on the port side a red light so constructed as to show an unbroken light over an arc of the horizon of ten points of the compass, and so fixed as to throw the light from right ahead to two points abaft the beam on the port side; the sidelights shall be fitted with inboard screens of sufficient height and length and so placed as to prevent the lights from being seen across the bow.

(3) Every white light prescribed by this rule shall be of such a character as to be visible at a distance of at least two miles; every coloured light prescribed by this rule shall be of such a character as to be visible at a distance of at least one mile.

Sailing Vessels and Vessels Being Towed.

10. (1) A sailing vessel under way and any vessel being towed shall carry the side lights prescribed by rule 3.

(2) A vessel being towed shall also carry a small white light aft, but such light shall not be visible forward of the beam.

(3) A sailing vessel shall, on the approach of another vessel, show temporarily a white light in the direction of the approaching vessel.

Small Vessels

11. (1) Whenever, as in the case of small vessels under way during bad weather, the green and red side lights cannot be fixed, these lights shall be kept at hand lighted and ready for use and shall, on the approach of or to other vessels, be exhibited in sufficient time to prevent collision, in such manner as to make them most visible, and so that the green light shall not be seen on the port side nor the red light on the starboard side nor, if practicable, more than two points abaft the beam on their respective sides.

(2) The lanterns containing the lights prescribed by subsection (1) shall each be painted on the outside with the colour of the light they respectively contain, and shall be provided with proper screens.

Canal Boats in Tow of Steam Vessels

12. (1) Canal boats when in tow of steam vessels shall carry lights as follows:

(a) When towed astern of steam vessels and towed singly or tandem they shall each carry a green light on the starboard side, a red light on the port side, and a small bright white light aft;

(b) When towed astern in one or more tiers, two or more abreast, the boat on the starboard side of each tier shall carry a green light on her starboard side and the boat on the port side of each tier shall carry a red light on her port side, and each of the outside boats in the last tier also shall carry a small bright white light aft;

(c) When towed alongside and on the starboard side of a steam vessel, the boat towed shall carry a green light on the starboard side, and when towed on the port side of a steam vessel, the boat towed shall carry a red light on the port side,

(d) When towed alongside a steam vessel, one boat on the starboard side and the other on the port side, the starboard boat shall carry a green light on the starboard side and the port boat shall carry a red light on the port side,

(e) When a tow of one or more boats is being pushed ahead of a steam vessel such tow shall carry a green light on the starboard side and a red light on the port side so placed that they mark the tow at its maximum projection to starboard and port respectively, and may carry an amber light at the extreme forward end of the tow as near the centre line as it is practicable to carry such light, such amber light shall be so constructed as to show an unbroken light over an arc of the horizon of twenty points of the compass, so fixed as to throw the light ten points on each side, from right ahead to two points abaft the beam on either side, and of such a character as to be visible at a distance of at least three miles.

(2) The coloured side lights shall be so constructed as to show a uniform and unbroken light over an arc of the horizon of ten points of the compass, so fixed as to throw the light from right ahead to two points abaft the beam on their respective sides, and of such a character as to be visible at a distance of at least two miles; the minimum size of glass globes shall be six inches in diameter and five inches high in the clear; the said coloured sidelights shall be fitted with inboard screens so as to prevent them from being seen across the bow.

(3) The small bright white light aft required to be carried on a canal boat in tow shall not be visible forward of the beam.

(4) For the purposes of this rule, the term "canal boat" includes barges, scows and other nondescript craft.

Vessels not under command

13. (1) A vessel over sixty-five feet in length that is not under command shall carry where they can best be seen and, if a steam vessel, in lieu of the white light required by rule 3 (1) (a) two red lights in a vertical line one over the other not less than three feet apart, and of such a character as to be visible all around the horizon at a distance of at least two miles; such vessel, when not making way through the water, shall not carry the side lights required by rule 3 (1) (b) and (c), but when making way shall carry them.

(2) By day such vessel shall carry in a vertical line one over the other not less than three feet apart, where they can best be seen, two black balls, each two feet in diameter.

Vessels at anchor

14. (1) A vessel under one hundred and fifty feet register length, when at anchor, shall carry forward, where it can best be seen, but at a height not exceeding twenty feet above the hull, a white light constructed so as to show a clear, uniform and unbroken light visible all around the horizon at a distance of at least one mile.

(2) A vessel of one hundred and fifty feet or upward in register length, when at anchor, shall carry in the forward part of the vessel two white lights at the same height of not less than twenty and not exceeding forty feet above the hull, and not less than ten feet apart horizontally and athwartships, except that each need not be visible all around the horizon but so arranged that one or the other, or both shall show a clear, uniform and unbroken light and be visible from any angle of approach at a distance of at least one mile; and at or near the stern of the vessel two similar lights, similarly arranged and at such height that they shall be not less than fifteen feet lower than the forward lights; in addition to the four anchor lights above specified, at least one white decklight shall be displayed in every interval of one hundred feet along the deck measuring from the forward lights, such decklights to be not less than two feet above the deck and arranged, so far as intervening structures will permit, so as to be visible from any angle of approach.

(3) Between sunrise and sunset every vessel over sixty-five feet in length, when at anchor, shall carry forward, where it can best be seen, one black ball not less than two feet in diameter.

(4) A vessel over sixty-five feet in length, which is aground, shall carry by night the white light or lights prescribed for a vessel at anchor and, in addition, shall carry, where they can best be seen by approaching vessels, two red lights in a vertical line one over the other, not less than three feet apart, visible all around the horizon at a distance of at least two miles; by day such vessel shall carry in a vertical line one over the other not less than three feet apart, where they can best be seen, three black balls each two feet in diameter.

Certain Naval or Military Vessels and Vessels not otherwise provided for

15. (1) Whenever it shall be determined to the satisfaction of the Minister of Transport that a naval or other military vessel of special construction or purpose cannot comply fully with the provisions of any of these rules with respect to number, position, range or arc of visibility of lights or shapes, such vessel shall comply with such other provisions in regard to the number, position, range or arc of visibility of lights or shapes as shall have been determined by the Minister to be the closest possible compliance with these rules in respect to that vessel; provided that notice of such noncompliance with the rules together with the character and positions of lights or shapes to be displayed on such vessel, shall be published by "Notice to Mariners".

(2) Every vessel not otherwise provided for in these rules, when under way, or at anchor, shall carry a white light forward; such light shall be carried at least eight feet above the surface of the water, in a lantern so fixed and constructed as to show a clear, uniform and unbroken light all around the horizon, and of such a character as to be visible at a distance of at least one mile.

Rafts

16. (1) Rafts when under way, at anchor or moored shall carry lights as follows:

(a) a raft of one crib and not more than two in length shall carry one white light; a raft of three or more cribs in length and one crib in width shall carry one white light at each end of the raft; a raft of more than one crib abreast shall carry one white light on each outside corner of the raft, making four lights in all;

(b) a bag or boom raft shall carry a bright white light at each end of the raft, and one of such lights on each side midway between the forward and after ends.

(2) The white lights required by these rules for rafts shall be carried in lanterns so fixed and constructed as to show clear, uniform and unbroken lights visible all around the horizon, and of such a character as to be visible at a distance of at least one mile; such lights shall be carried at a height of not less than eight feet above the surface of the water.

Use of searchlights

17. No person shall direct the rays of a searchlight or other blinding light on the pilot house or navigating bridge of any vessel under way.

Fog Signals

18. (1) A steam vessel shall be provided with an efficient whistle, sounded by steam or by some substitute for steam, placed before the funnel not less than eight feet from the deck, or in such other place where the sound will not be intercepted by any obstruction, and of such a character as to be heard in ordinary weather at a distance of at least two miles, and with an efficient bell; a sailing vessel shall be provided with an efficient fog horn and with an efficient bell.

(2) In fog, mist, falling snow or heavy rainstorms, or when visibility is low from any other cause, whether by day or by night, fog signals shall be used as follows:

(a) a steam vessel under way, excepting only a steam vessel with a raft in tow, shall sound at intervals of not more than one minute three distinct blasts of its whistle;

(b) every vessel in tow of another vessel shall, at intervals of not more than one minute, sound four strokes on a good and properly placed bell, by striking the bell twice in quick

succession, followed by a little longer interval, and then again striking twice in quick succession (as in striking "four bells" to indicate time);

- (c) a steam vessel with a raft in tow shall sound at intervals of not more than one minute a screeching or Modoc whistle for from three to five seconds;
- (d) a sailing vessel when under way and not in tow shall sound on the foghorn, at intervals of not more than one minute, when on the starboard tack one blast, when on the port tack two blasts in succession, when with the wind abaft the beam three blasts in succession;
- (e) a vessel at anchor and a vessel aground in or near a channel or fairway shall at intervals of not more than two minutes ring the bell rapidly for from three to five seconds and, in addition, at intervals of not more than three minutes shall sound on the whistle or horn a signal of one short blast, two long blasts, and one short blast in quick succession;
- (f) a vessel of less than ten tons register tonnage, not being a steam vessel, shall not be obliged to give the signals prescribed by paragraphs (a) to (e), but if she does not she shall make some other efficient sound signal at intervals of not more than one minute;
- (g) any vessel or raft not otherwise provided for in this rule, when under way, anchored or moored, and not in port, shall make an efficient sound signal at intervals of not more than one minute.

Speed of ships in fog

19. In fog, mist, falling snow or heavy rainstorms, or when visibility is low from any other cause, every vessel shall go at a moderate speed; a steam vessel hearing, apparently not more than four points from right ahead, the fog signal of another vessel shall at once reduce her speed to bare steerageway, and thereafter navigate with caution until the vessels shall have passed each other.

Steering and Sailing Rules

20. Risk of collision can, when circumstances permit, be ascertained by carefully watching the bearing of an approaching vessel; when the bearing does not appreciably change, risk of collision should be deemed to exist.

Sailing Vessels

21. When two sailing vessels are approaching one another so as to involve risk of collision one of them shall keep out of the way of the other, as follows:

- (a) a vessel that is running free shall keep out of the way of a vessel that is closehauled;
- (b) a vessel that is closehauled on the port tack shall keep out of the way of a vessel that is closehauled on the starboard tack;
- (c) when both vessels are running free, with the wind on different sides, the vessel that has the wind on the port side shall keep out of the way of the other;
- (d) when both vessels are running free, with the wind on the same side, the vessel that is to windward shall keep out of the way of the vessel that is to leeward.

Steam Vessels Meeting End On

22. (1) When two steam vessels are meeting end on, or nearly end on, so as to involve risk of collision, each shall alter her course to starboard, so that each shall pass on the port side of the other.

(2) When steam vessels are meeting end on, or nearly end on, each steam vessel shall pass on the port side of the other; and the pilot of either steam vessel may be first in determining to pursue this course, and thereupon shall give, as a signal of this intention, one distinct blast of his whistle, which the pilot of the other steam vessel shall answer promptly by a similar blast of his whistle and thereupon such steam vessels shall pass on the port side of each other; but if the courses of such steam vessels are so far on the starboard of each other as not to be considered by their pilots as meeting end on, or nearly end on, the pilot so first deciding shall immediately give two distinct blasts of his whistle, which the pilot of the other steam vessel shall answer promptly by two similar blasts of his whistle, and they shall pass on the starboard side of each other.

Meeting in Rivers and Channels where there is a current

23. In all narrow channels where there is a current, and in the rivers Saint Mary, St. Clair, Detroit, Niagara, St. Lawrence and Ottawa, when two steam vessels are meeting, the descending steam vessel shall have the right of way, and shall before the vessels shall have arrived within the distance of one-half mile of each other, give the signal necessary to indicate the side on which she intends to pass.

Steam Vessels Crossing

24. (1) When two steam vessels are crossing so as to involve risk of collision the vessel that has the other on her own starboard side shall keep out of the way of the other.

(2) When two steam vessels are approaching each other at right angles or obliquely so as to involve risk of collision, other than when one steam vessel is overtaking another, the steam vessel that has the other on her own port side shall hold her course and speed; and the steam vessel which has the other on her own starboard side shall keep out of the way of the other by directing her course to starboard so as to cross the stern of the other steam vessel or, if necessary to do so, slacken her speed or stop or reverse; the steam vessel having the other on her own port side shall blow

one distinct blast of her whistle as a signal of her intention to cross the bow of the other, holding her course and speed, which signal shall be promptly answered by the other steam vessel by one distinct blast of her whistle as a signal of her intention to direct her course to starboard so as to cross the stern of the other steam vessel or otherwise keep clear.

(3) If from any cause whatever conditions are such as to prevent immediate compliance by the vessels with each other's signals, the misunderstanding or objection shall be at once made apparent by blowing the danger signal, and both vessels shall be stopped, and reversed if necessary, until signals for passing with safety are made and understood.

Steam and Sailing Vessels Approaching Each Other

25. When a steam vessel and a sailing vessel are proceeding in such directions as to involve risk of a collision the steam vessel shall keep out of the way of the sailing vessel.

Right of Way

26. Where, by any of these rules one of two vessels is required to keep out of the way, the other shall keep her course and speed.

Duty to slacken speed or stop

27. Every steam vessel which is directed by these rules to keep out of the way of another vessel shall, on approaching such vessel, if necessary, slacken her speed or stop or reverse.

Overtaking Vessels

28. (1) Notwithstanding anything contained in these rules every vessel overtaking any other shall keep out of the way of the overtaken vessel.

(2) When one steam vessel is overtaking another and the steam vessel astern shall desire to pass on the right or starboard side of the steam vessel ahead, she shall give one distinct blast of the whistle as a signal of such desire and, if the vessel ahead answers with one blast, she shall direct her course to starboard; or if she shall desire to pass on the left or port side of the vessel ahead, she shall give two distinct blasts of the whistle as a signal of such desire and, if the vessel ahead answers with two blasts, she shall direct her course to port; or if the vessel ahead does not think it safe for the vessel astern to pass at that time, she shall immediately signify the same by giving the danger signal of several short and rapid blasts of the whistle, not less than five; the steam vessel astern shall then hold back and, after an appropriate interval, if she still desires to pass, make the proper signal so indicating; but under no circumstances shall the steam vessel astern attempt to pass the steam vessel ahead until such time as they have reached a point where it can be safely done, and the steam vessel ahead shall signify her willingness by blowing the proper answering signal; the steam vessel ahead shall in no case attempt to cross the bow or crowd upon the course of the other steam vessel.

(3) Every vessel coming up with another vessel from any direction more than two points abaft her beam, that is, in such a position, with reference to the vessel which she is overtaking, that at night she would be unable to see either of that vessel's sidelights, shall be deemed to be an overtaking vessel, and no subsequent alteration of the bearing between the two vessels shall make the overtaking vessel a crossing vessel within the meaning of these rules, or relieve her of the duty of keeping clear of the overtaken vessel until the overtaken vessel is finally passed and cleared.

(4) As the overtaking vessel cannot always know with certainty whether she is forward of or abaft this direction from the other vessel, she should, when in doubt, assume that she is an overtaking vessel and keep out of the way.

Narrow Channels

29. (1) In all channels less than five hundred feet in width, no steam vessel shall pass another going in the same direction unless the steam vessel ahead be disabled or signify her willingness that the steam vessel astern shall pass; the steam vessel astern may then pass, subject, however, to the other rules applicable to such a situation.

(2) When steam vessels proceeding in opposite directions are about to meet in a channel less than five hundred feet in width, such steam vessels shall be slowed to a moderate speed, according to the circumstances.

Signals indicating course

30. (1) In all weathers every steam vessel under way, in taking any course authorized or required by these rules, shall indicate that course by a signal on her whistle, to be accompanied, whenever required, by a corresponding alteration of her course; and every steam vessel receiving a signal from another shall promptly respond with the same signal or sound the danger signal as provided in rule 31.

(2) Except as otherwise provided in these rules,

- (a) one blast shall mean "I am directing my course to starboard"; and
- (b) two blasts shall mean "I am directing my course to port".

(3) These signals shall be used, not only when an alteration of course is required, but at all times before vessels approach within half a mile of each other, from whatever direction, if their courses will bring them within that distance from each other.

Danger Signal

31. If, when steam vessels are approaching each other, the pilot of either vessel fails to understand the course or intention of the other, whether from signals being given or answered erroneously, or from other causes, the pilot so in doubt shall immediately signify the same by giving the danger signal of several short and rapid blasts of the whistle, not less than five, and if both vessels shall have approached within half a mile,

other, both shall be immediately slowed to a speed barely sufficient for steerageway and, when necessary, stopped and reversed, until the proper signals are given, answered and understood, or until the vessels shall have passed each other.

Cross Signals Prohibited

32. Pilots shall in no circumstances use "cross signals", that is, answering one blast of the whistle with two, or two blasts with one; whenever a pilot receives either of the whistle signals provided in rule 30 (2) and he deems it imprudent to comply with that signal, he shall immediately give the danger signal and observe the rule applying thereto (rule 31).

Approaching a short bend or curve in channel

33. Whenever a steam vessel is nearing a short bend or curve in the channel where, from the height of the banks or other cause, a steam vessel approaching from the opposite direction cannot be seen for a distance of half a mile, the pilot of such steam vessel, when he has arrived within half a mile of such bend or curve, shall give a blast of the whistle of at least eight seconds duration, which shall be answered by a similar blast given by the pilot of any approaching steam vessel within hearing on the other side and within half a mile of such bend or curve; should such a signal be so answered by a steam vessel upon the farther side of the bend or curve, then the usual signals for meeting and passing shall immediately be given and answered.

Leaving a Dock or Berth

34. When a steam vessel is leaving a dock or berth she shall give one blast of the whistle of at least eight seconds duration, which shall be answered by a similar blast given by any approaching steam vessel; both vessels shall be governed by rule 35 until the course of the vessel leaving the dock or berth becomes apparent, after which time the applicable steering and sailing rules shall be observed.

Special Circumstances

35. In obeying and construing these rules due regard shall be had to all dangers of navigation and collision and to any special circumstances which may render a departure from them necessary in order to avoid immediate danger.

Neglect of Rules or Other Precautions

36. Nothing in these rules shall exonerate any vessel, or the owner or master or crew thereof, from the consequences of any neglect to carry lights or signals, or of any neglect to keep a proper lookout, or of the neglect of any precaution which may be required by the ordinary practice of seamen, or by the special circumstances of the case.

Unnecessary Sounding of Whistle

37. No person shall authorize or permit unnecessary sounding of the whistle.

Distress Signals

38. When a vessel is in distress and requires assistance from other vessels or from the shore, the signals to be used or displayed, either together or separately, are as follows:

- (a) In the daytime:
 - (i) a gun or other explosive signal fired at intervals of about a minute;
 - (ii) the distant signal, consisting of a square flag, having either above or below it a ball or some object resembling a ball;
 - (iii) continuous sounding with any fog-signal apparatus.
- (b) At night:
 - (i) a gun or other explosive signal fired at intervals of about a minute;
 - (ii) flames from the vessel (as from burning of a tarbarrel or oilbarrel);
 - (iii) rockets or shells, throwing stars of any colour or description, fired one at a time, at short intervals;
 - (iv) a continuous sounding with any fog-signal apparatus.

Bell and Whistle Signals Between Bridge and Engine Room

39. When signals between bridge and engine room are made by bell or whistle they shall be given as follows:

- 1 stroke or 1 blast (when engines are stopped)..... Go Ahead
- 1 stroke or 1 blast (when engines are turning)..... Stop
- 2 strokes or 2 blasts..... Go Astern
- 3 strokes or 3 blasts..... Slow
- 4 strokes or 4 blasts..... Full Speed
- 2 strokes or 2 blasts shall always mean "Go astern", irrespective of other signals previously given.

Supplement

Diagrams

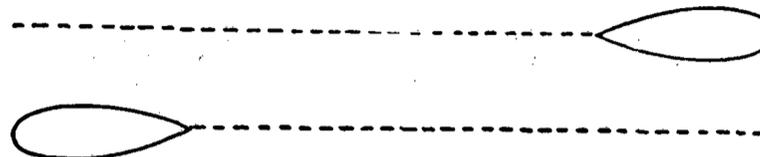
The following diagrams are intended to illustrate the steering and sailing rules:

First Situation



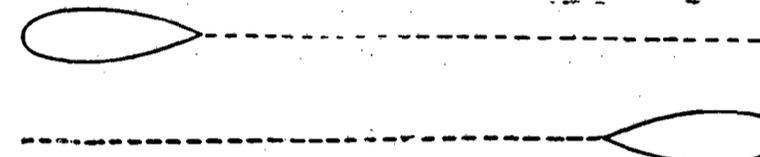
Here the two coloured lights visible to each will indicate their direct approach end on to each other. In this situation it is a standing rule that both shall direct their courses to starboard and pass on the port side of each other, each having previously given one distinct blast of the whistle.

Second Situation



In this situation the red light only will be visible to each, the screens preventing the green lights from being seen. Both vessels are evidently passing to port of each other, which is permissible in this situation, each pilot having previously signified his intention by one distinct blast of the whistle.

Third Situation



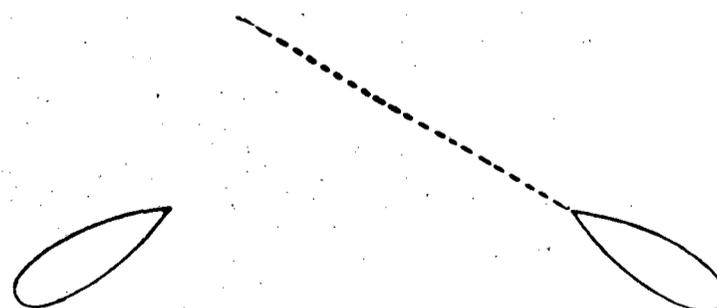
In this situation the green light only will be visible to each, the screens preventing the red light from being seen. They are therefore passing to starboard of each other, which is permissible in this situation, each pilot having previously signified his intention by two distinct blasts of the whistle.

Fourth Situation



In this situation one steam vessel is overtaking another steam vessel from some point more than two points abaft the beam of the overtaken steam vessel. The overtaking steam vessel may pass on the starboard or port side of the steam vessel ahead after the necessary signals for passing have been given, with assent of the overtaken steam vessel, as prescribed in rule 28.

Fifth Situation



In this situation two steam vessels are approaching each other at right angles or obliquely in such manner as to involve risk of collision, other than where one steam vessel is overtaking another.

The steam vessel which has the other on her own port side shall hold her course and speed, and the other shall keep clear by crossing astern of the steam vessel that is holding course and speed; or, if necessary to do so, shall slacken her speed or stop or reverse. Both steam vessels shall otherwise observe the provisions of rules 30 and 31 with respect to the signals for passing and the danger signal.