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# Canada



**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 569

## SHIP'S LOG

**FOR**

**Month of** SEPTEMBER **19**73

<b>Days at Sea</b>	<u>10</u>
<b>Days in Harbour</b>	<u>20</u>
<b>Total Distance Run</b>	<u>2412.9</u>

B. Waal **LCDR**  
Navigating Officer.

A. Hammy  
Captain.

A. Hammy **Capt(H)**  
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.

#### 00-03 CHANGE OF SKY IN LAST HOUR

- 00 Cloud development not observed
- 01 Clouds becoming less developed
- 02 State of sky on the whole unchanged
- 03 Clouds developing

#### 04-10 HAZE, ETC.

- 04 Smoky
- 05 Dry haze
- 06 Widespread dust
- 07 Dust raised near station
- 08 Dust devils within last hour
- 09 Duststorm or sandstorm within last hour
- 10 Mist (visibility 1/2 nautical mile or more)

#### 11-12 SHALLOW FOG

- 11 In patches
- 12 More or less continuous

#### 13-17 PHENOMENA WITHIN SIGHT BUT NOT AT STATION

- 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

#### 17-19 PHENOMENA WITHIN LAST HOUR OR AT TIME OF OBSN.

- 17 Thunder heard, but no precipitation at station
- 18 Squall(s)
- 19 Funnel cloud(s)

#### 20-29 PHENOMENA WITHIN HR. BUT NOT AT TIME OF OBSN.

- 20 Drizzle
- 21 Rain
- 22 Snow
- 23 Rain and snow
- 24 Drizzle or rain, freezing

- 25 Shower(s) of rain
- 26 Shower(s) of snow, or of rain and snow

- 27 Shower(s) of hail, or of hail and rain
- 28 Fog
- 29 Thunderstorm, with or without precipitation

#### 30-39 (Not likely to be used in ship reports)

- | <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            |

#### 40-49 FOG

- 40 Fog at a distance
- 41 Fog in patches

- | <i>Sky discernible</i>             | <i>Visibility less than 1/2 mi. at time of observation</i> | <i>Sky not discernible</i> |
|------------------------------------|------------------------------------------------------------|----------------------------|
| 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                         |

#### 50-59 DRIZZLE (Consists of numerous minute drops)

- | <i>Intermittent</i> | <i>Continuous</i> |
|---------------------|-------------------|
| 50 Slight drizzle   | 51                |
| 52 Moderate drizzle | 53                |
| 54 Thick drizzle    | 55                |

- | <i>Slight</i>       | <i>Moderate or thick</i> |
|---------------------|--------------------------|
| 56 Freezing drizzle | 57                       |
| 58 Drizzle and rain | 59                       |

#### 60-69 RAIN

- | <i>Intermittent</i> | <i>Continuous</i> |
|---------------------|-------------------|
| 60 Slight rain      | 61                |
| 62 Moderate rain    | 63                |
| 64 Heavy rain       | 65                |

- | <i>Slight</i>                | <i>Moderate or heavy</i> |
|------------------------------|--------------------------|
| 66 Freezing rain             | 67                       |
| 68 Rain or drizzle with snow | 69                       |

#### 70-79 SOLID PRECIPITATION, NOT IN SHOWERS

- | <i>Intermittent</i>                | <i>Continuous</i>     |
|------------------------------------|-----------------------|
| 70 Slight snow in flakes           | 71                    |
| 72 Moderate snow in flakes         | 73                    |
| 74 Heavy snow in flakes            | 75                    |
| 76 Ice needles                     | } With or without fog |
| 77 Granulated snow                 |                       |
| 78 Isolated starlike snow crystals |                       |
| 79 Ice pellets                     |                       |

#### 80-84 RAIN SHOWER(S)

- 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

#### 85-90 SOLID PRECIPITATION IN SHOWER(S)

- | <i>Slight</i>            | <i>Moderate or heavy</i> |
|--------------------------|--------------------------|
| 85 Snow                  | 86                       |
| 87 Soft or small hail*   | 88                       |
| 89 Hail* without thunder | 90                       |

(\*The hail may be with or without rain or snow)

#### 91-94 THUNDER HEARD DURING PRECEDING HOUR BUT NOT AT TIME OF OBSERVATION (Note, choose numbers 17 or 29 whenever applicable)

- |                                             |                                                  |
|---------------------------------------------|--------------------------------------------------|
| 91 Slight rain                              | } Precipitation occurring at time of observation |
| 92 Moderate or heavy rain                   |                                                  |
| 93 Slight snow and rain, or hail            |                                                  |
| 94 Moderate or heavy snow and rain, or hail |                                                  |

#### 95-99 THUNDERSTORM AT TIME OF OBSERVATION

- |                                         |                                            |
|-----------------------------------------|--------------------------------------------|
| 95 Slight or moderate tstm without hail | } Precipitation occurring at time of obsn. |
| 96 Slight or moderate tstm with hail    |                                            |
| 97 Heavy thunderstorm without hail      |                                            |
| 98 Tstm with dust or sandstorm          |                                            |
| 99 Heavy thunderstorm with hail         | (Ditto)                                    |



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 steer- age 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 pro- nounced; crests have a glassy appear- ance 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 pro- nounced 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 main- sails.	Large waves begin to form; the white foam crests are more extensive every- where. (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 sprindrift. 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 cover- ed with long white patches of foam lying along the direction of the wind. Everywhere the edges of the wave crests are blown into froth. Visi- bility 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 af- fected.....	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
								Feet	ft
								Fix by any method	fix
								Green, in relative bearing	G
								Harbour	Hbr
								Head	Hd
								High, for gyro error	H
								Hour	Hr
								Island	Is
								Jetty	Jty
								Knot	kt
								Left hand edge	←
								Light	Lt
								Light Buoy	Lt By
								Light House	Lt Ho
								Light Vessel	Lt Vsl
								Low, for gyro error	L
								Magnetic	(M)
								Mile	m
								Minute	min or '
								Observed Position	OP
								Open fire	OF
								Point	Pt
								Port	pt
								Position	pos
								Radar	Ra
								Radar Beacon	Racon
								Radio Beacon	Ro Bn
								Radio Direction Finder	Ro D/F
								Range	rg
								Red, in relative bearing	R
								Revolution	rev
								Right hand edge	→
								Second	sec
								Set course	s/c
								Shackle	sh
								Special Sea Dutymen	SSD
								Speed	sp
								Starboard	st
								Transit	ø
								True	(T)
								Various	var
								Visibility	vis
								Wharf	Whf
								Yard	x
								Zigzag	ZZ

\* 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.

\* 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.



Time	Zone Suffix	Log (Stating type) Electro- magnetic	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		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																																											
1513				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			Starboard and 1st of Port Watches. CPO & PO 1630 - 0755 Tuesday. LS & below 1640 - 0745 " OSUT 1640 - 0100 " WK 1640 - 1015 "										1410  { Anglican Church Steeple 348°. ↳ Dominion Coal Jetty 019°. ↳ Old Railway Pt. 106°. Careening Pt. Br. 1000621									



19 63

FROM HALIFAX

TO ST. JOHN'S, NFLD.

, OR AT SEA & LOUISBURG.

REMARKS							Initials of the Officer of the Watch
0001 - Came to immediate notice for steam.							
0115 - Called the hands. 0145 SSD closed up, assumed NBCD 1. 0150 - Tug "Whelp" alongside port side. Singled up. 0155 - Slipped, hauled off by tug. Switched on Nav Lts. 0159 Tug cast off. Proceeded. 0203 - $\frac{1}{2}$ c 142° sp. 7 kts. 0211 - a/c 160°. 0221 - a/c 153°. 0229 - a/c 159° sp. 10 kts. SSD secured. 0230 - Reverted to NBCD 3. 0242 - a/c 175° sp. 15 kts. 0249 - a/c 156°. Dartmouth Range brg. 339° by Gyro. Gyro correct. 0310 - a/c 101° sp. 18 kts. 0326 - Outer Automatic Buoy 1 pt. 1.1 m. (Ra) a/c 083° 0340 - { Sambro Is. Lt. 238° Devils Is. Lt. 310° Shutts Is. 338°							
0450 - { Egg Is. Lt. 350°, 10.45 m. (Ra.) Egg Is. Buoy 000°, $\frac{5.7}{5.2}$ m. (Ra.) a/c 068°							
0615 - { Beamer Pt. Lt. 282° Current since 0450 - Liscombe Is. Lt. 350° Set 205° - $\frac{1}{4}$ kt. 0642 - Sunrise. Switched off Navigation lights Gyro 2° L. by Sun's Amplitude a/c 066° (G) 0758 - { Liscombe Is. Lt. 281° Country Is. Lt. 352° 0730 - Lifebuoy Sentry exercised Lifebuoy Alarm tested 0800 - Divisions and prayers. 0815 - Hands employed cleaning ship. 0930 - Hands employed painting forward messdeck. (WS) and (RP) classes to instruction. 1000 - Exercised seaboats crew. 1030 General Alarm tested. 1016 - One man suffered broken arm while securing # 4 Carley Float. (ABBN1 - A.N. OTHER - 1234 H.). 1030 Cape Canso brg. 287° - 17.8 m. (Ra.). 1142 - One pair binoculars Patt. # 1900 A., Serial 58274, lost overboard. 1203 - a/c 002° sp. 15 kts. 1230 - Communications publications correct. 1323 - Louisburg Bell Buoy brg. 000° - 7 m. (Ra.) 1340 SSD closed up, assumed NBCD 1. 1355 - Louisburg Bell Buoy 1 pt. 1 m. (Ra.) a/c 275° sp. 10 knots. 1401 - Co. and sp. as reg. for coming to Lt. 1410 Let go pt. Lt. 1415 Came to in 6 fms. with 3 sh. - on deck. 1420 - SSD secured, Lt. watches set. Remained at immediate notice for steam. 1430 - Hands to General Payment. 1500 - SSD closed up. 1508 - Shortened in to 1 sh. on deck. 1513 Weighed and proceeded. 1530 - Secured alongside Sydney & Louisburg Railway Wharf pt. side to. Reverted to 2 hour notice for steam. Co. & spd. as reg. to berth alongside. 1532 - SSD secured, reverted to NBCD 4. 1600 - ABBN1 - A.N. OTHER, 1234-H. landed to Louisburg General Hospital. 1630 Duty watch to fire drill. 1615 - Cleared Lower Deck. Read Warrant # 72. 1754 - Sunset. 1800 - Shore patrol landed. 1905 - Sub-Lieutenant P. Smith - 0-32414 RCN, joined ship from HMCS "STADACONA". Eight men joined ship from HMCS "STADACONA". 2300 - RCAF aircraft reported missing 50 m. SE. Louisburg. Recalled libertymen. 2330 - Came to immediate notice for steam. 2345 - Shore patrol returned on board.							
Position	Latitude N.	Longitude W.	Depending on	Draught			Notice for Main Engines at Noon
0800	44° 53' 3	61° 29' 1	0758 (+4) FIX.	Time	Forward	Aft	
1200	45° 25' 4	59° 58' 8	1159 (+4) (Ra.)	0145	12' 5"	16' 6"	
2000	° ' '	° ' '		1425	12' 3"	16' 4"	

HMCS PROTECTEUR

SATUR DAY

1<sup>ST</sup> OF SEPTEMBER

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									0	CALM			CALM		98	01	1005.0	3.9	3.3	
0500																					
0600																					
0700																					
0800	+4									3	240	5	0	-	0	98	02	1010.5	3.3	2.2	
0900																					
1000		u/s	.3	6.0	242	242	295	3°W	81°W												
1020					242	242	295	3°W	51°W												
1100		u/s	6.4	30.7	235	235	288	3°W	51°W												
1200	+4	u/s	6.8	35.8	VAR	VAR	VAR	VAR	51°W	1	295	10	0	-	0	98	02	1010.5	6.1	4.4	3.3
1300		u/s	5.6	30.3	VAR	VAR	VAR	VAR	51°W												
1400		u/s	4.9	32.8	VAR	VAR	VAR	VAR	51°W												
1500		u/s	5.6	23.8	VAR	VAR	VAR	VAR	51°W												
1600	+4	u/s	5.4	23.1	VAR	VAR	VAR	VAR	51°W	3	295	2	0	-	0	98	02	1012.0	6.3	3.9	3.3
1700		u/s	5.7	32.4	VAR	VAR	VAR	VAR	51°W												
1800	+4	u/s	4.2	21.0	VAR	VAR	VAR	VAR	51°W	2	295	5	0	-	0	98	02	1010.5	4.3	3.3	3.3
1900		u/s	4.6	36.1	VAR	VAR	VAR	VAR	51°W												
2000	+4	u/s	5.8	29.7	VAR	VAR	VAR	VAR	51°W	2	250	4	0	-	0	98	02	1010.0	4.6	3.8	3.2
2100		u/s	5.9	29.8	VAR	VAR	VAR	VAR	81°W												
2200		u/s	5.4	26.9	VAR	VAR	VAR	VAR	51°W												
2300		u/s	.5	2.4	VAR	VAR	VAR	VAR	51°W												
2400	+4									3	150	15	0	-	0	98	02	1008.0	2.2	1.7	3.9
Distance run through the Water Midnight to Midnight		Leave Granted to Ship's Company										Anchor Bearings									
66.1																					



FROM PANGNIERTUNG N.W.T. TO FROBISHER BAY N.W.T. <sup>AND</sup> OR AT PANGNIERTUNG N.W.T.

000624

# HMCS PROTECTEUR

## SUN DAY

## 2<sup>ND</sup> OF SEPTEMBER

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									5	160	15	0	-	0	99	02	1008.0	3.3	2.2	3.2
0500		u/s	4.1	22.4	VAR	VAR	VAR	VAR	50°W												
0600		u/s	9.6	54.6	VAR	VAR	VAR	VAR	50°W												
0700		u/s	10.3	57.1	VAR	VAR	VAR	VAR	50°W												
0800	+4	u/s	10.8	61.4	VAR	VAR	VAR	VAR	50°W	8	100	20	2	110	1	98	03	1005.0	0.3	0.3	3.2
0900		u/s	11.8	63.1	VAR	VAR	VAR	VAR	50°W												
1000		u/s	10.8	63.5	VAR	VAR	VAR	VAR	50°W												
1100		u/s	11.6	63.0	VAR	VAR	VAR	VAR	49°W												
1200	+4	u/s	11.8	60.9	VAR	VAR	VAR	VAR	49°W	8	085	20	2	090	2	96	03	1002.5	0.6	0.4	3.2
1300		u/s	8.1	44.9	VAR	VAR	VAR	VAR	49°W												
1345					VAR	VAR	VAR	VAR	49°W												
1400		u/s	16.1	83.9	145	145	195	1°W	49°W												
1435					145	145	195	1°W	49°W												
1500		u/s	17.4	92	160	160	212	3°W	49°W												
1600	+4	u/s	15.4	76.6	160	160	212	3°W	49°W	8	035	34	4	060	10	96	45	992.0	2.2	1.9	5.6
1700		u/s	15.2	76.6	160	160	212	3°W	49°W												
1800	+4	u/s	15.0	76.5	190	190	226	3°W	49°W	8	025	30	4	055	10	96	02	993.2	0.8	0.8	5.6
1900		u/s	15.2	76.7	200	200	252	3°W	49°W												
2000	+4	u/s	15.1	76.5	200	200	252	3°W	49°W	8	035	24	3	060	6	96	45	991.0	2.8	2.8	7.2
2100		u/s	15.0	76.1	230	230	279	2°W	47°W												
2200		u/s	14.2	71.6	VAR	VAR	VAR	VAR	45°W												
2300		u/s	14.0	70.2	VAR	VAR	VAR	VAR	44°W												
2400	+4	u/s	12.5	62.9	250	250	296	2°W	44°W	4	340	24	5	000	8	95	44	993.0	1.7	1.1	5.6
Distance run through the Water Midnight to Midnight			Leave Granted to Ship's Company										Anchor Bearings								
254.0																					



1973 FROM PANQNIJTUNG N.W.T. TO FROBISHER BAY, N.W.T. OR AT

REMARKS							Initials of the Officer of the Watch
0001 - Stopped in ice pack							
0030 { Shomes Pt 11.0 mi Ra { Wareham Isd 11.2 mi							
0200 { Shomes Pt 11.8 mi Ra { Wareham Isd 12.5 mi							
0300 - Ship drifting NNW @ 1.5 kts							
0300 { Shomes Pt 12.2 mi Ra { Wareham Isd 13.0 mi							
0400 - Came to immediate N.F.S							
0429 - Underway - Co + Sp as required to follow N.B. McLean in pack ice							
0500 { Muleahdjuin Isd 12.0 mi Ra { Shomes Pt 9.7 mi Wareham Isd 11.0 mi							
0556 { Shomes Pt 9.2 mi Ra { Wareham Isd 4.3 mi Cape Queen 13.3 mi							
0700 { Wareham Isd 11.0 mi Cape Queen 7.5 mi Nunuk Pt 9.3 mi							
0801 - Co + Sp as required to follow N.B. McLean in pack ice							
0852 - Entered snow storm - vis 1 mi switched on Navigation Lights							
1000 { 64° 40.2 N Ra { 64° 07.4 W							
1152 - Switched off Navigation Lights							
1150 { 64° 21.0 N Ra { 63° 38.0 W							
1345 - entered clear water a/c 145° sp 18							
1435 - a/c 160 sp 15							
1600 { 63° 37.9 N DR { 69 44.0 W							
1800 { 63° 10.2' N DR { 62° 34.6 W							
2000 { 62° 35.5 N DR. { 62 42.5 W							
2110 - a/c 228 2120 - a/c 220 2128 - a/c 230							
2230 - a/c 350 sp 12 2231 - a/c 250							
Position	Latitude	Longitude	Depending on	Draught			Notice for Main Engines at Noon
0800	64° 45.2 N	63° 52.6 W		Time	Forward	Aft	
1200	64° 20' N	63° 33' W	1153 (+4) fix + DR.				
2000	62° 38.5 N	62° 42.5 W	2000 (+4) DR.				

HMCS PROTECTEUR

MON DAY

3<sup>RD</sup> OF SEPTEMBER

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	12.6	63.1	VAR	VAR	VAR	VAR	47°W												
0200		u/s	12.7	63.3	290	290	339	2°W	47°W												
0300		u/s	12.5	62.7	VAR	VAR	VAR	VAR	47°W												
0400	+4	u/s	9.8	49.1	VAR	VAR	VAR	VAR	47°W	8	330	20	3	320	4	98	02	995.0	2.4	2.3	2.2
0500		u/s	12.4	62.1	315	315	005	3°W	47°W												
0600		u/s	11.1	58.6	315	315	005	3°W	47°W												
0700		u/s	13.9	69.8	315	315	005	3°W	47°W												
0800	+4	u/s	12.6	63.1	315	315	005	3°W	47°W	8	330	30	6	320	8	98	02	995	3.9	2.8	4.4
0900		u/s	12.8	62.6	315	315	005	3°W	47°W												
1000		u/s	11.5	57.6	VAR	VAR	VAR	VAR	47°W												
1100		u/s	9.0	43.4	VAR	VAR	VAR	VAR	47°W												
1200	+4	u/s	14.1	70.5	VAR	VAR	VAR	VAR	47°W	7	300	15	1/2	270	2	98	02	1003	4.4	2.8	3.3
1300		u/s	18.0	91.7	VAR	VAR	VAR	VAR	47°W												
1400		u/s	7.1	35.1	VAR	VAR	VAR	VAR	47°W												
1500																					
1600	+4									7	290	8	0	-	0	98	02	1006.5	7.2	5.0	
1700																					
1800										7	290	15	1	-	0	98	02	1008	7.2	5.0	
1900																					
2000	+4									8	285	14	2	-	0	98	02	1009.5	7.2	5.0	
2100																					
2200																					
2300																					
2400	+4									8	330	10	0	-	0	98	02	1005.0	7.2	5.6	
Distance run through the Water Midnight to Midnight			Leave Granted to Ship's Company								Anchor Bearings										
170.1											1340 { Monument clsl Bn 3010 Long clsl Bn 3810 K Mc-Laren clsl 0420 K Main clsl 1100										



1973 FROM PANGNIETUNG N.W.T. TO FROBISHER BAY, N.W.T. <sup>AND</sup> OR AT FROBISHER BAY, N.W.T.

REMARKS							Initials of the Officer of the Watch
0007 - a/c 290 0025 - a/c 295 0041 - a/c 290 0100 - a/c 295							
0145 { Harper Isd 13.3 mi Blanch Bluff 14.0 mi Ra { Laflotte Isd 19.0 mi							
0230 - a/c 290 0233 - a/c 315 0245 - a/c 295 0250 - a/c 290 0301 - a/c 315 0305 - a/c 300 0325 - SP 8 - Co var to clear ice 0400 - SP 12							JMB
0425 { Birge Pt 11.8 mi Peters Pt 14.3 mi Ra {							
0515 - Sunrise - Navigation lights off. 0530 Sp 14							
0515 { Birge Pt 10.9 mi Peters Pt 9.0 mi Ra {							
0628 { Wynne Edwards Bay 5.6 mi Presidents Seat 7.6 mi Ra { C. Ostrom 11.0 mi							
0700 - Sp 13							
0800 - Hands to flying stations							JG
0830 - Launched helo 22 - secured flying stations							
0930 - a/c 285 0931 - Sp 10 0935 - a/c 282 0950 - Hands to flying stations							
0951 - a/c 280 0959 - Sp 9							
1003 - SP 8 1011 - a/c 284 1012 - Recovered helo 22 - secured flying stations 1015 - a/c 285							
1045 - SSD + Cable party closed up - Co + Sp Var to navigate in Pike-Resore Passage 1056 - Hands to flying stations							
1117 - launched helo 36 1150 - recovered helo 36 1200 - secured flying stations							JG
1201 - a/c 326 Sp 15 1204 - Secured SSD + cable party 1215 - SP 18 1220 - a/c 338							
1252 a/c 335							
1309 - a/c 340 1323 - a/c 351 1335 - a/c 348 1336 - Co + Sp var as required to come to ±							
1340 - let go at ± - depth 6 1/2 fms. 1355 - came to with 5 sh. at waterline 1358 - rang off main engines 1359 - secured SSD + cable party							
1445 ± Brgs Connect							
1550 ± Brgs Connect							JG
1627 ± Brgs Connect							
1730 ± Brgs Connect							JMB
1820 ± Brgs Connect							
1946 - Sunset - ± lights on							JG
1920 ± Brgs Connect							
2015 ± Brgs Connect							
2130 ± Brgs Connect							
2230 ± Brgs Connect							
2330 ± Brgs Connect							JG
Position	Latitude	Longitude	Depending on	Draught			Notice for Main Engines at Noon
0800	62° 52' 15" N	66° 54' 18" W	0800 (+4) fix	Time	Forward	Aft	
1200	62° 06' 2" N	66° 56' 3" W	RADAR				
2000	"	"					

HMCS PROTECTOR

TUES DAY

4<sup>TH</sup> OF SEPTEMBER

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	+4									8	355	10	1	-	0	98	02	1011	27.6	1.3	
0500																					
0600																					
0700																					
0800	+4									6	340	10	0	-	0	98	02	1015.5	5.6	4.4	
0900																					
1000																					
1100																					
1200	+4									2	340	9	0	-	0	98	01	1017	5.6	4.4	
1300																					
1400																					
1500																					
1600	+4									2	340	10	0	-	0	98	02	1017	7.1	5.6	
1700																					
1800	+4									2	340	8	0	-	0	98	02	1013.0	7.1	5.5	
1900																					
2000	+4									1	340	5	0	-	0	98	02	1018.5	7.0	5.4	
2100																					
2200																					
2300																					
2400	+4									1	-	0	0	-	0	98	02	1018.0	2.8	2.2	
Distance run through the Water Midnight to Midnight		Leave Granted to Ship's Company										Anchor Bearings									



1973 FROM

TO

OR AT FROBISHER BAY, N.W.T.

REMARKS		Initials of the Officer of the Watch
	0025 $\pm$ Bup Correct	
	0128 $\pm$ Bup Correct	
	0235 $\pm$ Bup Correct	
	0342 $\pm$ Bup Correct	J.
	0500 $\pm$ Bup Correct	
0529 - Sunrise $\pm$ lights off	0600 $\pm$ Bup Correct	
	0615 $\pm$ Bup Correct	
	0715 $\pm$ Bup Correct	JS
	0845 $\pm$ Bup Correct	
	0955 $\pm$ Bup Correct	
	1100 $\pm$ Bup Correct	
	1145 $\pm$ Bup Correct	Jon
	1246 $\pm$ Bup Correct	
	1334 $\pm$ Bup Correct	
1400 - Hands to flying stations 1428 - launched helo 22 1436 - launched helo 36 - secured flying stations	1431 $\pm$ Bup Correct	
1538 - hands to flying stations 1555 - recovered helo 22	1530 $\pm$ Bup Correct	JMB
1615 - recovered helo 36 - secured flying stations	1605 $\pm$ Bup Correct	
	1730 $\pm$ Bup Correct	JS
	1830 $\pm$ Bup Correct	
	1925 $\pm$ Bup Correct	JOS
	2015 $\pm$ Bup Correct	
	2120 $\pm$ Bup Correct	
	2223 $\pm$ Bup Correct	
	2309 $\pm$ Bup Correct	

Position	Latitude	Longitude	Depending on	Draught			Notice for Main Engines at Noon
				Time	Forward	Aft	
0800	° ' "	° ' "					
1200	° ' "	° ' "					
2000	° ' "	° ' "					1/2 Hr.

HMCS PROTECTOR

WEDNES DAY

5<sup>TH</sup> OF SEPTEMBER

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									2	-	0	0	-	0	98	02	1018.0	2.8	2.2	
0500																					
0600																					
0700																					
0800	+4									2	-	0	0	-	0	98	02	1018.0	2.8	2.2	
0900																					
1000																					
1050					170	170	219	3W	46W												
1100		m/s	7.1	35.3	173	173	222	3W	46W												
1105					173	173	222	3W	46W												
1150					163	163	211	2W	46W												
1200	+4	m/s	18.0	100.0	VAR	VAR	VAR	VAR	46W	4	120	5	17	130	1	98	02	1016.0	2.6	2.0	3.3
1300		m/s	12.3	66.3	VAR	VAR	VAR	VAR	46W												
1400		m/s	12.3	66.3	130	130	179	3W	46W												
1450					130	130	179	3W	46W												
1500		m/s	18.0	100.5	135	135	186	4W	46W												
1600	+4	m/s	18.1	100.8	135	135	186	4W	46W	8	125	10	1	130	1	98	02	1014.0	2.6	2.0	3.3
1645					135	135	186	4W	46W												
1700		m/s	18.0	99.6	145	145	193	2W	46W												
1740					145	145	193	2W	46W												
1800	+4	m/s	18.1	101.6	125	175	220	10E	46W	7	215	10	1	120	3	98	03	1014.4	2.8	2.2	1.1
1828					175	175	220	10E	46W												
1856					225	225	265	6E	46W												
1900		m/s	18.1	101.4	230	230	270	3E	43W												
2000	+4	m/s	18.1	101.1	VAR	VAR	VAR	VAR	43W	7	090	18	1	110	2	98	02	1012.0	3.3	2.8	3.9
2100		m/s	16.4	82.7	225	225	265	2E	42W												
2200		m/s	16.2	80.9	225	225	265	2E	42W												
2300		m/s	16.3	81.2	225	225	265	2E	42W												
2400	+4	m/s	14.6	72.8	225	225	265	2E	42W	8	110	25	3	105	4	97	53	1007	4.4	3.9	3.3
Distance run through the Water Midnight to Midnight		Leave Granted to Ship's Company										Anchor Bearings									
221.6																					

1973 FROM FROBISHER Bay, N.W.T. TO PORT BURWELL

AND OR AT FROBISHER Bay, N.W.T.

REMARKS							Initials of the Officer of the Watch
0100 ± Buys Correct							
0200 ± Buys Correct							
0300 ± Buys Correct							
0400 ± Buys Correct							JS
0435 ± Buys Correct							
0545 - Sunrise - ± lights off							
0530 ± Buys Correct							
0642 ± Buys Correct							
0725 ± Buys Correct							J.P.G.
0800 - Colours							
1000 - SSD + Cable party closed up.							
1015 - commenced weighing ±							
1025 - came to immediate NPS							
1030 - ± weighed a/c 170 Sp 12							
1050 - a/c 173 Sp 20							
1105 - a/c 163							
1150 - <del>at 1045</del> - SSD + Cable party closed up - Co was to enter Pike River passage.							JMB
1200 - Sp 12							
1225 - Co + Sp ver to navigate channel							
1256 { PTA 097° PTB 170° PTC 002° PTD 327°							
1325 - Sp 18							
1331 - Sp 8 for trial and water sample							
1350 - a/c 130							
1349 { PTA 1.9 mi PTB 1.9 mi Ra PTC 3.3 mi							
1452 - a/c 135°							
1500 - Sp 18							
1452 { 62 53.8 N Ra 66 58.0 W							J
1645 - a/c 145							J
1630 { 62 32 N Ra 66 08.5 W							JS
1740 - a/c 175							
1828 - a/c 225							
1856 - a/c 230							
1900 { K Savage Is 2.2 mi Pt A 4.1 mi Ra East Bluff 3.1 mi							J.P.G.
1903 - a/c 225							
1930 - hands to flying stations							
1951 - a/c 190							
1953 - launched hls 22							
2003 - Sp 16							
2020 - a/c 05 launched hls 36							
2022 - a/c 225 secured flying stations							
2130 - hands to flying stations							
2140 - a/c 100							
2145 - recovered hls 22 a/c 225							
2208 - a/c 095							
2215 - recovered hls 36 - secured flying stations							
2315 - Sp 14							JS
Position	Latitude	Longitude	Depending on	Draught			Notice for Main Engines at Noon
0800	° ' "	° ' "		Time	Forward	Aft	
1200	62° 32' 8" W	66° 57' 8" W	RADAR	1000	27' 11"	29' 9"	
2000	61° 39' N	66° 16' W	2000(+4) Ra				

HMCS PROTECTEUR

THURS DAY

6<sup>TH</sup> OF SEPTEMBER

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
0030 0049 0100		m/s	14.9	74.9	225 235 240	225 235 240	261 270 275	3E 3E 3E	38W 38W 38W												
0159 0200		m/s	16.0	80.0	240 242	240 242	225 277	3E 3E	38W 38W												
0236 0300		m/s	16.0	80.0	242 210	242 210	277 247	3E 2E	38W 38W												
0400	+4	m/s	16.1	80.7	210	210	247	2E	38W	8	110	25	3	110	3	97	80	1004	4.4	3.9	2.8
0500		m/s	16.1	80.7	210	210	247	2E	38W												
0535 0600		m/s	12.2	61.0	210 265	210 265	247 296	2E 6E	38W 41W												
0700		m/s	8.9	44.7	VAR	VAR	VAR	VAR	42W												
0800	+4									8	150	12	1	120	2	95	46	995	4.4	3.9	2.8
0900																					
1000																					
1100		m/s	5.0	25.5	VAR	VAR	VAR	VAR	42W												
1106 1200	+4	m/s	14.5	73.1	085 085	085 085	125 125	2E 2E	42W 42W	8	150	12	1	120	2	05	46	995	4.2	3.7	1.8
1300		m/s	16.9	84.2	085	085	125	3°E	42W												
1400		m/s	17.0	84.8	085	085	125	2°E	42W												
1500		m/s	17.6	88	070	070	112	2°W	40W												
1600	+4	m/s	17.5	86	070	070	112	2W	40W	8	176	20	2	115	3	92	51	994.5	3.3	3.3	3.2
1700		m/s	17.5	86.5	070	070	112	2W	40W												
1800	+4	m/s	17.5	86.1	070	070	112	2W	40W	8	150	12	1	110	1	32	45	995	4.0	3.3	3.8
1900		m/s	17.5	86	070	070	112	2W	40W												
1930 1946 2000	+4	m/s	17.5	86.3	070 100 110	070 100 110	112 142 152	2W 2W 2W	40W 40W 40W	8	050	10	2	115	3	94	42	995	3.3	2.9	4.4
2100		m/s	17.4	85.8	VAR	VAR	VAR	VAR	40W												
2200		m/s	14.6	73.1	110	110	152	2W	40W												
2300		m/s	14.6	73.1	VAR	VAR	VAR	VAR	40W												
2400	+4	m/s	17.4	86.6	155	155	200	6W	39W	8	060	14	2	120	3	96	02	994	1.7	1.1	1.1
Distance run through the Water Midnight to Midnight		Leave Granted to Ship's Company										Anchor Bearings									
322.7																					



1973 FROM FROBISHER BAY, N.W.T. TO PAYNE BAY

AND  
OR AT PAYNE BAY

REMARKS							Initials of the Officer of the Watch
0036 - a/c 235 <sup>6</sup> 0035 - SP16 0049 - a/c 240							
0159 - a/c 242							
0236 - a/c 210							
0510 - SP6 0528 - SP16 0530 - hands to flying stations 0535 - a/c 268 0605 - launched helo 22 0606 - a/c 280 secured flying stations 0619 - a/c 265 0620 - SP12 0629 - a/c 232 SP6 0537 - Sunrise - navigation lights off 0600 - SSD + cable potty closed up 0630 Co + SP as required to 0642 - Hands to flying stations 0654 - let go 3rd & in 28 ft 0700 - came to with 9th at the WL - Reverted to 1/2 hr NFS.							
0750 - Launched helo 36 - Helo's engaged in frequent landing to embark fish							
0745 ± Bigs Connect							
0830 ± Bigs Connect							
0925 ± Bigs Connect							
1015 - Reverted helo 22 - came to immediately NFS. 1030 - Recovered helo 36 - secured flying stations - all fish embarked 1040 - Rang on main engines 1045 - Towed Co + SP as required to clear anchorage. 1100 - S/L 085 SP17							
1036 ± Bigs Connect							
1126 { Pt A 6.0 mi Pt B 8.0 mi Ra { Pt C 7.2 mi Pt D 4.8 mi							
1223 { 60° 03' N Re { 68° 54' W							
1330 { 60° 03.5' N Re { 68° 21.0' W							
1430 { 60° 07' N Re { 67° 52' W							
1550 { Southeast Pt 281°, 23.3 mi Re {							
1646 - switched on navigation lights							
1630 { 60° 18.1' N DR { 66° 51.3' W							
1730 { 60° 23.8' N DR { 66° 19.6' W							
1900 { 60° 32' N DR { 65° 32' W							
1914 - Sunset 1930 - a/c 100 1940 - a/c 110							
1923 { Button cl. 0800 17.3 mi Ra {							
2001 - a/c 115 2005 - a/c 129 2016 - a/c 139 2024 - a/c 110							
2200 { Pt Harvey 275° 11.8 mi 2200 { Knight cl. 2970 16.0 mi Re {							
2201 - a/c 170 2218 - a/c 156 2244 - a/c 155							
2300 { Cabot cl. 296° 23.7 mi 2300 { Home cl. 252° 18.5 mi Ra { Black Rk Pt 226° 21.5 mi							
2347 { mta Boche 2380 21.5 mi 2347 { E. Kakhwiah S. 252° 20.4 mi Re { E. Kakhwiah N 261° 20.0 mi							
Position	Latitude	Longitude	Depending on	Draught			Notice for Main Engines at Noon
0800	° /	° /		Time	Forward	Aft	
1200	° /	° /					
2000	° /	° /					

# HMCS PROTECTOR

## FRI DAY

## 7<sup>TH</sup> OF SEPTEMBER

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		m/s	17.6	86.7	155	155	200	6W	39W												
0200		m/s	17.7	87.0	155	155	200	6W	39W												
0245					155	155	200	6W	39W												
0300		m/s	17.6	86.8	160	160	205	6W	39W												
0400	+4	m/s	17.3	86.7	170	170	215	6W	39W	8	160	4	1	-	0	96	56	992.0	4.4	3.9	4.4
0401					170	170	215	6W	39W												
0445					160	160	205	6W	39W												
0500		m/s	14.6	73.6	170	170	215	6W	39W												
0544					170	170	215	6W	39W												
0600		m/s	6.5	32.3	155	155	200	6W	39W												
0609					155	155	200	6W	39W												
0700		m/s	17.1	85.4	146	146	190	5W	39W												
0800	+4	m/s	19.8	99.9	VAR	VAR	VAR	VAR	39W	8	330	8	2	180	2	96	42	991.0	5.0	4.4	4.4
0900		m/s	19.1	100.7	VAR	VAR	VAR	VAR	39W												
0908					102	102	144	3W	39W												
1000		m/s	19.0	100.5	326	326	359	3W	39W												
1100		m/s	17.8	92.9	VAR	VAR	VAR	VAR	39W												
1200	+4	m/s	19.5	101.2	146	146	189	3W	39W	8	270	15	0	695	2	95	43	989.5	3.3	3.3	3.1
1215					146	146	189	3W	39W												
1300		m/s	19.5	101.2	145	145	185	2W	38W												
1400		m/s	19.4	101.2	145	145	185	3W	37W												
1500		m/s	19.4	100.9	145	145	185	3W	37W												
1600	+4	m/s	19.5	100.5	145	145	185	3W	37W	6	135	12	1	100	2	95	43	989.5	3.4	3.2	3.1
1700		m/s	19.4	101.2	145	145	185	3W	37W												
1800	+4	m/s	19.5	101.2	145	145	185	2W	37W	1	050	18	0	130	3	92	42	990.0	7.8	7.2	5.0
1900		m/s	19.4	101.1	145	145	185	3W	37W												
2000	+4	m/s	19.0	101.5	145	145	185	3W	37W	3	656	10	0	130	2	92	42	990.0	6.0	5.3	5.0
2100		m/s	19.0	100.5	145	145	185	3W	37W												
2200		m/s	19.0	100.3	145	145	185	3W	37W												
2300		m/s	19.0	100.1	145	145	185	3W	37W												
2400	+4	m/s	19.0	100.4	145	145	185	3W	37W	3	045	11	1/2	-	0	98	02	988.0	8.3	7.8	7.8
Distance run through the Water Midnight to Midnight			Leave Granted to Ship's Company								Anchor Bearings										
433.7																					

1973 FROM PAYNE BAY

TO HALIFAX, N.S. OR AT

REMARKS							Initials of the Officer of the Watch
0025 Ra { C Territor 18.5 mi False Bay 25.5 mi mt Backe Pt 26.2 mi							
0130 Ra { C Territor 26.0 mi C White Handkerchief 23.8 mi C Daly 24.8 mi							
0245 - a/c 160° 0300 - a/c 170° 0230 Ra { Nachvale B.(S) 18.1 mi C White Handkerchief 18.1 mi C Daly 19.0 mi							
0318 Ra { Guleh Cape 18.0 mi C. Daly 20.0 mi C. White Handkerchief 21.0 mi							JDC
0401 - a/c 160 0445 - a/c 170 Sp 7 0500 - Hands to flying stations 0524 - Sunrise - navigation lights off. 0539 - launched Helo 36 - secured flying stations 0544 - a/c 155° 0445 Ra { The Muzzle 15.5 mi Reached Hl 15.3 mi Cold Feet C. 14.7 mi							
0610 - Hands to flying stations 0644 - recovered Helo 36 0655 - secured flying stations 0545 Ra { Reached Hl. 14.0 mi Cold Feet C. 12.6 mi Big chl 12.4 mi							
0710 - a/c 290 0735 - SSD + cable party closed up 0744 - a/c 255 0757 - a/c 100 0800 - a/c 104 0802 - secured SSD + cable party 0810 - a/c 100 0825 - a/c 102 0645 Ra { Big chl 12.2 mi Bluebell chl 11.1 mi Fish chl 13.5 mi							JMB
0908 - a/c 326 0732 Ra { Big chl Bluebell chl 0850 { Fish chl 239° 12.5 mi Ra							
1015 - a/c 040 Sp 16 1047 - a/c 146 1030 - a/c 246 1036 - a/c 056 1045 - Sp 18							
1200 Ra { 58° 31' N 62° 51' W							J
1215 - a/c 145 1257 - entered fog - navigation lights on 1215 Ra { Matchman chl 18.0 mi Fenger Hill chl 32.7 mi White Bear chl 31.0 mi							J
1312 Ra { Matchman chl 22.4 mi Fenger Hill chl 27.2 mi White Bear chl 17.9 mi							
1458 - navigation lights off 1419 Ra { White Bear chl 20.6 mi Cool chl 21.7 mi Saddle chl 20.8 mi							JH
1700 DR { 57° 12' N 60° 07' W							J
1800 DR { 56° 57' N 59° 46' W							J
1835. Sunset							JDC
2200 DR { 55° 54.5' N 58° 28.0 W							JH
2359 DR { 55° 23.2 N 57° 50.0 W							JH
Position	Latitude	Longitude	Depending on	Draught			Notice for Main Engines at Noon
0800	58° 30' N	62° 10' W	0732 (+4) fix + DR.	Time	Forward	Aft	—
1200	58° 31' N	62° 51' W	RADAR				
2000	56° 25.0 N	59° 07.0 W	1510 (+4) fix + DR.				

HMCS PROTECTOR

SATURDAY

8<sup>TH</sup> OF SEPTEMBER

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	19.0	99.9	145	145	185	6½W	33½W												
0111					145	145	185	6½W	33½W												
0200		u/s	19.0	99.8	110	110	147	3½W	33½W												
0230					110	110	147	3½W	33½W												
0300		u/s	19.0	99.8	155	155	190	6½W	33½W												
0400	+4	u/s	19.0	99.9	155	155	190	6½W	33½W	1	210	20	2	180	3	98	02	990.0	10.0	10.0	7.8
0445					155	155	190	6W	34W												
0500		u/s	19.0	98.6	145	145	180	6W	34W												
0600		u/s	19.0	99.9	155	155	190	6W	34W												
0700		u/s	19.0	99.9	155	155	190	6W	34W												
0800	+4	u/s	19.0	99.9	155	155	190	6W	34W	1	210	15	2	200	3	98	02	993.0	10.0	8.9	7.8
0900		u/s	16.9	84.5	155	155	190	6W	34W												
1000		u/s	17.0	85.2	155	155	190	6W	34W												
1100		u/s	12.4	63.3	VAR	VAR	VAR	VAR	34W												
1200	+4	u/s	1.3	7.5	VAR	VAR	VAR	VAR	34W	1	210	10	2	200	1	98	02	996.5	8.0	7.6	7.8
1300		u/s	13.9	68.8	VAR	VAR	VAR	VAR	34W												
1400		u/s	18.9	100.3	VAR	VAR	VAR	VAR	34W												
1500		u/s	18.7	99.9	VAR	VAR	VAR	VAR	34W												
1600	+4	u/s	19.0	99.7	VAR	VAR	VAR	VAR	34W	1	240	26	3	145	5	99	02	997.0	12.2	9.4	10.0
1700		u/s	19.1	99.2	235	235	265	1E	31W												
					235	235	265	1E	31W												
1800	+4	u/s	19.1	99.5	237	237	267	1E	31W	8	200	20	2	235	1	98	03	1000.0	10.6	8.4	10.0
1835					237	237	267	1E	31W												
1900		u/s	19.4	99.4	236	236	266	1E	31W												
2000	+4	u/s	19.4	99.9	236	236	266	1E	31W	8	240	10	2	235	2	98	02	1000.5	13.9	12.8	10.0
2010					236	236	266	1E	31W												
2100		u/s	19.4	99.5	210	210	240	0	30W												
2200		u/s	19.4	99.2	210	210	240	0	30W												
2300		u/s	19.4	99.2	205	205	236	1W	30W												
2330	+3																				
2400	+3	u/s	9.7	99.4	205	205	336	1W	30W	5	235	15	3	240	4	98	02	1000.5	13.3	11.1	12.1

Distance run  
through the Water  
Midnight to  
Midnight

Leave Granted to Ship's Company

Anchor Bearings

415.0



1973 FROM PAYNE BAY, P.Q. TO HALIFAX, N.S. , OR AT

REMARKS

Initials  
of the  
Officer  
of the  
Watch

0115 - a/c 110

0141 { False Cape 242 $\frac{1}{2}$ °, 27.0 mi  
Ra { C Harrison 249 $\frac{1}{2}$ °, 27.3 mi

0230 - a/c 155

0445 - a/c 145

0500 - a/c 155

0507 - Sunrise - navigation lights off - #1 gyro correct by auto amp.  
#2 gyro 1 $\frac{1}{2}$ ° low by comparison

0550 { Chazy Is. 235°  
Ra { S Wolf Is. 180°  
Black Is. 19.9 mi

0631 { Spotted Is. 170°  
S Wolf Is. 200°  
Halfway Is. 242°

0730 { Roundhill Is. 200°  
Ra { Spotted Is. 264°  
Roundhill Is. 7.9 mi

0930 - Hands to flying stations

1000 - launched helo 36  
1008 - recovered helo 36  
1035 - CO & Sp van to conduct operations  
1050 - launched helo 22 - secured flying stations

1130 - guns crew closed up.

1151 - commenced shoot - fired first round - Hands to flying stations

1225 - shoot completed - s/c 280 sp 5 1250 - a/c 015°  
1227 - launched helo 36  
1230 - recovered helo 22 - secured flying stations  
1240 - a/c 205° sp 18

1310 - a/c 180°  
1330 - a/c 182°  
1358 - a/c 162°

1330 { Copper Is. 284°, 10.4 mi  
Ra

1445 - a/c 180 - hands to flying stations

1420 { Spear Pt 232° 9.2 mi  
Ra

1500 - a/c 215

1503 - recovered helo 36 - secured flying stations  
1504 - a/c 155°  
1508 - a/c 180

1509 { 52° 21' N  
Ra { 55° 24' W

1648 { South Pt Lt. 102°  
Murray Pt 068 $\frac{1}{2}$ °  
Round Hill 096°

1740 - a/c 237

1739 { C Norman 151°  
Berge Pt 294°  
Man of Man Pt 012°

1900 { L'Anse au Loup 280°  
L'Anse Amour Lt. 252 $\frac{1}{2}$ °  
Nameless Cove Lt. 198°

1945 { L'Anse Amour Lt. 087 $\frac{1}{2}$ °  
Chazy Is. Lt. 278°  
Nameless Cove Lt. 107°

2010 - a/c 210°

2015 { Gamble Pt 16.4 mi  
Ra { Pt aux Perches 14.6 mi  
Shearby Is. 7.3 mi

2200 - a/c 205°

2155 { Kippale Is. 13.8 mi  
Ra { Pte aux Choix 9.3 mi  
Bluff Is. 11.4 mi

2200 { Pte aux Choix 095° - 9.1 mi  
Ra

2330 - advanced clocks 1 hour to zone (+3)

2305 { Lefontaine Pt 12.3 mi  
Ra { Pt A 12.2 mi  
Table Pt 13.7 mi

Position	Latitude	Longitude	Depending on	Draught			Notice for Main Engines at Noon
0800	53° 21.3' N	55° 36.5' W	0745(+4) fix + DR.	Time	Forward	Aft	
1200	52° 50.5' N	55° 35.5' W	1200(+4) Ra fix				
2000	51° 20' N	57° 07.0' W	2000(+4) fix				

# HMCS PROTECTOR

## SUN DAY

## 9<sup>TH</sup> OF SEPTEMBER

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	9.7	99.4	265	265	235	1W	29W												
0200		u/s	19.0	98.6	265	205	235	1W	29W												
0300		u/s	19.0	98.6	265	205	235	1W	29W												
0315					205	205	235	1W	29W												
0400	+3	u/s	19.0	98.8	210	210	238	1E	29W	3	250	10	2	235	2	98	01	1000.5	12.8	10.0	15.0
0500		u/s	19.0	98.6	210	210	238	1E	29W												
0530					210	210	238	1E	29W												
0600		u/s	19.0	98.6	220	220	245	2E	27W												
0645					220	220	245	2E	27W												
0700		u/s	19.0	98.6	210	210	237	0	27W												
0747					210	210	237	0	27W												
0800	+3	u/s	18.8	95.8	190	190	215	2E	27W	5	300	8	2	240	3	98	02	1002	12.7	11.1	14.4
0900		u/s	16.1	80.3	190	190	215	2E	27W												
1000		u/s	16.2	80.5	190	190	215	2E	27W												
1100		u/s	16.2	80.9	VAR	VAR	VAR	VAR	27W												
1200	+3	u/s	16.2	81.2	168	168	196	2E	26W	5	300	10	1	240	3	99	02	1003	13.3	11.7	14.4
1300		u/s	16.2	81.1	165	165	193	2E	26W												
1400		u/s	16.1	81.1	165	165	193	2E	26W												
1443					165	165	193	2E	26W												
1500		u/s	16.0	81.1	166	166	194	2E	26W												
1600	+3	u/s	16.0	80.8	166	166	194	2E	26W	7	320	15	1	160	2	98	02	1004.5	12.6	11.4	14.4
1700		u/s	15.9	77.7	166	166	194	2E	26W												
1800	+3	u/s	15.8	76.0	230	230	255	0	25W	6	315	11	1	220	5	98	18	1005.5	14.4	11.1	17.2
1900		u/s	15.8	76.3	230	230	255	0	25W												
2000	+3	u/s	15.8	76.2	232	232	257	0	25W	6	315	11	1	220	2	98	18	1006.0	13.8	11.0	17.4
2100		u/s	15.9	79.0	232	232	257	0	25W												
2200		u/s	16.2	80.5	232	232	257	0	25W												
2300		u/s	15.2	78.0	232	232	257	0	25W												
2318					232	232	257	0	25W												
2400	+3	u/s	15.5	78.8	250	250	272	3E	25W	4	210	10	2	220	4	98	01	1006.0	14.2	17.2	17.2

Distance run  
through the Water  
Midnight to  
Midnight

397.6

Leave Granted to Ship's Company

Anchor Bearings

000639

1973 FROM PAYNE BAY P.Q. TO HALIFAX, N.S.

OR AT

REMARKS

Initials  
of the  
Officer  
of the  
Watch

0048 Eastern Hd. 15.3 mi Ra Pt P 14.1 mi Table Pt 14.6 mi							
0200 Broom Pt 18.8 mi Ra The Branches 18.0 mi Martin Pt 18.1 mi							
0255 Lobster Cove Hd. 113° Ra Trout River 149°							
0315 - a/c 210							
0350 Chimney Cove Hd 114° 12.9 mi Ra Beverly Hd 134° 15.1 mi							JG
0415 Chimney Cove Hd 18.8 mi Ra South Hd 14.6 mi Little Port Hd 16.3 mi							
0530 - a/c 220°							
0620 - Sunrise - navigation lights off 0645 - a/c 210							
0630 C. St George 191° Ra Three Rho Pt 165° 11.4 mi							
0747 - a/c 190 SP 16							
0810 - tested man overboard alarm							
0830 48° 15.2 N Decca 59° 32.0 W							JG
0905 C. Anguille 158° - 14.5 mi Ra							
1010 - a/c 195° 1025 - a/c 165° 1045 - a/c 168°							
1001 47° 53.5 N Ra 59° 38.5 W							
1130 47° 29.5 N Decca 59° 34.0 W							J
1231 47° 12.7 N Decca 59° 28.1 W							J
1334 46° 55.4 N Decca 59° 20.5 W							
1400 - landed to flying stations 1415 - launched helo 22 1431 - launched helo 36 - secured flying stations 1443 - a/c 166							
1437 46° 37.9 N Decca 59° 13.3 W							
1534 46° 23.2 N Decca 59° 07.1 W							JG
1700 - a/c 230							
1700 46° 02.8 N Decca 59° 00.0 W							
1730 45° 56.5 N Decca 59° 04.5 W							JG
1830 45° 46.0 N Decca 59° 21.0 W							
1900 - a/c 232							
1923 - sunset - navigation lights on.							
1942 45° 32.5 N Decca 59° 46.0 W							J
2100 45° 21.3 N Decca 60° 02.8 W							J
2200 45° 12.8 N Decca 60° 26.0 W							
2300 45° 03.5 N Decca 60° 37.0 W							
2318 - a/c 250°							
2345 44° 58.5 N Decca 60° 50.5 W							JG
Position	Latitude	Longitude	Depending on	Draught			Notice for Main Engines at Noon
0800	48° 26.3 N	59° 30.2 W	DECCA	Time	Forward	Aft	
1200	47° 20.3 N	59° 31.3 W	1130 DECCA				
2000	45° 31.6	59° 44.3	2000 (+3) fix				

HMCS PROTECTOR

MONDAY

10<sup>TH</sup> OF SEPTEMBER

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	15.2	81.8	250	250	272	2E	24W													
0200		u/s	15.3	82.0	250	250	272	2E	24W													
0300		u/s	15.4	82.3	250	250	272	2E	24W													
0400	+3	u/s	16.9	84.8	250	250	272	2E	24W	2	320	12	0	-	0	99	02	1005.0	13.9	12.2	18.3	
0500		u/s	15.0	75.0	VAR	VAR	VAR	VAR	23W													
0513					262	262	284	1E	23W													
0600		u/s	14.5	73.6	260	260	282	1E	23W													
0700		u/s	16.1	82.2	260	260	282	1E	23W													
0800	+3	u/s	15.0	75.0	VAR	VAR	VAR	VAR	23W	5	320	12	1	260	3	98	03	1006.0	18.9	18.3	17.8	
0900		u/s	5.5	27.1	VAR	VAR	VAR	VAR	23W													
1000		u/s	2.9	14.4	VAR	VAR	VAR	VAR	23W													
1100		u/s	0.3	1.7	VAR	VAR	VAR	VAR	23W													
1200	+3									5	180	10	1	-	0	98	03	1007.0	16.1	12.8		
1300																						
1400																						
1500																						
1600										2	040	5	0	-	0	98	03	1007.0	18.3	13.9		
1700																						
1800																						
1900																						
2000										2	040	5	0	-	0	98	02	1008.0	16.2	16.1		
2100																						
2200																						
2300																						
2400										1	045	5	0	-	0	98	02	1008.0	16.2	14.4		
Distance run through the Water Midnight to Midnight			Leave Granted to Ship's Company										Anchor Bearings									
132.1																						



000642

HMCS PROTECTOR

TUES DAY

11<sup>TH</sup> OF SEPTEMBER

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	-	0	0	-	0	98	02	1010	12.8	11.7	
0500																					
0600																					
0700																					
0800										1	-	0	0	-	0	98	02	1010	13.9	12.8	
0900																					
1000																					
1100																					
1200										6	190	15	0	-	0	98	03	1001	18.3	17.8	
1300																					
1400																					
1500																					
1600										6	260	20	0	-	0	98	02	997.5	20.6	20.0	
1700																					
1800																					
1900																					
2000										6	200	15	0	-	0	98	02	997.0	18.3	17.9	
2100																					
2200																					
2300																					
2400										8	230	15	0	-	0	98	02	998.6	17.2	16.1	
Distance run through the Water Midnight to Midnight		Leave Granted to Ship's Company										Anchor Bearings									
		PNRFD. from 0930 Tues until 0755 Mon 12 Sept.																			

1973 FROM

TO

OR AT HALIFAX, N.S.

REMARKS

Initials  
of the  
Officer  
of the  
Watch

0643 Sunrise

0800 - Colours - Mon + Tues duty watches employed at cleaning stations

0900 - Secured cleaning stations

JMB

1620 - Exercised emergency party at fire stations - Main cargo hold.

1925 - Rounds correct  
1930 - Sunset

FT.

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

HMCS PROTECTEUR

WEDNES DAY

12<sup>TH</sup> OF SEPTEMBER

Time	Zone Suffix	Log (Stating type)	Distance Run Miles and Tenth	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	-	0	0	-	0	97	02	999.5	15.6	14.8	
0500																					
0600																					
0700																					
0800										7	-	0	0	-	0	98	02	1000	15.6	15.0	
0900																					
1000																					
1100																					
1200	+3									8	-	0	0	-	0	96	62	1001	15.6	14.4	
1300																					
1400																					
1500																					
1600										2	-	0	0	-	0	98	01	1005.5	20	16.1	
1700																					
1800																					
1900																					
2000										1	-	0	0	-	0	98	01	1003	26	17.8	
2100																					
2200																					
2300																					
2400										0	-	0	0	-	0	98	02	1003	18	12.8	
Distance run through the Water Midnight to Midnight		Leave Granted to Ship's Company										Anchor Bearings									
		AMREFD 0900 WED 12 SEPT UNTIL 0755 MON 17 SEPT.																			



1973 FROM

TO

OR AT HALIFAX, N.S.

REMARKS

Initials  
of the  
Officer  
of the  
Watch

0647 - Sunrise

0800 - Colours - Two wheel duty watches employed at cleaning stations

0900 - Secured cleaning stations

HT.

1605 - Exercised emergency party at fire stations - Magazine.

1925 - Rounds correct  
1929 - Sunset

OK

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

HMCS PROTECTEUR

THURS DAY

13<sup>TH</sup> OF SEPTEMBER

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	5	0	-	0	98	02	1008	13.0	12.7	
0500																					
0600																					
0700																					
0800										0	300	8	0	-	0	98	02	1003	12.0	10.0	
0900																					
1000																					
1100																					
1200										4	030	5	0	-	0	98	02	1008	17.1	13.9	
1300																					
1400																					
1500																					
1600										6	030	3	0	-	0	98	03	1008.5	20.6	18.9	
1700																					
1800																					
1900																					
2000										0	240	3	0	-	0	98	03	1009	17.8	11.1	
2100																					
2200																					
2300																					
2400										0	260	2	0	-	0	98	01	1006.5	17.8	15.3	
Distance run through the Water Midnight to Midnight		Leave Granted to Ship's Company										Anchor Bearings									
		PNRFD 0900 THUR UNTIL 0755 MON 17 SEPT.																			

1973 FROM <sup>WT</sup>

TO

OR AT HALIFAX, N.S.

REMARKS

Initials  
of the  
Officer  
of the  
Watch

0648 - Sunrise

0800 - Colours - Wed & Thurs. duty watches employed at cleaning stations

0900 - Secured cleaning stations

1605 - Examined emergency party at fire stations - bow thruster compartment

1929 - Sunset

2000 - Rounds Correct

2055 - emergency party to fire stations - fire reported on jetties  
2100 - secured emergency party - false alarm

2250 - Guard Officer challenged

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

HMCS PROTECTOR

FRI DAY

14<sup>TH</sup> OF SEPTEMBER.

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										0	260	2	0	-	0	98	01	1008	17.2	15.6	
0500																					
0600																					
0700																					
0800										8	000	5	0	-	0	98	02	1019	11.1	10.0	
0900																					
1000																					
1100																					
1200	+3									6	000	6	0	-	0	98	01	1016	15.0	14.0	
1300																					
1400																					
1500																					
1600										8	200	5	0	-	0	98	03	1015	18.9	15.0	
1700																					
1800																					
1900																					
2000										8	265	8	0	-	0	98	02	1019.5	17.2	15.6	
2100																					
2200																					
2300																					
2400										8	-	0	0	-	0	98	02	1014	16.1	15.0	
Distance run through the Water Midnight to Midnight		Leave Granted to Ship's Company  PNRFD. 0900 FRI UNTIL 0755 MON										Anchor Bearings									

1973 FROM

TO

OR AT HALIFAX, N.S.

REMARKS

Initials  
of the  
Officer  
of the  
Watch

0656 - Sea Training fire exercise held in laundry flats - emergency party mustered

0800 - Columns - Tken + Pri. duty watches employed at cleaning stations

7/6

0900 - secured cleaning stations

1920 - Rounds correct  
1925 - Sunset  
1935 - Exercised emergency party at fire stations - engine room.

JK

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

HMCS *PROTECTOR*

*SATUR* DAY

*15<sup>TH</sup> OF SEPTEMBER*

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										2	-	0	0	-	0	98	01	1013	12.8	11.6	
0500																					
0600																					
0700																					
0800										8	-	0	0	-	0	98	03	1011	12.8	11.6	
0900																					
1000																					
1100																					
1200	+3									8	-	0	0	-	0	98	20	1010	13.3	12.1	
1300																					
1400																					
1500																					
1600										8	-	0	0	-	0	97	60	1008	15.6	13.3	
1700																					
1800																					
1900																					
2000										8	-	0	0	-	0	96	26	1006.5	12.8	11.7	
2100																					
2200																					
2300																					
2400										8	-	0	0	-	0	96	02	1005	11.7	10.6	

Distance run through the Water Midnight to Midnight	Leave Granted to Ship's Company										Anchor Bearings									
	PNRFD 0900 SAT UNTIL 0755 MON																			



1973

FROM

TO

OR AT

HALIFAX, N.S.

REMARKS

Initials  
of the  
Officer  
of the  
Watch

0650 - Sunrise

0800 - Columns - Fire + Sat duty watches employed at cleaning stations

0900 - Secured cleaning stations

1330 - Exercised emergency party at fire stations - engine room

1923 - Sunset  
2000 - Rounds correct

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

HMCS PROTECTEUR

SUNDAY

16<sup>TH</sup> OF SEPTEMBER

Time	Zone Suffix	Log (Stating type)	Distance Run Miles and Tenth	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	-	0	0	-	0	96	61	1007	11.1	10.0	
0500																					
0600																					
0700																					
0800										0	-	0	0	-	0	96	62	1007	11.7	10.6	
0900																					
1000																					
1100																					
1200	+3									0	100	5	0	-	0	98	62	1009	14.4	12.8	
1300																					
1400																					
1500																					
1600										3	225	10	0	-	0	98	62	1008	20.0	17.8	
1700																					
1800																					
1900																					
2000										7	006	10	0	-	0	98	61	1007	17.8	15.6	
2100																					
2200																					
2300																					
2400										7	000	5	0	-	0	98	61	1008	16.0	14.1	
Distance run through the Water Midnight to Midnight		Leave Granted to Ship's Company										Anchor Bearings									
		PNRFD 0930 SAT UNTIL 0755 MON																			

1973. FROM

TO

, OR AT HALIFAX, N.S.

REMARKS

Initials  
of the  
Officer  
of the  
Watch

0012 - Guard Officer challenged.

0652 - Sunrise

0800 - Colours - Set + Sun duty watches employed at cleaning stations

JAC

0900 - Secured cleaning stations

1306 - Exercised emergency party at fire stations - cabin 34.

1925 - Sunset

2000 - Rounds correct

HT

2113 - 227 188 489 CPL Halin J - reported on board

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

HMCS PROTECTOR

MON DAY

17<sup>TH</sup> OF SEPTEMBER

Time	Zone Suffix	Log (Stating type)	Distance Run Miles and Tents	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										5	035	10	0	-	0	97	03	1010.6	13.3	11.1	
0500																					
0600																					
0700																					
0800										3	020	5	0	-	0	98	01	1009.0	11.1	10.6	
0900																					
1000																					
1100																					
1200										3	000	15	0	-	0	98	02	1014	14.4	13.6	
1300																					
1400																					
1500																					
1600										1	000	13	0	-	0	98	01	1015	17.2	12.2	
1700																					
1800																					
1900																					
2000										0	-	0	0	-	0	98	00	1017	15.6	12.8	
2100																					
2200																					
2300																					
2400										0	-	0	0	-	0	98	02	1019	11.0	10.6	
Distance run through the Water Midnight to Midnight		Leave Granted to Ship's Company										Anchor Bearings									
		PNRFD 1555 MON UNTIL 0755 THES																			

1973

FROM

TO

OR AT HALIFAX, N.S.

REMARKS

Initials  
of the  
Officer  
of the  
Watch

0652 - Sunrise

0800 - Colours - Hands to morning divisions

0805 - Hands to cleaning stations

0900 - Secured cleaning station - hands employed by departments

1800 - exercised emergency party at fire stations - tiller flats.

1919 Sunset

2000 - Rounds correct

JT.

DAK

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

HMCS PROTECTOR

TUESDAY

18<sup>TH</sup> OF SEPTEMBER

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	-	0	0	-	0	98	02	1019	8.9	8.3	
0500																					
0600																					
0700																					
0800										3	-	0	0	-	0	98	03	1019	7.8	7.1	
0900																					
1000																					
1100																					
1200	+3									3	-	0	0	-	0	98	02	1018	18.3	16.7	
1300																					
1400																					
1500																					
1600										3	000	5	0	-	0	98	02	1016	17.2	15.6	
1700																					
1800																					
1900																					
2000										3	000	10	0	-	0	98	02	1012	17.1	15.4	
2100																					
2200																					
2300																					
2400										2	000	15	0	-	0	98	02	1008	17.2	16.1	
Distance run through the Water Midnight to Midnight		Leave Granted to Ship's Company										Anchor Bearings									
		PNRFD																			
		1600 TUES UNTIL 0755 WED																			



OR AT *Halifax, N.S.*

000658

HMCS PROTECTOR

WEDNESDAY

19<sup>TH</sup> OF SEPTEMBER

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	-	0	0	-	0	96	42	1002	17.8	15.6	
0500																					
0600																					
0700																					
0800	-									8	-	0	0	-	0	94	62	1003	17.8	16.1	
0900																					
1000																					
1100																					
1200	+3									3	000	16	0	-	0	96	00	1008.5	15.0	12.8	
1300																					
1400																					
1500																					
1600										3	-	0	0	-	0	98	02	1012	17.2	15.6	
1700																					
1800																					
1900																					
2000										3	-	0	0	-	0	97	02	1016	17.1	15.4	
2100																					
2200																					
2300																					
2400										3	-	0	0	-	0	97	02	1008	17.2	16.1	
Distance run through the Water Midnight to Midnight		Leave Granted to Ship's Company										Anchor Bearings									
		PNRFD 1555 WED UNTIL 0755 THUR.																			

1973 FROM

TO

OR AT HALIFAX, N.S.

REMARKS							Initials of the Officer of the Watch
0657 - Sunrise							
0800 - Colours - Hands employed at cleaning stations							JMB
0830 - HMCS Annapolis left harbour							
0900 - Secured cleaning stations - hands employed by departments							
1919 - Sunset							
2000 - Rounds correct							JM
2319 - Guard Officer challenged							
Position	Latitude	Longitude	Depending on	Draught			Notice for Main Engines at Noon
0800	° '	° '		Time	Forward	Aft	
1200	° '	° '					
2000	° '	° '					24 hrs.

# HMCS PROTECTEUR

## THURSDAY

## 20<sup>TH</sup> OF SEPTEMBER

Time	Zone Suffix	Log (Stating type)	Distance Run Miles and Tenth	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										0	-	0	0	-	0	98	02	1012	15.0	13.9	
0500																					
0600																					
0700																					
0800										0	-	0	0	-	0	98	02	1014	14.6	13.3	
0900																					
1000																					
1100																					
1200	+3									5	-	0	0	-	0	98	03	1014	15.6	13.8	
1300																					
1400																					
1500																					
1600										4	180	10	0	-	0	98	02	1017	17.8	15.6	
1700																					
1800																					
1900																					
2000										1	190	10	0	-	0	98	01	1017	16.0	14.4	
2100																					
2200																					
2300																					
2400										2	-	0	0	-	0	98	02	1010	14.4	13.3	

Distance run through the Water Midnight to Midnight	Leave Granted to Ship's Company		Anchor Bearings	
	PNRFD 1600 THURS UNTIL 0755 FRI			

1973 FROM

TO

OR AT HALIFAX, N.S.

REMARKS

Initials  
of the  
Officer  
of the  
Watch

0657 - Sunrise

0800 - Colours - Hands to morning divisions

0805 - Hands to cleaning stations

0900 - Secured cleaning stations hands employed by departments.

1800 - Exercised emergency party at fire stations #3 aviation workshop.

1916 - Sunset

2000 - Rounds Connect

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

# HMCS PROTECTOR

## FRI DAY

## 21<sup>ST</sup> OF SEPTEMBER

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										8	-	0	0	-	0	98	56	1010	14.4	13.1	
0500																					
0600																					
0700																					
0800										8	200	10	0	-	0	98	02	1012	12.8	11.1	
0900																					
1000																					
1100																					
1200	+3									1	240	10	0	-	0	98	02	1015	12.8	10.6	
1300																					
1400																					
1500																					
1600										1	270	10	0	-	0	98	02	1015	14.4	10.0	
1700																					
1800																					
1900																					
2000										2	270	5	0	-	0	98	02	1017.5	11.1	8.9	
2100																					
2200																					
2300																					
2400										1	270	5	0	-	0	96	02	1020	8.3	7.2	

Distance run through the Water Midnight to Midnight	Leave Granted to Ship's Company										Anchor Bearings									
	PNRFD 1200 FRI UNTIL 0755 MON																			



**FROM**

**TO**

, OR AT *HALIFAX, N.S.*

REMARKS

Initials  
of the  
Officer  
of the  
Watch

0659 - Sunrise

0800 - Colours - Hands employed at cleaning stations

0900 - desired learning stations = hands employed by departments

1327 - Exercised emergency party at fire stations - Held Tech's workshop

1620 - Wheeler Barge alongside port side

1914 - Sunset

2000 - Rounds Correct

Position	Latitude	Longitude	Depending on	Draught			Notice for Main Engines at Noon	
0800	° /	° /		Time	Forward	Aft	24 Hrs.	000
1200	° /	° /						
2000	° /	° /						

HMCS *PROTECTOR*

SATUR. DAY

22<sup>ND</sup> OF SEPTEMBER

Time	Zone Suffix	Log (Stating type)	Distance Run Miles and Tenth	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	-	0	0	-	0	95	21	1012	10.0	8.8	
0500																					
0600																					
0700																					
0800										3	210	5	0	-	0	95	20	1008.5	13.9	11.1	
0900																					
1000																					
1100																					
1200	+3									8	000	10	0	-	0	98	02	1012	18.0	13.9	
1300																					
1400																					
1500																					
1600										8	000	18	0	-	0	98	02	1013.5	12.8	12.2	
1700																					
1800																					
1900																					
2000										8	000	10	0	-	0	98	02	1015	12.2	11.7	
2100																					
2200																					
2300																					
2400										8	090	20	0	-	0	98	02	1017.5	11.1	10.6	
Distance run through the Water Midnight to Midnight		Leave Granted to Ship's Company										Anchor Bearings									
		PNRFD 1000 SAT UNTIL 0755 MON																			

1973 FROM

TO

OR AT HALIFAX, N.S.

REMARKS		Initials of the Officer of the Watch
0701 - Sunrise		
0800 - Colours		BB
0900 - Sat + Fri duty watches employed at cleaning stations		
1000 - Secured cleaning stations		
1110 - Emergency party exercised at fire stations - galley		
1230 - Rehearsed Emergency party at fire stations - J.P.S. pump room		
1910 - Sunset		
2000 - Rounds concert		HT

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

HMCS PROTECTOR

SUNDAY

23<sup>RD</sup> OF SEPTEMBER

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	-	0	0	-	0	98	02	1012	10.0	8.6	
0500																					
0600																					
0700																					
0800										3	210	5	0	-	0	98	02	1008.6	13.9	12.1	
0900																					
1000																					
1100																					
1200	13									8	000	10	0	-	0	98	02	1012.0	15.0	13.4	
1300																					
1400																					
1500																					
1600										8	000	18	0	-	0	98	02	1013.5	12.8	12.2	
1700																					
1800																					
1900																					
2000										8	000	16	0	-	0	98	02	1015	12.2	11.7	
2100																					
2200																					
2300																					
2400										8	290	15	0	-	0	98	02	1017.5	11.1	10.6	
Distance run through the Water Midnight to Midnight		Leave Granted to Ship's Company PNRFD 1000 SUN UNTIL 0755 MON										Anchor Bearings									

1973

FROM

TO

, OR AT HALIFAX, N.S.

REMARKS

Initials  
of the  
Officer  
of the  
Watch

0640 - Exercised emergency party at fire stations - tiller fluts - Hands to emergency stations  
0700 - Secured emergency stations  
0701 - Sunrise  
0800 - Colours - Hands to morning divisions  
0805 - Hands employed at cleaning stations  
0900 - Secured cleaning stations - Hands employed by departments

OK

1435 - Exercised Fire in Cabin 49

1925 - Round Correct  
1908 - Sunset

A

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

HMCS PROTECTEUR

TUES DAY

25<sup>TH</sup> OF SEPTEMBER

Time	Zone Suffix	Log (Stating type)	Distance Run Miles and Tenth	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										1	150	5	-	-	-	98	02	1032.0	7.2	6.2	
0500																					
0600																					
0700																					
0800										0	135	5	-	-	-	98	02	1033.0	5.6	4.4	
0900																					
1000																					
1100																					
1200	+3									0	020	5	0	-	0	98	02	1032.5	13.3	10.6	
1300																					
1400																					
1500																					
1600										0	000	3	0	-	0	98	02	1022.5	18.3	13.9	
1700																					
1800																					
1900																					
2000										0	340	10	0	-	0	98	02	1032.0	16.1	13.3	
2100																					
2200																					
2300																					
2400										0	035	5	0	-	0	98	02	1022.5	11.2	10.1	
Distance run through the Water Midnight to Midnight		Leave Granted to Ship's Company										Anchor Bearings									
		P.N.R.F.D. From 1600 Tues till 0755 WED.																			



Initials  
of the  
Officer  
of the  
Watch

2000 - Rounds Correct

000670

HMCS PROTECTOR

WEDNESDAY

26<sup>TH</sup> OF SEPTEMBER.

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										0	020	5	0	-	0	98	02	1022.5	10.0	8.9	
0500																					
0600																					
0700																					
0800										1	020	5	0	-	0	98	03	1022.5	7.8	6.7	
0900																					
1000																					
1100																					
1200	+3									1	CALM					98	02	1025	14.4	12.2	
1300																					
1400																					
1500																					
1600										4	350	8	-			98	02	1024	20.6	15.0	
1700																					
1800																					
1900																					
2000										1	CALM					98	01	1025	17.2	15.0	
2100																					
2200																					
2300																					
2400										0	CALM					98	01	1025.5	15.0	14.4	
Distance run through the Water Midnight to Midnight		Leave Granted to Ship's Company PNRFD From 1600 WED UNTIL 0755 THURS										Anchor Bearings									

1973 FROM TO OR AT *Halifax, N.S.*

REMARKS		Initials of the Officer of the Watch
0704 - Sunrise		
0800 - "Colours" & "lights" employed at cleaning stations		<i>JMB</i>
0840 YMFN 15 To Local Area		
0915 CAPTAIN ASHORE		
1210 CAPTAIN ASHORE <i>EW</i>		
1300 HANDS TO STATION TO TURN SHIP		
1330 PILOT ON BOARD: 1315 SSD CLOSED <i>EW</i> BUT UP <i>CAPT ROSE</i>		
1330 BROW LANDED 1345. SHIPPED BOW 82 TO COMMENCE TURNING SHIP FROM BOWS EAST TO BOWS WEST.		
1440 SECURED ALONG SIDE JETTY 8 PILOT ASHORE		
<del>1445 CAPTAIN ASHORE <i>EW</i></del>		
1500 SECURED <i>EW</i> SSD MAN		
1558 CAPTAIN ASHORE <i>EW</i>		<i>TE</i>
1813 EXERCISED EMERGENCY PARTY FIREMAN BROKEN IN JUNGLE DECK PORT SIDE ART.		
1905 SUNSET UDL SWITCHED ON		
<del>1921 CAPTAIN ASHORE <i>EW</i></del>		<i>TE</i>
1945 YN FR: LOCAL AREA		
2317 O.O.G. CHALLENGED		<i>TE</i>

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

HMCS PROTECTOR

THURSDAY

27<sup>TH</sup> OF SEPTEMBER

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										0	CALM					98	02	1024.5	12.8	12.3	
0500																					
0600																					
0700																					
0800										8	CALM					98	02	1024	12.2	12.7	
0900																					
1000																					
1100																					
1200	+3									6	270	5				98	01	1021	17.8	12.8	
1300																					
1400																					
1500																					
1600										4	270	5				98	01	1018	18.3	16.8	
1700																					
1800																					
1900																					
2000										2	260	5				98	01	1019	16.1	12.2	
2100																					
2200																					
2300																					
2400										1	250	5				98	01	1016	15.6	14.8	

Distance run  
through the Water  
Midnight to  
Midnight

Leave Granted to Ship's Company

PNRFD FROM 1600 THURSDAY  
TILL 0755 FRIDAY

Anchor Bearings

19/73 FROM

TO

OR AT

REMARKS

Initials  
of the  
Officer  
of the  
Watch

1737 CAPTAIN ABOARD 0750 STANDARD ON BOARD 0755 HANDS TO DIVISIONS  
0800 COLOURS  
1812 BAND ASHORE 0805 - HANDS EMPLOYED AT CLEANING STATIONS  
0900 - HANDS EMPLOYED BY DEPARTMENTS

1825 FIRE EXERCISE  
1903 SUNSET  
1935 ROUNDS CORRECT

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

HMCS *PROTECTOR*

FRI DAY

28<sup>TH</sup> OF SEPTEMBER

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					98	03	1007	15.0	12.8	
0500																					
0600																					
0700																					
0800										8	CALM					96	03	1006	14.4	12.8	
0900																					
1000																					
1100																					
1200	+3									6	CALM					98	02	1007	16.7	13.3	
1300																					
1400																					
1500																					
1600										6	025	10				98	03	1007.5	15.6	12.8	
1700																					
1800																					
1900																					
2000										7	010	2				98	03	1007.5	15.6	12.8	
2100																					
2200																					
2300																					
2400										00	015	2				98	03	1007.5	15.6	12.2	

Distance run through the Water Midnight to Midnight	Leave Granted to Ship's Company	Anchor Bearings
	PNRFD LEAVE GRANTED FROM SECURE TO 0755 MONDAY	

1973 FROM

TO

OR AT HALIFAX N.S.

REMARKS

Initials of the Officer of the Watch

0706 - SUNRISE

0800 - COLOURS

0830 - HANDS TO GENERAL PAYMENT

0900 - SHIP'S COMPAGNY EMPLOYED AT CLEANING SHIP

*[Signature]*

1901 - SUNSET

1925 - ROUNDS CORRECT

1940 - EXERCISED EMERGENCY PARTY - FLOOD IN BOW THRUSTER COMPT

*[Signature]*

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

HMCS PROTECTOR

SATUR DAY

29<sup>TH</sup> OF SEPTEMBER



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										00	CALM					98	02	1007	11.7	10.6	
0500																					
0600																					
0700																					
0800										1	CALM					98	02	1007	10.6	8.3	
0900																					
1000																					
1100																					
1200	+3									2	290	10	-	-	-	98	02	1004.0	17.2	12.8	
1300																					
1400																					
1500																					
1600										5	280	12	-	-	-	98	03	1000.0	18.3	15.0	
1700																					
1800																					
1900																					
2000										2	270	10	-	-	-	98	01	998.0	16.7	13.9	
2100																					
2200																					
2300																					
2400										1	270	18	-	-	-	98	02	1000.5	12.2	10.0	
Distance run through the Water Midnight to Midnight		Leave Granted to Ship's Company <i>PNRFD - From 0930 Saturday until 0755 Monday.</i>										Anchor Bearings									



19 73 FROM

TO

OR AT HALIFAX  
N.S.

REMARKS		Initials of the Officer of the Watch
0708 - SUNRISE		
0800 - COLOURS		
0805 - FRIDAY & SATURD. DUTYWATCH EMPLOYED IN CLEANING SHIP		
1150 - Exercised Fire in the RAS store.		
1859 - Sunset		
2002 - Rounds Correct		

Position	Latitude	Longitude	Depending on	Draught			Notice for Main Engines at Noon	000678
0800	°   '   '	°   '   '		Time	Forward	Aft	24 Hrs	
1200	°   '   '	°   '   '						
2000	°   '   '	°   '   '						

HMCS PROTECTEUR

SUN DAY

30<sup>TH</sup> OF SEPTEMBER

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	290	20	-	-	-	98	02	1002.0	8.9	7.8	
0500																					
0600																					
0700																					
0800										1	270	29	-	-	-	98	02	1005.0	8.9	7.2	
0900																					
1000																					
1100																					
1200	+3									3	270	20	-	-	-	98	03	1006.0	12.2	8.9	
1300																					
1400																					
1500																					
1600										3	280	15	-	-	-	98	02	1008.0	13.3	8.9	
1700																					
1800																					
1900																					
2000										5	300	15	-	-	-	98	03	1011.0	12.2	7.2	
2100																					
2200																					
2300																					
2400										1	310	10	-	-	-	98	01	1015.0	10.0	6.7	

Distance run through the Water Midnight to Midnight	Leave Granted to Ship's Company										Anchor Bearings									
	PERSONNEL NRFD FROM 1000 SUNDAY UNTIL 0755 MONDAY																			

1973

FROM

TO

, OR AT HALIFAX

REMARKS		Initials of the Officer of the Watch
0710 - Sunrise		
0800 - Colors		
s.19(1)		
1520 - EXERCISED EMERGENCY PARTY AT FIRE STNS.		
1530 -		
1857 - SUNSET.		
2000 - ROUNDS CORRECT		
2345 - GUARD OFFICER CHALLENGED.		

Position	Latitude	Longitude	Depending on	Draught			Notice for Main Engines at Noon	000680
0800	°   '   '	°   '   '		Time	Forward	Aft		
1200	°   '   '	°   '   '					24 HRS.	
2000	°   '   '	°   '   '						

**CAUTION - THE FOLLOWING RULES (INTERNATIONAL, ST. LAWRENCE RIVER, AND RULES OF THE ROAD FOR THE GREAT LAKES)**  
**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 (112½ 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:

- (i) by power-driven vessels on the whistle;
- (ii) by sailing vessels on the fog-horn;
- (iii) 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:

- (i) A power-driven vessel making way through the water, shall sound at intervals of not more than 2 minutes a prolonged blast.
- (ii) 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.
- (iii) 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.
- (iv) 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.
- (v) 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.
- (vi) 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.
- (vii) 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.
- (viii) 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.
- (ix) 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 vessel which is running free shall keep out of the way of a vessel which is close-hauled.
- 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.
- 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.
- 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.
- 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 vessels 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 gun or other explosive signal fired at intervals of about a minute.
- A continuous sounding with any fog-signal apparatus.
- Rockets or shells, throwing red stars fired one at a time at short intervals.
- A signal made by radiotelegraphy or by any other signalling method consisting of the group . . . — — — . . . in the Morse Code.
- A signal sent by radiotelephony consisting of the spoken word "Mayday".
- The International Code Signal of distress indicated by N.C.
- A signal consisting of a square flag having above or below it a ball or anything resembling a ball.
- Flames on the vessel (as from a burning tar barrel, oil barrel, etc.).
- 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



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 of each

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*

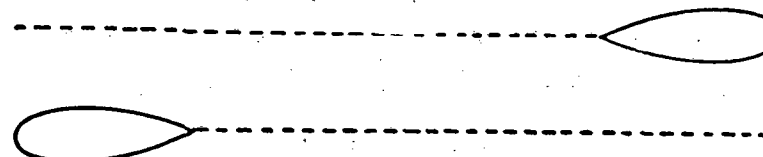
The following diagrams are intended to illustrate the steering and sailing rules:

#### *First Situation*



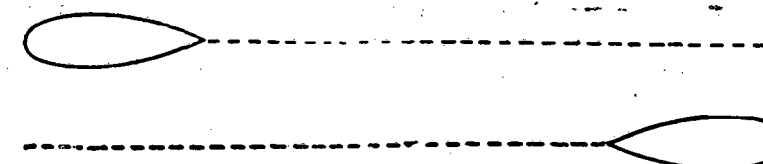
Here the two coloured lights visible to each will indicate their direct approach end on to each other. In this situation it is a standing rule that both shall direct their courses to starboard and pass on the port side of each other, each having previously given one distinct blast of the whistle.

#### *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*



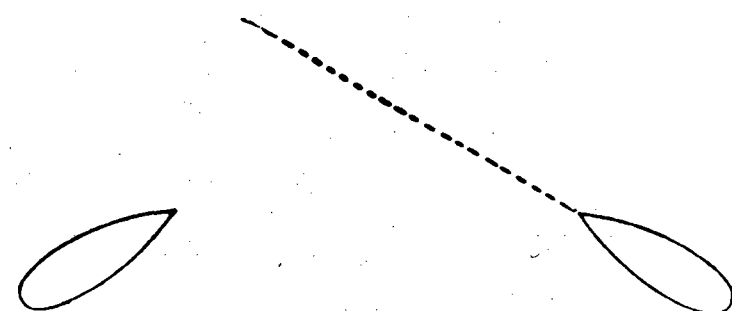
In this situation the green light only will be visible to each, the screens preventing the red light from being seen. They are therefore passing to starboard of each other, which is permissible in this situation, each pilot having previously signified his intention by two distinct blasts of the whistle.

#### *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.